

HAND HELD OSCILLOSCOPES

**FLUKE-120 SERIES  
THREE-IN-ONE  
SIMPLICITY  
SCOPEMETER® HAND-  
HELD OSCILLOSCOPES**



**FLUKE®**



- Dual-Input 40MHz or 20MHz Digital Oscilloscope
- 5,000 Count True-RMS Digital Multimeters
- Dual-Channel TrendPlot™ Recorder
- Connect-and-View™ Trigger Simplicity for Hands-Off Operation
- 10:1 Voltage Probe Included for Reduced Circuit Loading
- Optically-Isolated RS-232 Interface
- Meets 600V CAT III Safety Standards (IEC 1010-1)
- UL listed, CSA certified
- Recommended accessories - C125 Case, TL220 Test Lead Set, 1200s Current Clamp

Compact **FLUKE-120 series** Scopemeter® is the rugged solution for industrial troubleshooting and installation jobs in machinery, instrumentation, control and power systems. It's an integrated test tool with oscilloscope, paperless data recorder and DMM functions. You can use one and the same set to test leads for waveform display, multiple meter readings, capacitance and resistance measurements, and continuity checking. There is no need to swap leads.

**Mfg. part no. FLUKE-125** has all of the features of **mfg. part no. FLUKE-124** plus network bus health test, power and harmonics measurement, RPM reading and low resistance readings.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-123/003	20MHz ScopeMeter®	16F6982	1385.00
FLUKE-123/003S	20MHz ScopeMeter® with SCC120E Kit	16F6983	1715.00
FLUKE-124/003	40MHz ScopeMeter®	29H4613	1715.00
FLUKE-124/003S	40MHz ScopeMeter® with SCC120E Kit	26H5462	1999.00
FLUKE-125/003	40MHz ScopeMeter®	30M9563	1990.00
FLUKE-125/003S	40MHz ScopeMeter® with SCC120E Kit	30M9564	2318.00

**CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT**

FLUKE-123/003 CALIBRATED	Calibrated 20MHz ScopeMeter®	57K9810	1495.00
FLUKE-123/003S CALIBRATED	Calibrated 20MHz ScopeMeter® with SCC120E Kit	57K9811	1825.00

**ACCESSORIES**

BP120MH	Rechargeable Battery Pack	73K7383	86.00
C120	Hardside Carrying Case for 120 Series ScopeMeters	16F6984	66.00
C125	Softside Fabric Meter Case	16F6985	32.00
SCC120E	C120 Hardside Carrying Case, FlukeView Software and Interface Cable for 120 Series ScopeMeters	33B1938	333.00

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**FLUKE-190 SERIES SCOPEMETER®  
HAND-HELD OSCILLOSCOPES**



**FLUKE®**



- Speed, Performance and Analysis Power
- Dual Input - 60, 100 or 200MHz Bandwidth
- Up to 2.5GS/s Real-Time Sampling Per Input
- Increased Waveform Acquisition Memory Depth of 3k Point Per Input
- Connect-and-View™ Automatic Triggering, Full-Range Manual Trigger Modes
- Advanced Trigger Function (**FLUKE-190C Series**)
- Digital Persistence for Analyzing Complex Dynamic Waveforms Like on an Analog Scope
- Frequency Spectrum Analysis Using FFT (**FLUKE-190C Series**)
- Fast Display Update Rate for Seeing Dynamic Behavior Instantaneously
- Automatic Capture and Replay of 100 Screens
- 27,500 Points Per Input Record Length Using ScopeRecord Mode
- TrendPlot™ Paperless Chart Recorder For Trend Analysis Up to 22 Days
- Up to 1000V Independently Floating Isolated Inputs
- Waveform Reference for Visual Comparisons and Automatic Pass/Fail testing of Waveforms
- Vpwm Function for Motor Drive and Frequency Inverter Applications
- Four Hours Rechargeable NiMH Battery Pack
- Recommended accessories - C195 Case, DP120 Differential Probe, i1000s Current Clamp

For the more demanding applications, **FLUKE-190 series** Scopemeter® high-performance oscilloscopes are ideal for engineers who need the capabilities of a high-performance oscilloscope in a hand-held, battery powered instrument. All **FLUKE-190 series** Scopemeter® models come complete with **mfg. part no. BC190** battery charger/line voltage adapter, **mfg. part no. BP190** NiMH battery pack, **mfg. part no. TL75** hard point test lead set, **mfg. part no. VPS200-G** gray voltage probe, **mfg. part no. VPS200-R** red voltage probe, Getting-Started guide, and user manual on CD. In addition, models with SCC190 kit includes: **mfg. part no. C190** hardside carrying case, serial interface cable and **mfg. part no. SW90W** FlukeView® Scopemeter® software for Windows®.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-196C/003	100MHz Color ScopeMeter	39C2817	3135.00
FLUKE-196C/003S	100MHz Color ScopeMeter with SCC190 Kit	39C2818	3565.00
FLUKE-199C/003	200MHz Color ScopeMeter	39C2819	3475.00
FLUKE-199C/003S	200MHz Color ScopeMeter with SCC190 Kit	39C2767	3950.00

**CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT**

All other models available calibrated with printed certification and data report; go online or call.

FLUKE-199C/003 CALIBRATED	Calibrated 200MHz Color Scopemeter	57K9817	3585.00
FLUKE-199C/003S CALIBRATED	Calibrated 200MHz Color Scopemeter with SCC 190 kit	57K9818	4060.00

**ACCESSORIES**

AS-200-R	Probe Accessory Set, Red	25C3159	71.00
AS-200-G	Probe Accessory Set, Gray	25C3158	71.00
VPS200-R	10:1 Voltage Probe Set, 200MHz, Red	24C5369	177.00
VPS200-G	10:1 Voltage Probe Set, 200MHz, Gray	24C6393	177.00

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**FLUKE-190 SERIES SCOPEMETER® HAND-HELD OSCILLOSCOPES (CONT.)**

**ACCESSORIES**

Mfg. Part No.	Description	Stock No.	Price Each
VPS121	1:1 Voltage Probe Set: 12MHz	25C5825	177.00
VPS100	100:1 Voltage Probe Set: 100MHz	25C0386	348.00
VPS201	100:1 Voltage Probe Set, 200MHz	24C6395	348.00
VPS250	2.5m Voltage Probe Set, 75MHz	25C1610	348.00
RS200	Voltage Probe Replacement Set	25C6529	91.00
CS200MA	Current Shunt 4-20mA	93B8021	75.00
BP190	Rechargeable NiMH Battery Pack for 190 Series ScopeMeter	93B7966	131.00
PM9080/101	Optically Isolated-to-RS-232 Interface Adapter and Cable	39C2821	167.00
PAC91	Serial-to-Parallel Printer Adapter Cable	16F6993	253.00
SW90W/034EFG	FlukeView Scopemeter Software	35C5189	242.00
C195	Softside Carrying Case for 190 Series ScopeMeters	93B7962	141.00
C190	Hardside Carrying Case for 190 Series ScopeMeters	93B7955	157.00
SCC190EFG	C190 Hardside Carrying Case, FlukeView Scopemeter Software and Optically-Isolated Serial Interface USB Adapter/Cable	97B9565	465.00

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**U1600 SERIES HAND-HELD DIGITAL  
OSCILLOSCOPES**



Authorized Distributor

- Maximum 200MSa/s real time sampling, one channel
- Maximum 100MSa/s, using both channels simultaneously
- 2.5GSa/s repetitive sampling
- 11,100 points maximum recording length
- 4.5" color LCD display
- FFT
- Waveform math
- Waveform zoom function

**Mfg. part nos. U1602A and U1604A** digital oscilloscopes combine bench performance with hand held convenience. All models come complete with **mfg. part nos. U1560A and U1561A** scope test probes, **mfg. part no. U1580A** DMM test leads, USB cable, power cord and AC adapter, **mfg. part no. U1571A** 4500mA NiMH battery pack, Quick-Start guide, CD (which includes PC Link application software and manuals), and test report. Order additional accessories separately below.



**SPECIFICATIONS**

Mfg. Part No.	U1602A	U1604A
Bandwidth	20MHz	40MHz
Channel	2	
Vertical Resolution	8 bits	
Multimeter Functions	6000-Count, True rms, VDC, VAC, V DC + AC, Current, Temperature, Humidity, Pressure, Resistance, Capacitance	
Dual Waveform Math	Ch1+Ch2, Ch1-Ch2, Ch2-Ch1	
Trigger Modes	Edge, Pulse, Pattern, Video	
Cursor Modes	Voltage (Y Cursor), Time (X Cursor)	
Automatic Voltage Measurements	Peak-to-Peak, Max., Min., Amplitude, Top, Base, Mean, Cycle Mean, RMS (DC), Preshoot, +Overshoot, -Overshoot	
Automatic Time Measurements	Frequency, Period, +Width, -Width, Rise Time, Fall Time, Phase, Delay	
FFT	...	Rectangular, Hanning, Hamming, Black-Harris

Mfg. Part No.	Description	Stock No.	Price Each
U1602A	20MHz Hand-Held Digital Oscilloscope	04M7403	1358.00
U1602A-001	20MHz Hand-Held Digital Oscilloscope with USB Host	04M7404	1509.00
U1604A	40MHz Hand-Held Digital Oscilloscope	04M7405	1695.00
U1604A-001	40MHz Hand-Held Digital Oscilloscope with USB Host	04M7406	1846.00

**ACCESSORIES**

**Mfg. part nos. U1560A, U1561A, and U1562A** scope test probes include ground lead with mini-alligator clip and hook-clip for probe tip.

Mfg. Part No.	Description	Stock No.	Price Each
U1560A	1:1 Scope Test Probe, Rated X1 CAT III 300V	04M7396	151.00
U1561A	10:1 Scope Test Probe, Rated X10 CAT III 600V	04M7397	151.00
U1562A	100:1 Scope Test Probe, Rated X100 CAT III 600V	04M7398	151.00
U1580A	Digital Multimeter Test Lead Probes — 1-Pair	04M7400	25.20
U1571A	4500mA NiMH Battery Pack	04M7399	69.53
U1590A	Softside Carrying Case	04M7402	60.47

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**Designing a signal acquisition system?**  
See our huge selection of analog & mixed signal semiconductors in this catalog and online.

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HAND HELD OSCILLOSCOPES • DIGITAL MULTIMETERS

20 MHz AND 60MHz 2-CHANNEL DIGITAL OSCILLOSCOPES



- 3.8" (97mm) color LCD display makes viewing multiple waveforms easy
- Peak detect function for 50ns glitch capture
- XY mode
- Persistence mode for observing dynamic signals
- EN61010-1, CAT II 400V safety rating
- One year warranty

Mfg. part nos. MS420 and MS460 auto-set function optimizes the position, range, timebase, and triggering to assure a stable display of virtually any waveform. Five automatic measurements: frequency, cycle, average, peak to peak and RMS. Comes complete with two oscilloscope probes, test leads, Windows® compatible USB software and cable, current shunt, capacitor measuring module, adjustment screw driver, AC adaptor/ charger, and hard carrying case. CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each
MS420	20MHz Dual Channel Digital Oscilloscope	71P2411	899.00
MS460	60MHz Dual Channel Digital Oscilloscope	10R0436	1599.00

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MULTIFUNCTION DIGITAL STORAGE OSCILLOSCOPES



- 5MHz, 20MS/s Oscilloscope
- 4½-Digit, 20,000 Count DMM
- 1.3GHz Frequency Counter
- 5MHz Function Generator
- Logic Analyzer

Choice of uncalibrated or calibrated models. Features 2.5 x 2.5" 160 x 160 pixel graphic LCD, RS-232 interface. Standard accessories include: holster, AC/DC adapter, scope probe and adapter, DMM test leads, RS-232 software, RS-232 cable, and owner's manual.

Mfg. Part No.	Description	Stock No.	Price Each
72-6920	Multifunction Digital Storage Oscilloscope	36C3019	479.27

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FLUKE-233 TRUE-RMS, WIRELESS REMOTE DISPLAY DIGITAL MULTIMETER



Measures:

- True-rms AC voltage and current
- Measure up to 1000V AC and DC
- Measure up to 10A (20A for 30 seconds)
- 10,000µF capacitance range
- Frequency to 50kHz
- Built-in thermometer conveniently takes temperature readings without having to carry a separate instrument
- Resistance, continuity and diode test
- Min/Max and average recording to capture variations automatically

Features:

- Wireless technology allows display to be carried up to 30-ft. away from point of measurement
- Removable magnetic display can be conveniently mounted where it is easily seen
- No need to hold meter to make or read measurements, improving visual focus on probes
- Low-power 802.15.4 wireless technology does not interfere with measurement accuracy
- Use as a conventional multimeter when display is connected
- Auto power off maximizes battery life
- Radio transmitter automatically turns off when display is connected to meter
- True-rms AC voltage and current for accurate measurements on non linear signals
- Record signal fluctuations using Min/Max function
- Test continuity and diodes
- Easy-to-read display with large digits and bright backlight
- Battery life approximately 200-hours
- Three-year manufacturer's warranty
- Made in the U.S.A.
- CE compliant, TUV approved

SPECIFICATIONS AT A GLANCE

Mfg. Part No.	FLUKE-233
Counts:	6000
Voltage:	0.1mV to 1000V AC/DC
Current:	0.1mA to 10A AC/DC
Resistance:	0.1Ω to 40MΩ
Capacitance:	100nF to 9999µF
Frequency:	0.1Hz to 50kHz

➤ CONTINUED ➤

FLUKE-233 TRUE-RMS, WIRELESS REMOTE DISPLAY DIGITAL MULTIMETER (CONT.)

Mfg. Part No.	FLUKE-233
Functions:	Min/Max/Average, Hold, Auto, Manual Range, Continuity/Diode
Temperature:	-40°C to +400°C
Power:	5 AA Batteries for 200-Hrs. of Battery Life
Wireless Frequency:	2.4GHz
Safety Rating:	CAT III 1000V, CAT IV 600V

FLUKE-233 true-rms, remote display digital multimeter allows the operator to be in two places at once. The removable display solves the problems of holding both the meter and the test leads to make a measurement. Designed for making measurements in hard-to-reach places, and in machines or panels that are physically separated from a limit switch or an isolator switch. Ideal for working in areas where the operator can't be close to the active measurement point, like clean-rooms or hazardous areas. Comes complete with test leads, alligator clips, temperature probe, batteries, user's manual and three-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-233	True-rms Wireless Remote Display Digital Multimeter	10R6966	320.95

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FLUKE-27-II AND FLUKE-28-II RUGGED, WATERPROOF, FULLY-SUBMERSIBLE DIGITAL MULTIMETERS



Features:

- IP67 waterproof and dustproof protection, impervious to the harsh environments
- Designed to withstand 3 meter drop
- Hi-resolution, easy-to-read display with large digits and bright, two-level backlight for increased visibility
- Backlit keypad buttons allows for easy visibility in low-light areas
- Reversible holster for added protection when not in use
- Improved sleep mode for long battery life
- Relative mode to remove test lead resistance from low ohms measurements
- Auto and manual ranging for maximum flexibility
- MSHA approved for hazardous areas
- Limited lifetime manufacturer's warranty
- Made in the U.S.A.
- CE compliant, TUV approved

Measures:

- Measure up to 1000V AC and DC
- Measure up to 10A (20A for 30 seconds)
- 10,000µF capacitance range
- Frequency to 200kHz
- Extended AC voltage bandwidth – 15Hz to 20kHz
- Built-in thermometer conveniently takes temperature readings without having to carry a separate instrument
- Resistance, continuity and diode test
- Min/Max and average recording to capture variations automatically

SPECIFICATIONS AT A GLANCE

Mfg. Part No.	FLUKE-27-II	FLUKE-28-II
Response:	Average	True-rms
Counts:	6000	6000 / 19,999
Voltage:	0.1mV to 1000V AC/DC	
Current:	0.1µA to 10A AC/DC	
Resistance:	0.1Ω to 50 MΩ	
Capacitance:	1nF to 9999µF	
Frequency:	0.5Hz to 199.99kHz	
Functions:	Min/Max/Average, Hold, Auto, Manual Range, Continuity / Diode	
Temperature:	...	-200°C to +1090°C
Low Pass Filter (Measurements on VSD's):	...	Yes
Safety Rating:	CAT III 1000V, CAT IV 600V	
IP Rating:	IP67	
Power:	Three AA Batteries for 800-Hours of Battery Life	
Dimensions:	8"H x 3.75"W x 2.2"D	

FLUKE-27-II and FLUKE-28-II fully-submersible digital multimeters are ruggedly built to work in the toughest environments. These two industrial multimeters define a new standard for operating in harsh conditions with the features and accuracy to troubleshoot most electrical problems. Both meters have IP-67 (waterproof and dustproof) rating, MSHA approvals, an extended operating temperature range of -15° C to + 55°C (5°F to 131°F) and 95% humidity, and are shock/vibration-resistant to withstand a 3-meter (10-ft) drop to concrete. Both meters can withstand hazardous 8000 volt spikes caused by load switching and faults on industrial circuits and comply with second edition IEC and ANSI electrical safety standards. Mfg. part no. FLUKE-28-II also features hi-resolution 20,000 count display mode and true-rms AC voltage and current for accurate measurements on non linear signals. Plus it has a unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment. Both models come complete with holster, test leads, alligator clips, batteries and user's manual.

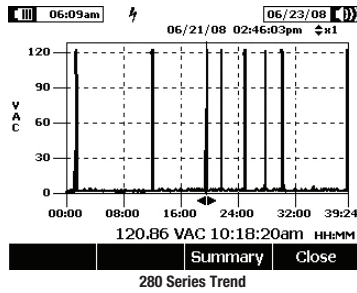
Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-27-II	Waterproof Digital Multimeter	10R6967	440.00
FLUKE-28-II	True-rms, Waterproof Digital Multimeter	10R6968	465.95

(148703)

**FLUKE 287, 289 DIGITAL DATA LOGGING MULTIMETERS**



FLUKE 289



**Features:**

- 50,000 count 1/4 VGA dot matrix display with white backlight
- True-RMS for accurate measurements on non-linear loads
- Trendcapture plots measurements as single line to help detect anomalies
- LoZ: low input impedance prevents false readings due to "ghost voltage" (Model 289)
- 50 Ohm Range for motor winding and low ohm measurements (Model 289)
- Soft keys and navigation control provide access to secondary functions
- Saved measurements allows the user to name and recall measurements made in the field
- Field upgradeable and expandable meter as new capabilities added
- Record events and trends, and display as a graph on the meter without downloading to a PC
- Multi lingual interface
- Internal memory allows stand-alone logging up to 200 hours
- Min/Max/Average with Time Stamp to record signal fluctuations
- Compatible with optional magnetic hanger (ToolPak) for hands free operation
- Optical RS232, USB communication interface
- CAT III 1000 V / CAT IV 600 V safety rated

**Capabilities**

- Measures up to 1000V AC and DC
- Current measurement 20A (30 seconds momentary; 10A continuous)
- 10,000µF capacitance range
- Frequency to 999.99kHz
- Build in thermometer -200°C to +1350°C (-328°F to +2462°F)
- Continuity/Conductance/Capacitance
- Resistance and continuity

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-287	Fluke 287 Digital Multimeter	42M9904	464.95
FLUKE-289	Fluke 289 Digital Multimeter	42M9905	544.95

**TYPE 289 KIT**

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE -289/FVF	Fluke 287 Digital Multimeter, test leads, alligator clips, 80BK temperature probe, TPAK magnetic meter hanger, FlukeView forms software and cable, soft case.	54M4559	615.95

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**ELECTRONICS AND INDUSTRIAL MASTER TEST LEAD KITS**



TLK287



TLK289

These master test lead kits are ideal for today's electrical and electronics testing and design. Perfect to complement mfg. part nos. Fluke-287 and Fluke-289 logging digital multimeters; ordered separately on this page.

**ELECTRONICS MASTER TEST LEAD KIT**

Mfg. part no. TLK287 Electronics Master test lead kit includes precision electronic probes with multiple spring-loaded sharp tips to maximize contact with SMD test points, micro-grabbers and leads to enable fine SMD testing plus mini-alligator clips, grabbers and probes for virtually every electronics need. All packaged in a handy storage case.

Mfg. Part No.	Description	Stock No.	Price Each
TLK287	Electronics Master Test Lead Kit	70M8699	119.55

**INDUSTRIAL MASTER TEST LEAD KIT**

Mfg. part no. TLK289 Industrial Master test lead kit contains SureGrip™ alligator clips, grabbers, hook clips and industrial test probes for dependable contact with a variety of test points. Also includes a temperature adapter with K-Type thermocouple for direct temperature measurement with user's own DMM's temperature measurement functions, a convenient, magnetic DMM hanger and a protective, softside carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
TLK289	Industrial Master Test Lead Kit	70M8700	119.55

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**FLUKE-289/IMSK AND FLUKE-179/IMSK INDUSTRIAL MULTIMETER SERVICE COMBO KITS**



**Fluke-289/IMSK Kit includes:**

- Fluke-289V Advanced data logging Multimeter
- Trendcapture: record, graph and review measurements in the field
- Precise Performance: solve problems with speed and accuracy
- Large 50,000 count, 1/4 VGA display with white backlight
- Unique function for accurate voltage and frequency measurements
- LoZ Volts low impedance voltage function
- 50 ohm range
- Fluke-i400 AC 400A Current Clamp
- Companion to your DMM to measure up to 400 A AC 1mA/Amp output
- CAT IV 600 V / CAT III 1000 V safety rating
- Designed to offer maximum utility in a very compact shape
- 22 of the most useful accessories
- TL71 Silicone Test Leads
- AC72 Alligator Clips
- Limited lifetime warranty on Fluke-289 and 1-year warranty on accessories



Fluke-289/IMSK

**Fluke-179/IMSK Kit includes:**

- Fluke-179 True RMS Multimeter with temperature frequency, capacitance
- 0.09% basic accuracy
- 6000 counts
- Smoothing mode allows filtering of rapidly changing inputs
- Fluke-322 AC 400A Current Clamp
- Measures AC current to 400 A
- Measures AC and DC volts to 600 V
- Precise measurements with 1.8% basic accuracy
- Resolution up to 0.01A and 0.1 V
- 80BK-A thermocouple bead probe
- TL75 test leads
- AC72 Alligator Clips
- Limited lifetime warranty on Fluke-179 and 2-year warranty on Fluke-322



Fluke-179/IMSK

Mfg. part no. **FLUKE-289/IMSK** combo kit combines the advanced data logging multimeter with Trendcapture with the i400 AC current clamp. Together they provide the ability to troubleshoot most industrial problems.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-289/IMSK	Fluke-289 Industrial Logging Meter w/ Fluke- i400 Clamp Meter Combo Kit	09R2346	584.95

Mfg. part no. **FLUKE-179/IMSK** combo kit combines the rugged 179 true-rms multimeter with a built-in thermometer and the 322 AC current clamp. Together they provide the ability to troubleshoot electrical and electromechanical problems.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-179/IMSK	Fluke-179 Meter w/ Fluke 322 Clamp Meter Combo Kit	09R2345	295.95

(147954)

**LOGGING DIGITAL MULTIMETER ACCESSORIES**

Just Added



TPAK

FVF-SC2

BP189

IR189USB

IV series accessories allows easy storage of multimeters. TPAK ToolPak™ allows you to hang your meter by a magnet or strap hanger. The magnet allows you to hang your multimeter just about anywhere. For use with FLUKE-110, -170, -180 series, 87V, 83V DMMs, 724, 725 and 789 ProcessMeter™ test tools.

Mfg. part no. FVF-SC2 FlukeView® Forms version 3.0 software allows you to document, store and analyze readings or measurements from mfg. part nos. 280 and 180 series, 789, 1550B or 1653 test tools. Mfg. part no. FVF-SC4 version 4.0 software supports 8808A, 8845A and 8846A multimeters. FlukeView® forms software offers enhanced display functions and real time logging with mfg. part nos. 187 and 189. Provides data download for mfg. part no. 189. Creation of custom forms, reports, graphs and tables. Includes interface cable, full user documentation and manual. Mfg. part no. FVF-Basic works with mfg. part nos. 280 and 180 series, 789, 1550B and 1653.

Mfg. part no. BP189 high capacity battery pack for Fluke-180 series DMMs. Mfg. part no. IR189USB changes the RS232 serial cable in the mfg. part no. FVF-SC2 to a USB cable.

Mfg. Part No.	Description	Stock No.	Price Each
TPAK	ToolPak Magnetic and Velcro Strap	97B3576	33.15
FVF-SC1	FlukeView Forms Software with Cable for 53-II, 54-II, 87IV and 89V	24C4883	187.15
FLUKE-FVF-SC2	FlukeView Forms Software with Cable for 280 and 180 series, 789, 1550B and 1653	26K2565	179.93
FVF-SC4	FlukeView Forms Software with Cable for 8808A, 8845A, and 8846A	55M0615	243.45
FLUKE-FVF-BASIC	FlukeView Forms Basic Software with Cable for 280 and 180 series, 789 and 1550B	26K2563	120.20
FLUKE-FVF-UG	FlukeView Forms Software Upgrade	26K2567	92.72
FLUKE-BP189	High Capacity Battery Pack	26K2561	43.10
FLUKE-IR189USB	RS232-to-USB Cable Assembly	26K2568	40.80

(48580)

DIGITAL MULTIMETERS

FLUKE-80 SERIES V INDUSTRIAL MULTIMETERS



FLUKE®

Features:

- Unique Function for Accurate Voltage and Frequency Measurements on Adjustable Speed Motor Drives and Other Electrically Noisy Equipment (FLUKE-87-V and 87V EX)
- Optional Magnetic Hanger for Hands-Free Setup and Viewing
- Large Display Digits and 2-Level Bright White Backlight for Increased Visibility
- Withstands Hazardous 8,000 Volt Spikes Caused by Load Switching and Faults on Industrial Circuits
- Complies with Second Edition IEC and ANSI Electrical Safety Standards
- Improved Sleep Mode for Long Battery Life
- Relative Mode to Remove Test Lead Resistance for Low Ohms Measurements
- Auto and Manual Ranging for Maximum Flexibility
- Meets 1000V CAT III and 600V CAT IV Safety Standards (IEC 1010-1)
- UL listed, CSA certified, CE compliant, VDE approved, TUV approved
- Recommended accessories: C35 Case, TLK-220 Test Lead Set, i400 Current Clamp

Capabilities:

- Measure up to 1000V AC and DC
- Measure up to 10A (20A for 30 seconds)
- 10,000µF Capacitance Range
- Frequency to 200kHz and % Duty Cycle
- True-rms AC Voltage and Current for Accurate Measurements on Non Linear Signals (FLUKE-87-5)
- Built-in Thermometer (FLUKE-87-5); Thermocouple Included
- Peak Capture to Record Transients as Fast as 250 µs (FLUKE-87-5)
- 4½ Digit Mode (FLUKE-87-5)

FLUKE-80 series V has improved measurement functions, troubleshooting features, resolution and accuracy to solve more problems in electronics, plant automation, power distribution, and electro-mechanical equipment.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-83-5	Industrial Digital Multimeter	96H6286	369.95
FLUKE-87-5	Industrial Multimeter with Temperature	96H6287	379.95
FLUKE-87-5/EX	Intrinsically Safe True-rms Multimeter	20M0501	899.95

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

FLUKE-83-5 CALIBRATED	Calibrated Industrial Digital Multimeter	60K7396	424.95
FLUKE-87-5 CALIBRATED	Calibrated Industrial Multimeter with Temperature	58K3279	434.95

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FLUKE-170 SERIES DIGITAL MULTIMETERS



FLUKE®

- Wide 1000 V measurement range
- True-rms voltage and current measurements
- 6000 count resolution
- Digital display with analog bargraph and backlight (177, 179)
- Manual and automatic ranging
- Display Hold and Auto Hold
- Frequency and capacitance measurements
- Resistance, continuity and diode measurements
- Temperature measurements (179)
- Min/Max/Avg recording
- Easy battery exchange without opening the case
- Closed case calibration through front panel
- Ergonomic case with integrated protective holster
- EN61010-1 CAT III 1000 V, CAT IV 600 V
- Recommended accessories: C25 Case, TL71 Test Lead Kit, i410 Current Clamp



FLUKE-179

AC amps: 3mA to 10.00A (20A overload for 30 seconds). DC amps: 0.01mA to 10.00A (20A overload for 30 seconds). AC voltage: 30mV to 1000V. DC voltage: 0.1mV to 1000V. Resistance: 0.1Ω to 50.00MΩ. Capacitance: 1nF to 9999µF. Frequency voltage input: 2Hz to 100kHz; current input: 2Hz to 30kHz. Temperature range: -40°F to +752°F (-40°C to +400°C). Includes test leads, battery and manual. FLUKE-179 also includes 80BK-A temperature probe. Certificate of calibration available on all models, go online or call Newark.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-175 ESFP	Model 175 Digital Multimeter	25C4796	237.95
FLUKE-177 ESFP	Model 177 Digital Multimeter	25C4800	247.95
FLUKE-179-ESFP	Model 179 Digital Multimeter	25C4804	257.95

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

FLUKE-175 ESFP CALIBRATED	Calibrated Model 175 Digital Multimeter	57K9813	282.95
FLUKE-177 ESFP CALIBRATED	Calibrated Model 177 Digital Multimeter	57K9814	292.95
FLUKE-179-ESFP CALIBRATED	Calibrated Model 179 Digital Multimeter	57K9815	302.95

(68973)

87V/E INDUSTRIAL COMBO KIT

FLUKE®

Kit Contents:

- 87V Industrial Multimeter
- 1.5m Silicone Leads Resist Heat
- Removable Probes with 4mm of Exposed Metal for Use on Industrial Circuits
- Retractable Long Reach Alligator Clips
- Magnetic Hanger to Position and Hold Meter to Steel Surfaces
- K-Type Temperature Probe
- Lightweight soft case to provide optimal protection and storage
- Kit Offers a Solution for Maximum Productivity of Industrial Electricians



Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-87-5/E2 KIT	Industrial Multimeter Combo Kit	12M6081	429.95

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

FLUKE-87-5/E2 KIT CALIBRATED	Industrial Multimeter Combo Kit	23M2642	484.95
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(78759)

ELECTRICAL/HVAC COMBO KIT

FLUKE®

Fluke 62 Mini Infrared Thermometer

- Accuracy: ±1.5% of reading
- Wide temperature range from -30°C to 500°C (-20°F to 932°F)
- Single point offset laser sighting
- Backlit display for poorly lit areas

Fluke T+PRO Voltage and Continuity Tester

- Three forms of ac/dc voltage detection: light, sound, and vibration
- Extra heavy-duty, replacement test leads
- Safety rated CAT IV 600, CAT III 1000 V
- Continuity beeper

Fluke 1AC-II VoltAlert™ Non-Contact Voltage Detector

- Voltbeat technology continually tests its battery and circuitry
- Upon detection of voltage, tip glows and beeper sounds
- Voltage detection of 90 to 1000 VAC
- CAT IV 1000V



Mfg. part no. FLUKE-62/T+PRO/1AC electrical/HVAC combo kit includes compact Fluke 62 IR thermometer teamed with the full featured T+PRO voltage tester and the easy-to-use 1-AC-II non-contact voltage detector. Use the IR thermometer to test for overheating in electrical devices, then use the electrical test tools to find more about the problem. Comes complete with soft case.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-62/T+PRO/1AC	FLUKE-62/T+PRO/1AC Kit with C115 Softcase	09R2347	189.00

(147957)

ELECTRONICS COMBO KIT

FLUKE®

Combo Kit Includes:

- Fluke 179 True-rms Digital Multimeter with Backlight
- Fluke TL224 Silicone Test Leads
- Fluke TL910 Electronic Test Probes with Replacement Tips
- Fluke AC280 Heavy Duty Hook Clips
- Fluke 80BK-A Integrated Temperature Probe
- Fluke C35 lightweight soft case to provide optimal protection and storage
- TPAK Magnetic Hanger

Full-featured DMM with advanced electronic troubleshooting functions plus probes and hooks for delicate electronic measurements all packed in a sleek, durable carrying case. Designed to meet the demands of the electronics professional.



Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-179/EDA2	Electronics Combo Kit	31M7868	292.95

(74088)

ELECTRICIAN'S COMBO KIT

FLUKE®

Combo Kit Includes:

- Fluke 179 True-rms Digital Multimeter with Backlight
- Fluke 1AC-II Non-Contact Voltage Tester
- Fluke TL224 Silicone Test Leads
- Fluke TP220 Industrial Test Probes
- Fluke AC220 Heavy Duty Alligator Clips
- Fluke 80BK-A Integrated Temperature Probe
- Fluke 35 Soft Carrying Case

Multimeter and accessory combination designed specifically for today's electrician. Rugged 1000V CAT III meter, and industrial strength test lead set, and a non-contact voltage detector all in a durable carrying case.



Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-179/1AC-II KIT	Electricians Combo Kit	45M5421	292.95

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

FLUKE-179/1AC-II KIT CAL	Electricians Combo Kit	50M7190	337.95
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(74086)

**FLUKE 179 MULTIMETER AND TOOLPAK™ COMBO KIT**



- Combo Kit Includes:**
- Fluke 179 Meter (w/ Temperature)
  - Two Universal Hanger clips
  - Two hook & Loop Straps
  - Strong Magnet

Fluke 179 multimeter plus magnetic hanger (TPAK) for hands free viewing.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-179/TPAK	True-RMS Digital Multimeter w/Magnetic Hanging Kit	74C6496	272.95

**CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT**

FLUKE-179/TPAK CALIBRATED	True-RMS Digital Multimeter w/Magnetic Hanging Kit	60K7388	317.95
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(74091)

**FLUKE 110 SERIES DIGITAL MULTIMETERS**

- VoltAlert™ technology non-contact voltage detection
- AutoVolt automatic AC/DC voltage selection
- LoZ: low input impedance prevents false readings due to "ghost voltage"
- Large display and white LED backlight to work in poorly lit areas more effectively
- CAT III 600V safety rated
- UL listed, CSA certified, CE compliant, VDE approved, TUV approved



FLUKE-117

FLUKE®



110 series digital multimeters have features and functions professional electricians need to get their job done. **Mfg. part no. Fluke-117** is the ideal DMM for demanding settings like commercial buildings, hospitals and schools. The compact design makes it easy to hold and use one-handed. **Mfg. part no. Fluke-116** has a built-in thermometer and is specialized for HVAC applications including temperature and microamp measurements to quickly troubleshoot problems with HVAC equipment and flame sensors. **Mfg. part no. Fluke-115** is designed for a wide variety of electrical and electronic testing applications. **Mfg. part no. Fluke-113** is simple-to-use and has the features needed to repair most electrical problems Using the Fluke VCHECK™ LoZ low impedance measurement function, users can simultaneously test for voltage or continuity. All models compatible with **mfg. part no. TPAK** ToolPak™ magnetic hanger for hands-free operation; ordered separately below. These DMMs include **mfg. part no. TL75** hard point test lead set, registration and manual.

**COMPARISON AT A GLANCE:**

Mfg. Part No.	Fluke-117	Fluke-116	Fluke-115	Fluke-114	Fluke-113
AC/DC Voltage	600V	600V	600V	600V	600V
AC/DC Current	10A Continuous		10A Continuous		
MicroAmps		•			
VoltAlert™	•				
AutoVolts	•	•		•	
VCHECK™					•
LoZ	•	•		•	•
Resistance	40MΩ	40MΩ	40MΩ	40MΩ	60KΩ
Temperature		•			
Capacitance	1nF to 9999µF	1nF to 9999µF	1nF to 9999µF		1nF to 9999µF
Frequency	0.1Hz to 50kHz	0.1Hz to 50kHz	0.1Hz to 50kHz		
Continuity	•	•	•	•	•
Min./Max./Avg.	•	•	•	•	•
Diode Test	•	•	•	•	•
Hold	•	•	•	•	•

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-117	Electrician's True RMS Digital Multimeter	83K1721	186.95
FLUKE-116	HVAC True RMS Digital Multimeter	83K1719	176.95
FLUKE-115	True RMS Digital Multimeter	83K1718	156.95
FLUKE-114	Electrical True RMS Digital Multimeter	83K1717	129.95
FLUKE-113	Utility Digital Multimeter	94M4662	119.95

**ACCESSORIES**

C25	Softside Vinyl Meter Case	44F7741	31.00
TPAK	ToolPak Magnetic and Velcro Strap Tool Hanger	97B3576	33.15
TL75	Replacement Test Leads	44F622	18.05

(80089)

FLUKE®

**FLUKE-117 TRUE-RMS DIGITAL MULTIMETER AND FLUKE-322 CLAMP METER ELECTRICIAN'S COMBO KIT**

FLUKE®

**Combo Kit Includes:**

- Fluke-117 true-rms digital multimeter with non-contact voltage detection
- Fluke-322 Compact clamp meter
- Mfg. part no. TL75 hard point test lead set
- Mfg. part no. TPAK ToolPak™ magnetic meter hanging strap
- Mfg. part no. C115 deluxe carrying case with shoulder strap



Fluke117/322 multimeter and clamp meter electrician's combo kit is the perfect solution to meet the demands of electrical professionals. The NEW Fluke 117 DMM is paired with a Fluke 322 clamp meter for productive and effective troubleshooting in one total solution. Includes the NEW **mfg. part no. C115** durable soft carrying case for protection and easy meter transportation.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-117/322	Digital Multimeter and Clamp Meter Electrician's Combo Kit	83K1722	267.95

(80091)

**TLK-220 US INDUSTRIAL TEST LEAD KIT**

FLUKE®

**Included With Set**

- AC220 Plunger Style Alligator Clips
- AC285 Large Jaw Alligator Clips
- TP220 Sharp Test Probes
- TL224 Right-to-Straight Test Leads
- Zippered Vinyl Carrying Case With Moveable Divider



Special value SureGrip Set for industrial applications. Includes two sizes of alligator clips and sharp test probes for reliable connections, test leads and a roomy carrying case to hold and protect your meter and all your accessories. All 1000V CAT III, 600V CAT IV related.

Mfg. Part No.	Description	Stock No.	Price Each
TLK-220	SureGrip Industrial Test Lead Kit	86H2845	117.00

(79154)

**AC/DC CURRENT CLAMP KITS**

FLUKE®

- For use with your Fluke DMM to extend the current ranges
- Choice of noncalibrated or calibrated models



These special-value current clamp kits are ideal for electrical professionals looking to add on DC and AC current measurement capabilities to their DMM. Each kit includes a zippered, vinyl carry case with moveable divider. Case is roomy enough to hold and protect current clamp (included) along with your own digital multimeter and accessories

**NON-CALIBRATED KITS**

Mfg. Part No.	Description	Current Measuring Range	Stock No.	Price Each
I410-KIT	AC/DC Current Clamp Kit	400A (AC), 400A (DC)	02J7894	240.95
I1010-KIT	AC/DC Current Clamp Kit	600A (AC), 1000A (DC)	85H0100	337.40

**CURRENT CLAMP ONLY**

I800	AC Current Clamp Probe	800A (AC)	55M0782	244.00
I410	AC/DC Current Clamp	400A (AC), 400A (DC)	01F006	194.65
I1010	AC/DC Current Clamp	600A (AC), 1000A (DC)	01F007	316.40

**CURRENT CLAMP ONLY WITH CALIBRATION AND PRINTED CERTIFICATION AND DATA REPORT**

I410 CALIBRATED	Calibrated AC/DC Current Clamp	400A (AC), 400A (DC)	57K9831	234.65
I1010 CALIBRATED	Calibrated AC/DC Current Clamp	600A (AC), 1000A (DC)	57K9830	356.40
80I-110S	Calibrated AC/DC Current Clamp		92F6683	499.00

(79163)

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(148859)

DIGITAL MULTIMETERS

METER AND ACCESSORY CASES

Just Added

FLUKE®



- CXT80, 170, 280 EXTREME CASES**
- Unbreakable, watertight, airtight, dustproof, chemical resistant and corrosion proof
  - Buoyancy allows case to float in salt water with 7.94 lb load
  - Includes an automatic purge valve for quick equalization
  - Features an exclusive neoprene O-ring and ABS latches for excellent seal

Mfg. Part No.	Description	Stock No.	Price Each
CXT80	Extreme Case	12P9337	155.95
CXT170	Extreme Case	09R2344	155.95
CXT280	Extreme Case	67P4216	155.95

- C510 AND C520A LEATHER CASES**
- Oiled genuine top-grain cowhide (brown)
  - Rugged construction with heavy-duty stitching and reinforced rivets
  - Large tool belt loop and top flap to secure meter
  - C510 case designed for Fluke 110 and 170 series meters and most other Fluke DMMs, thermometers, and process calibrators
  - C520A case designed for Fluke T2 and T5 series electrical testers

Mfg. Part No.	Description	Stock No.	Price Each
C510	Leather Meter Case	01C1138	53.65
C520A	Leather Electrical Tester Case	39C3071	41.70

- C550 TOOL BAG**
- Rugged, black and yellow ballistic cloth with heavy-duty hardware
  - Steel reinforced frame
  - Large, zippered storage compartment with 25 pockets
  - Weather resistant
  - Carry all your tools to the job

Mfg. Part No.	Description	Stock No.	Price Each
C550	Tool Bag	06C0817	77.50

- C25 LARGE, SOFT VINYL METER CASE FOR DMMs**
- Zippered, black and yellow soft vinyl case with padding
  - Inside pocket

Mfg. Part No.	Description	Stock No.	Price Each
C25	Large, Soft Vinyl Meter Case	44F7741	31.00

- C90 SOFT VINYL METER CASE**
- Zippered, black and yellow soft vinyl case
  - Inside pocket and belt loop

Mfg. Part No.	Description	Stock No.	Price Each
C-90	Soft Vinyl Meter Case	44F597	29.65

- C125 SOFT FABRIC METER CASE**
- Zippered, black and yellow fabric case
  - Detachable external pouch

Mfg. Part No.	Description	Stock No.	Price Each
C125	Soft Fabric Meter Case	16F6985	32.00

- C789 FABRIC METER AND ACCESSORY CASE**
- Large black fabric carrying case with 3 compartments
  - Removable handle and shoulder strap

Mfg. Part No.	Description	Stock No.	Price Each
C789	Fabric Meter and Accessory Case	92F7017	101.65

- C1600 GEAR BOX FOR METER AND ACCESSORIES**
- Deep interior, lift-out tray keeps everything organized
  - Rubber gasket in lid seals out dust and keeps contents dry
  - Includes five hook and loop straps to wrap cords and test leads when not in use
  - Can be locked
  - Large carry handle for comfortable hauling

Mfg. Part No.	Description	Stock No.	Price Each
C1600	Gear Box	81H6396	47.20

- FLUKE-C101 HARDSIDED CARRYING CASE FOR INDUSTRIAL TEST TOOLS**
- Tough, black polypropylene exterior shell measures 12 x 14.2 x 4.1"
  - Interior cavity measures 9 x 11.5 x 2.5"
  - Configure diced foam interior to fit, store and protect all Fluke test tools
  - Durable molded latches and handle

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-C101	Hardside Carrying Case	26K2562	47.65

(61079)

DATALOGGING HAND-HELD DIGITAL MULTIMETERS

Agilent Technologies

Authorized Distributor



U1252A

U1253A

- All Models:**
- High-resolution 50,000 count display
  - Unlimited datalogging

- Mfg. Part No. U1252A & U1253A Only:**
- Built-in 20MHz frequency counter
  - 0.5 to 4800Hz variable square wave output
  - 10A DC+AC measurement range
  - Rechargeable battery with built-in charger

Mfg. part nos. U1251A and U1252A datalogging DMMs provide high-accuracy and unique features. AC current and voltage can be measured to 1MHz, with display of frequency on the dual display. The AC+DC current and voltage feature separates AC and DC components of a signal and displays them simultaneously on the dual display, allowing user to measure ripple on a DC source or DC offset on an AC signal. The datalogging feature on both models allows manual storage of 100 points, interval storage of 200 points and unlimited storage when connected to a PC via mfg. part no. U1173A IR-to-USB connectivity cable; ordered separately below. The supplied application software allows continuous datalogging that is limited only by the user's PC storage media. Mfg. part no. U1252A features a 20MHz frequency counter and a square wave generator, variable in steps, with adjustable duty cycle. Both DMM models come complete with a softside carrying case, test lead kit, quick-start guide, CD which includes user's guide, application software and instrument drivers, certificate of calibration and test report. Mfg. part no. U1251A also includes one 9V battery and mfg. part no. 1252A includes one 7.2V rechargeable battery with AC adapter and power cord. Mfg. part no. U1253A is the world's first organic LED handheld digital multimeter.

SPECIFICATIONS

Mfg. Part No.	U1251A	U1252A	U1253A
DC Voltage Accuracy	0.03%		0.025%
DC Volts		1000	
AC Volts		1000	
DC + AC Volts			1000
DC Current		10	
AC Current		10	
DC + AC Current			10
Resistance	50MΩ		500MΩ
Capacitance		100mF	
AC Frequency Limit		1MHz	
Temperature		-200 to 1372°C	
Conductance		500nS	
DBm	●	●	●
DBV	●	●	●
Duty Cycle	●	●	●
Pulse Width	●	●	●
Diode Check	●	●	●
Square Wave Output		0.5Hz - 4800Hz	
Frequency Counter		20MHz	
Safety Rating	EN61010-1 to 1000V CAT III, 600V CAT IV		

Mfg. Part No.	Description	Stock No.	Price Each
U1251A	Datalogging Hand-Held Digital Multimeter	04M7393	402.00
U1252A	Datalogging Hand-Held Digital Multimeter with Frequency Counter and Square Wave Output	04M7394	442.00
U1253A	Datalogging Hand-held Digital Multimeter w/OLED Display	12P6194	450.00

ACCESSORIES

Mfg. part no. U1160A standard test lead kit includes: test probe leads rated 1000V/15A, fine-tip test probes rated 300V/3A, SMT grabber and mini-grabber clips both rated 300V/3A and alligator clips rated 1000V/10A. Mfg. part no. U1161A extended test lead kit includes: extended test leads and extension test probes both rated 1000V/15A, medium alligator clips and 4mm banana plugs both rated 600V/10A. Mfg. part no. U1180A temperature probe thermocouple accessory kit (limits the temperature range to -20° to +200°C) includes: non-compensation transfer adapter, yellow K-type tip thermocouple and black J-type tip thermocouple.

Mfg. Part No.	Description	Stock No.	Price Each
U1173A	IR-to-USB Connectivity Cable Assembly	04M7391	30.23
U1160A	Standard Test Lead Kit	04M7389	60.47
U1161A	Extended Test Lead Kit	04M7390	42.33
U1180A	Temperature Probe Thermocouple Accessory Kit	04M7392	35.25

(89359)

Designing a power supply?

See our huge selection of bench & module voltage regulators in this catalog and online.

(148860)

**HAND-HELD DIGITAL MULTIMETERS**

**Both Models:**

- 10,000 count display
- 0.09% basic DCV accuracy
- True RMS AC measurement
- Basic functions: ACV, DCV, ACI, DCI, resistance, frequency, diode, continuity test
- Advanced functions: capacitance, temperature, MINMAX recording

**Mfg. Part No. U1242A Only:**

- Manual data logging
- Built-in switch counter, harmonic ratio
- Dual/differential temperatures capabilities



U1242A



Mfg. part nos. U1241A and U1242A enable checking more with wide measurement ranges. Feature true RMS on their 10,000 count displays. Dual-level backlighting allows operation even in subdued lighting conditions while prolonging battery life. Built-in switch counter, harmonic ratio, dual temperature and differential temperature capabilities can be accessed with the press of a button. Rated CAT III 1000 V, CAT IV 600V protection. Both DMM models come complete test lead kit, quick-start guide, CD which includes user's guide, application software and instrument drivers, certificate of calibration, and four 1.5V AAA alkaline batteries.

**SPECIFICATIONS-U1241A & U1242A**

DC Voltage Accuracy	0.09%+5
DC Volts	1000V
AC Volts	1000V
DC Current	10A
AC Current	10A
DC + AC Current	10A
Resistance	100MΩ
Capacitance	10mF
AC Frequency Limit	1MHz
Temperature	-40°C to 1000°C
Safety Rating	1000V CAT III Overvoltage Protection, 600V CAT IV

**SPECIFICATIONS-U1242A ONLY**

Manual Data Logging	•
Built-in Switch Counter, Harmonic Ratio	•
Dual/Differential Temperatures Capabilities	•

**DIGITAL MULTIMETERS**

Mfg. Part No.	Description	Stock No.	Price Each
U1241A	Handheld Digital Multimeter	53M4052	201.00
U1242A	Handheld Digital Multimeter with Data Logging	53M4053	221.00

**ACCESSORIES**

Mfg. part no. U1181A immersion probe measures temperature of food, oil, and other liquids within -50° to +700° range. Mfg. part no. U1182A industrial surface probe measures still surface temperature within -50° to +400° range. Mfg. part no. U1183A air probe measures dryer, transport pipe and surrounding air temperature within -50° to +800° range. Mfg. part no. U1583A AC current clamp extends current measurement range up to 400A.

U1162A	Alligator Clip	53M4043	10.07
U1163A	SMT Grabber	53M4044	10.07
U1164A	Fine Tip Test Probe	53M4045	10.07
U1181A	Immersion Temperature Probe	53M4046	59.39
U1182A	Surface Temperature Probe	53M4047	180.00
U1183A	Air Temperature Probe	53M4048	69.47
U1184A	Temperature Probe Adapter	53M4049	10.07
U1185A	Thermocouple ( J-type) and Adaptor	53M4050	20.04
U1186A	Thermocouple ( K-type) and Adaptor	53M4051	20.04
U1583A	Current clamp (400A)	53M4054	139.00

(100234)

**COMPACT MULTIMETERS WITH MAGNE-GRIP™ HOLSTER AND VOLTECT™**



**Features:**

- 2000-Count (Mfg. part no. 35XP-A) 4000-Count Display
- Voltect™, Non-Contact Voltage Detection, 70 to 600VAC, 50Hz ~ 60Hz
- DC Voltage and AC Voltage Measurements
- DC Current and AC Current Measurements
- Resistance, Continuity, Diode Test
- Logic Test TTL to 20MHz (Mfg. part no. 15XP-A)
- Capacitance, Temperature and Frequency (Mfg. part no. 35XP-A)
- Range Lock, Data Hold, Input Jack Warning Tone (Mfg. part nos. 15XP-A and 35XP-A)
- One-Year Warranty



35XP-A

Three new compact multimeters from Mettler. The 5XP-A, 15XP-A, and 35XP-A include MagneGrip™ Holster and Voltect™. The exclusive Magne-Grip™ holster with magnetic hanging strap frees both your hands for work, and Voltect™, a non-contact voltage detector, allows the quick detection of dangerous AC voltages without probing.

**SPECIFICATIONS**

Mfg. Part No.	5XP-A	15XP-A	35XP-A
DC Voltage	200mV - 1000V (5 Ranges)		400mV - 1000V (5 Ranges)
AC Voltage	200MV - 750V (5 Ranges)		400mV - 750V (5 Ranges)

➔ CONTINUED ➔

**COMPACT MULTIMETERS WITH MAGNE-GRIP™ HOLSTER AND VOLTECT™ (CONT.)**

Mfg. Part No.	5XP-A	15XP-A	35XP-A
DC / AC Current	200µA to 200mA	200µA TO 2A	400µA to 2A
Resistance	200 Ohm to 20 MOhm	200 Ohm - 20 MOhm	400 Ohm to 40 MOhm
Capacitance	...	...	4nF - 400 µF
Temperature	...	...	20 to 1000°C, (-4 to 1832°C)
Frequency	...	...	4KHZ to 1MHz

Mfg. Part No.	Description	Stock No.	Price Each
5XP-A	Compact DMM w/Non-Contact Voltage Detector	29M6539	42.95
15XP-A	Compact DMM w/Logic Test, Non-Contact Voltage Detector	29M6212	62.95
35XP-A	Compact DMM w/Temperature, Frequency and Capacitance	29M6228	83.95

(79168)

**MODEL 30XR-A DIGITAL MULTIMETER**



- Built-in Non-Contact Voltage Detector with Audible and Visual Indicators
- Data Hold
- Min./Max. Value Recording
- Continuity, Diode Test and Battery Test (1.5V, 9V)
- DC Volts Ranges: 200mV, 2V, 20V, 200V, 600V
- AC Volts (45Hz - 500Hz) Ranges: 200mV, 2V, 20V, 200V, 600V
- DC Current Ranges: 200µA, 2mA, 20mA, 200mA, 10A
- AC Current (45Hz - 500Hz) Ranges: 200µA, 2mA, 20mA, 200mA, 10A
- Resistance Ranges: 200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ, 20MΩ
- CAT II 600V, CAT III 300V Rated, CE
- UL and cULus Listed
- One-Year Warranty

3 1/2 digit LCD, 2000 count, low battery indication. Dimensions: 195 x 91 x 60mm (7.7 x 3.5 x 2.4"). Weight: approx. 426gr. (0.94 lbs.) including battery. Shipped with test leads, 9V battery (installed), Magne-Grip™ holster with magnet hanging strap and operating instructions. Non-contact voltage indicator, indicates AC voltages: 70V to 600VAC, red LED and speaker both indicate presence of AC voltages in this range.

Mfg. Part No.	Description	Stock No.	Price Each
30XR-A	Model 30XR Digital Multimeter	29M6225	64.95

(72225)

**TWEezer STYLE PASSIVE COMPONENT R/C SMD**



- 4000 count LCD
- Measures resistance, capacitance, and diode test
- Relative mode for zero or user supplied reference
- Overrange and low battery indicators
- Auto power off

Mfg. part no. RC100 one-hand operation for fast, precise identification and measurement of surface mount components. Comes complete with two AG13 batteries and slide cover for storage.

Mfg. Part No.	Description	Stock No.	Price Each
RC100	Tweezer Style Passive Component R/C SMD	61M1002	59.99

(148528)

**DIGITAL CLAMP MULTIMETER WITH TEMPERATURE**



**Features:**

- 1999 count autoranging display
- Diode test
- Continuity buzzer
- Data hold
- Sleep mode
- Full icon display
- Low battery indicator

**Specifications: Range**

- DC voltage: 200mV, 2V, 20V, 200V, 600V
- AC voltage: 2V, 20V, 20V, 600V
- AC current: 2A, 20A, 200A, 400A
- Resistance: 200Ω, 2KΩ, 20KΩ, 200KΩ, 2MΩ, 20MΩ
- Temperature: -40°F - +1832°F

Digital Clamp Multimeter with Temperature Measurement is perfect for general purpose applications including HVAC and appliance repair. Comes complete with zipper case, test leads, two AAA batteries and owners manual.

Mfg. Part No.	Description	Stock No.	Price 1-999
72-7222	Digital Clamp Multimeter with Temperature	01N4891	37.95

(83048)

DIGITAL MULTIMETERS

POCKET DMM WITH BARGRAPH



Features:

- 3 1/2-Digit LCD with Bargraph
- 3200-Count Display
- Over Range Indicator
- Auto Power-Off
- Data Hold, Range Hold
- Continuity and Diode Test
- Low-Battery Indicator
- 450VDC/AC RMS Overload Protection
- 90-Day Manufacturer's Warranty
- Includes Battery and Owner's Manual
- CE Compliant

SPECIFICATIONS

AC Volts	3V - 450V
DC Volts	300mV - 450V
Resistance	300Ω - 30MΩ

Mfg. Part No.	Description	Stock No.	Price Each
72-4040	Pocket Digital Multimeter	66F1961	45.60

(5427)

TRUE RMS MULTIMETER WITH USB INTERFACE



Features:

- Large 19,999 count backlit display with analog bargraph
- True RMS Measurement
- Selectable auto/manual range
- Data logging and data recall with analog bargraph
- Max/min mode
- Sleep mode

Specifications: Range

- DC voltage: 200mV, 2V, 20V, 200V, 1000V
- AC Voltage: 2V, 20V, 200V, 1000V
- DC Current: 200uA, 2000uA, 20mA, 200mA, 10A
- AC Current: 200uA, 2000uA, 20mA, 200mA, 10A
- Resistance: 200Ω, 2KΩ, 20KΩ, 200KΩ, 2MΩ, 20MΩ
- Capacitance: 20nF, 200nF, 2uF, 20uF, 200uF, 2mF, 20mF
- Temperature: -40°F - 1832°F
- Frequency: 20Hz, 200Hz, 2KHz, 20KHz, 200KHz, 2MHz, 20MHz, 200MHz
- Duty Cycle: 10% - 90%
- Current Loop: 4 - 20mA displays 0 - 100%
- Input Impedance: 10MΩ
- Dimensions: 8" x 3 3/8" x 1 1/2" (H x W x D)

Full function multimeter offers a variety of ranges for every service application and an optically isolated USB interface. Includes four foot opto-coupled USB cable, data logging software, standard test leads, short clip leads for accurate capacitance measurement, alligator clip adaptors, standard 9V battery, soft case and instruction manual.

Mfg. Part No.	Description	Stock No.	Price Each
72-7730	True RMS Multimeter with USB Interface	45M5527	159.67

(93043)

ADVANCED DIGITAL MULTIMETERS



72-7770  
72-7765

72-7720  
72-7725

72-7735C, 72-7745C  
72-7740C, 72-7750C

72-7755C

- Great Meters, Great Values
- Selected Models Calibrated with Documentation

- 1-Year Warranty
- Data Hold (Except 72-7765)
- Diode and Continuity Tests

New digital multimeters' advanced designs use high-resolution A/D converters and microcontrollers. Performance, versatility, and safety are optimized for the most demanding applications. All models include test leads, holster, manual, and batteries.

NON-CALIBRATED UNITS

Mfg. Part No.	72-7770	72-7765	72-7720	72-7725
Stock No.	02J5547	02J5546	02J5538	02J5539
Backlight	X		X	X
Auto ranging				
Bargraph				
True rms				
Display counts	2000	4000	2000	20000
DCV accuracy	±0.5%+2	±0.8%+1	±0.5%+1	±0.5%+1
DC V	200 mV to 500 V	400 mV to 500 V	200 mV to 1000 V	200 mV to 1000 V
AC V	200V to 500 V	4V to 500 V	200 mV to 750 V	2V to 750 V
DC A	2000uA to 10A	400uA to 10A	20uA to 20A	2mA to 20A
AC A		400uA to 10A	20uA to 20A	2mA to 20A
Ohms	200 Ohm - 200 MOhm	400 Ohm to 40 MOhm	200 Ohm - 200 MOhm	200 Ohm - 200 MOhm

▶ CONTINUED ▶

ADVANCED DIGITAL MULTIMETERS (CONT.)

Mfg. Part No.	72-7770	72-7765	72-7720	72-7725
Stock No.	02J5547	02J5546	02J5538	02J5539
Capacitance			2 nF - 100 μF	2 nF-20 μF
Temperature				-40°C to 1000°C
Frequency				2kHz to 20kHz
Fused 10A range				
Duty Cycle				
Relative mode				
RS232C				
Calibration				
Min/Max				
Peak/Avg				
Conductance				
Safety	IEC 1010, 600V CAT I, 300V CAT II, CE		IEC 1010, 1000V CAT II, 600V CAT III, CE	

Mfg. Part No.	Stock No.	Price Each
72-7770	02J5547	12.69
72-7765	02J5546	19.95
72-7720	02J5538	30.25
72-7725	02J5539	37.95

CALIBRATED UNITS WITH CERTIFICATION AND DATA REPORT

Mfg. Part No.	72-7735 CALIBRATED W/DATA	72-7740 CALIBRATED W/DATA	72-7750 CALIBRATED W/DATA	72-7745 CALIBRATED W/DATA	72-7755 CALIBRATED
Stock No.	02J7830	02J7831	02J7833	02J7832	73K2532
Backlight		X	X	X	X
Auto ranging	X	X	X	X	X
Bargraph					X
True rms				X	
Display counts	4000	4000	6000	4000	4000
DCV accuracy	±0.8%+1	±0.8%+1	±0.5%+3	±0.8%+1	±0.8%+1
DC V	400mV to 1000V	400mV to 1000V	600mV to 1000V	400mV to 1000V	400mV to 1000V
AC V	4V to 750 V	4V to 750 V	600 mV-1000 V	4V to 750 V	4 to 750 V
DC A	400uA to 10A	400uA to 10A	60mA to 10A	400uA to 10A	400uA to 10A
AC A	400uA to 10A	400uA to 10A	60mA to 10A	400uA to 10A	400uA to 10A
Ohms	40 Ohm to 40 MOhm	400 Ohm to 40 MOhms	600 Ohm to 60 MOhm	400 Ohm to 40 MOhm	400 Ohm to 40 MOhm
Capacitance	40 nF - 100 μF	40 nF - 100 μF	6 nF - 6 mF		4 nF - 40 mF
Temperature		-40°C to 1000°C	-40°C to 1000°C	-40°C to 1000°C	-40°C to 1000°C
Frequency	10Hz to 10MHz	10Hz to 10MHz	6kHz to 60MHz	10Hz to 10MHz	4kHz to 400 MHz
Fused 10A range	X	X	X	X	X
Duty Cycle	X	X		X	
Relative mode	X	X		X	X
RS232C	X		X	X	X
Calibration	X	X	X	X	X
Min/Max					X
Peak/Avg					
Conductance					
Safety	IEC 1010, 1000V CAT II, 600V CAT III, CE				IEC 1010, 1000V CATIII, 600V CAT IV, CE

Mfg. Part No.	Stock No.	Price Each
72-7735 CALIBRATED W/DATA	02J7830	71.63
72-7740 CALIBRATED W/DATA	02J7831	80.99
72-7750 CALIBRATED W/DATA	02J7833	122.95
72-7745 CALIBRATED W/DATA	02J7832	119.00
72-7755 CALIBRATED	73K2532	149.00

(83983)

Designing an embedded control system?

See our huge selection of MCUs, MPUs & DSPs in this catalog and online.

(148861)



DIGITAL MULTIMETERS • VOLTAGE TESTERS

TEST BENCH® HIGH-PERFORMANCE DIGITAL MULTIMETERS



Features:

- Resistance measurement
- Diode check
- Frequency measurement
- Audible continuity
- All current ranges fused
- Ruggedized case
- Auto power off
- Designed to Meet IEC61010-1 CATIII 1000V, Class 2
- Three-year manufacturer's warranty



389A

Test Bench® high-performance, multifunctional DMMs include component test capabilities, resistance, and capacitance. Tough, dual-injection molded case allows for a better grip and more protection for meter. Includes 9V battery, test leads, thermocouple temperature probe (mfg. part no. 390A only) and instruction manual. UL listed, CE compliant. Calibration with printed certification and data report is available on all models. *go online or call Newark.*

SPECIFICATIONS

Mfg. Part No.	388B	389A	390A	391A
True RMS				X
DCV Accuracy	0.005	0.0025	0.001	0.0005
Display Count	4000	4000	4000	20000
Bargraph		X	X	
Ranging	Manual	Auto/Manual	Auto/Manual	Manual
Transistor Test	X			
Logic Probe	X			X
AC/DC Voltage	750 VAC/1000 VDC	750 VAC/1000 VDC	750 VAC/1000 VDC	750 VAC/1000 VDC
AC/DC Current	20A	20A	20A	20A
Capacitance	4 nF - 40 µF	4 nF - 40 µF	4 nF - 40 µF	
Resistance	400 Ohm to 40 MOhm	400 Ohm to 40 MOhm	400 Ohm to 40 MOhm	200 Ohm, 2 kOhm, 20 kOhm, 2 MOhm, 20 MOhm
Frequency	To 4MHz	To 40MHz	To 40MHz	To 200kHz
Temperature			58° to 2372°F	
Min./Max. Peak Hold, Rel. Mode		X	X	
Data Hold		X	X	X
Duty Cycle				X
RS-232 Interface and Software			X	

Mfg. Part No.	Description	Stock No.	Price Each
388B	Basic Test Bench Digital Multimeter	22C6856	149.85
389A	Test Bench Digital Multimeter with Bargraph	22C6857	155.00
390A	Test Bench Digital Multimeter with Bargraph, RS-232 Interface and Software	22C6858	194.25
391A	Test Bench Digital Multimeter with True rms	22C6859	195.00

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

391A CALIBRATED	Test Bench Digital Multimeter with True rms	60K7400	250.00
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T+ AND T+PRO ELECTRICAL TESTERS

Just Added



- Uses 3 forms of AC/DC voltage detection: light, sound and vibration
- AC/DC voltage: 12 to 600V on LED bar, 10.2 to 600V on LCD (T+PRO only)
- Replaceable, heavy-duty test leads
- Continuity beeper
- Bright LED flashlight
- GFCI trip
- On/Off switchable beeper
- Compliant with NFPA 70E recommendations
- UL listed, CSA certified, CE compliant



T+PRO

Safer than traditional solenoid testers, mfg. part nos. T+ and T+PRO electrical testers use all three voltage detection methods: light, sound and vibration, to work more efficiently in noisy environments, dimly lit areas or tight spaces. Mfg. part no. T+PRO is the perfect choice for demanding commercial and industrial applications, with its voltage and continuity measurement, a Rotary Field indicator, resistance to 9.99kΩ and a LCD digital display with 0.1V resolution and "hold" feature for easier viewing in hard-to-test areas. Basic electrical tester, mfg. part no. T+ is ideal for residential electricians and HVAC techs who need a durable, reliable tool for testing voltage and continuity. All models include test leads and probes, test lead strap for managing leads, two AAA batteries and 2-year manufacturer's warranty. Mfg. part no. T+PRO-1AC KIT also includes mfg. part no. FLUKE-1AC-II VoltAlert™ pocket-sized, non-contact AC voltage detector. Mfg. part no. T5-Kit is a starter kit for use with the Fluke T5 electrical tester. Includes mfg. part no. TP220 SureGrip test probes with removable comfort grips, mfg. part no. AC285 SureGrip large jaw alligator clips and mfg. part no. C33 zippered soft case. SureGrip™ alligator clips are designed to improve steadiness in slippery hands. Blunt tip grabs round screw heads up to 9.5 mm. Includes one pair (red, black) of small, insulated, nickel plated jaws. Mfg. part no. TP1 flat blade design holds securely in blade type electrical wall sockets. Includes one pair (red, black) of slender probe bodies.

Mfg. Part No.	Description	Stock No.	Price Each
T+ US	T+ Electrical Tester	30M9569	49.95
T+PRO US	T+PRO Electrical Tester	30M9570	88.95

▶ CONTINUED ▶

T+ AND T+PRO ELECTRICAL TESTERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
T+PRO-1AC KIT	T+PRO Electrical Tester and VoltAlert AC Voltage Detector Kit	30M9580	104.95
T5-KIT	Starter Kit for T5 Electrical Tester	97H3607	40.90
AC220	SureGrip Alligator Clips	81C7979	30.10
TP1	Flat Bladed Test Probes	83F2783	14.45

(90368)

AC VOLTAGE DETECTORS

Just Added



TIC 410A

Mfg. Part No. TIC 300HV Features:

- 9 VDC power supply
- Audible signal
- Lightweight yet rugged
- Integrated switchguard
- Made in the USA

Mfg. Part No. TIC 410A Features:

- Up to 121kV
- 48" long



TIC 300HV

Mfg. part no. TIC 300HV is used to check fuses, breaker panels, power outlets, load break connectors, transmission lines, etc. and detects AC voltage without connection. Operating temperature 32°F to 125°F (0°C to 52°C).

Mfg. Part No.	Description	Stock No.	Price Each
TIC 300HV	Tic Tracer - AC Voltage Detector	72M4734	79.95
TIC 410A	Hot Stick	72M4735	109.95

(147138)

FLUKE-1AC-II/1LAC-II VOLTALERT NON-CONTACT VOLTAGE DETECTORS

Just Added



- The 1AC-II continually tests its battery and its circuit integrity
- Fluke Voltbeat™ technology
- The 1AC-II and 1LAC-II are Category IV – 1000 V overvoltage rated
- Voltage detection of 90 to 1000 VAC, 1LAC-II range: 20 to 1000 VAC control circuit model
- Rugged, reliable, and have two-year warranty



Mfg. Part No. Fluke 1AC-II and 1LAC-II ac voltage detectors, with VoltAlert™ non-contact voltage detection, are easy to use - just touch the tip to a terminal strip, outlet, or cord. When tip glows red and unit beeps, there's voltage in the line. Allow users to quickly test for energized circuits and defective grounds on the factory floor, in the shop, or at home.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1AC-A1-II	VoltAlert AC Voltage Detector, 90 to 1000VAC	55K3325	25.95
FLUKE-1LAC-A-II	VoltAlert AC Low-Voltage Detector, 20 to 90VAC	55K3327	25.95
FLUKE-1AC-A1-II 5 PK	VoltAlert AC Voltage Detector Kit, Pkg. of 5	04M4406	109.95

ACCESSORIES

T5-KIT	Starter Kit for T5 Electrical Tester	97H3607	40.90
AC220	SureGrip Alligator Clips	81C7979	30.10
TP1	Flat Bladed Test Probes	83F2783	14.45

(6534)

NON-CONTACT AC VOLTAGE DETECTOR



- Built-in flashlight
- Detector glows blue when AC voltage is present
- Detector glows red when it is at the source
- 40V to 300VAC



Mfg. part no. LVD1 non-contact AC voltage detector and LED flashlight is combined in one convenient, compact design. With exclusive dual-sensitivity. The voltage detector glows blue when it's 1-5" or 2.5-12.5cm away from the source AC voltage, and glows red when it's at the source. Detects voltages from 40 V AC to 300 V AC. Voltage detector glows blue 50 Hz - 60 Hz or 2.5 - 38 cm (1 - 5") away from source. Operating temperature 0 °C to 50 °C. Ultra-bright white LED with 100,000 hour bulb life. AAA battery included.

Mfg. Part No.	Description	Stock No.	Price Each
LVD1	Volt Light	11J3453	28.25

(64888)

VOLTAGE TESTERS • CLAMP METERS

**FLUKE-T5-600 AND -1000 VOLTAGE/CONTINUITY/CURRENT TESTERS**

Just Added



FLUKE®

- Compact Design with Probe Storage
- Automatically Measures Volts AC and Volts DC with Precise Digital Resolution
- Resistance and Continuity Beeper
- Easy and Accurate OpenJaw™ Current Measurement to 100 A ac
- Available in 600V and 1000V Models
- **Mfg. part no. T5-600** meets 600 V CAT III safety standards (IEC 1010-1)
- **Mfg. part no. T5-1000** meets 1000 V CAT III, 600 V CAT IV safety standards (IEC 1010-1)
- UL listed, CSA certified, CE compliant



T5-1000

FLUKE-62/T+PRO/1AC

Troubleshoots a wider range of problems safer and faster than a traditional solenoid tester. **T5 series** voltage/continuity/current testers provide a variety of measurements in one compact testing unit. Measure up to 100A AC current and 1000 ohm resistance. **Mfg. part no. T5-600** measures AC or DC voltage to 600V. **Mfg. part no. T5-1000** measures AC or DC voltage to 1000V. Includes 4mm detachable probes, instruction sheet, and 2-year manufacturer's warranty. *Order leather carrying case, holster, or starter kit, that attaches to a belt and neatly stows test leads, separately below.* **Mfg. part no. FLUKE-62/T+PRO/1AC** electrical/HVAC combo kit includes compact Fluke 62 IR thermometer teamed with the full featured T-PRO voltage tester and the easy-to-use 1-AC-II non-contact voltage detector. Use the IR thermometer to test for overheating in electrical devices, then use the electrical test tools to find more about the problem. Comes complete with soft case.

Mfg. Part No.	Description	Stock No.	Price Each
T5-600 USA	600V Voltage/Continuity/Current Tester	91F6069	104.95
T5-1000	1000V Voltage/Continuity/Current Tester	91F6070	130.95

**CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT**

T5-600 USA CALIBRATED	Calibrated 600V Voltage/Continuity/Current Tester	57K9849	144.95
T5-1000 CALIBRATED	Calibrated 1000V Voltage/Continuity/Current Tester	57K9848	170.95

**ACCESSORIES**

C520A	Leather Tester Case	39C3071	41.70
H5	Holster	83F2779	24.05
T5-KIT	Starter Kit for T5 Electrical Tester	97H3607	40.90

**ACCESSORIES**

**Fluke 62 Mini Infrared Thermometer**

- Accuracy: ±1.5% of reading
- Wide temperature range from -30°C to 500°C (-20°F to 932°F)
- Single point offset laser sighting
- Backlit display for poorly lit areas

**Fluke T+PRO Voltage and Continuity Tester**

- Three forms of ac/dc voltage detection: light, sound, and vibration
- Extra heavy-duty, replacement test leads
- Safety rated CAT IV 600, CAT III 1000 V
- Continuity beeper

**Mfg. part no. FLUKE-62/T+PRO/1AC** electrical/HVAC combo kit includes compact Fluke 62 IR thermometer teamed with the full featured T+PRO voltage tester and the easy-to-use 1-AC-II non-contact voltage detector. Use the IR thermometer to test for overheating in electrical devices, then use the electrical test tools to find more about the problem. Comes complete with soft case.

**Fluke 1AC-II VoltAlert™ Non-Contact Voltage Detector**

- Voltbeat technology continually tests its battery and circuitry
- Upon detection of voltage, tip glows and beeper sounds
- Voltage detection of 90 to 1000 VAC
- CAT IV 1000V

Mfg. Part No.	Description	Stock No.	Price Each
C520A	Leather Tester Case	39C3071	41.70
H5	Holster	83F2779	24.05
T5-KIT	Starter Kit for T5 Electrical Tester	97H3607	40.90
FLUKE-62/T+PRO/1AC	FLUKE-62/T+PRO/1AC Kit with C115 Softcase	09R2347	189.00

(19028)

**T5-H5-1AC VOLTAGE, CONTINUITY AND CURRENT TESTER KIT WITH HOLSTER**

FLUKE®

**Fluke T5-1000 Features:**

- Automatically Measures Up to 1000VAC or DC
- Measures Up to 100.0A AC
- Measures Resistance to 1000Ω
- OpenJaw™ Technology Lets You Measure Current Without Breaking The Circuit

**Fluke VoltAlert™ Features:**

- Easy To Use
- Detects 90-1000VAC
- Fits in Shirt Pocket For Convenience
- Detects Voltage Without Metallic Contact

**H5 Custom Holster**

- Designed for T5 Tester
- Rugged Fabric Holster
- Includes Flap for Lead Storage
- Built-in Belt Loop



Mfg. Part No.	Description	Stock No.	Price Each
T5-H5-1ACKIT/US	Voltage, Continuity and Current Tester Kit w/Holster	02J7897	161.95

(79157)

**L215 SUREGRIP™ KIT WITH PROBE LIGHT AND PROBE EXTENDER**

FLUKE®

- Includes L200 Probe Light, TP220 SureGrip™ Test Probes, TL224 SureGrip™ Test Lead, TP280 Test Probe Extenders, Soft Foldable Pouch
- SureGrip™ Accessories Provide Better Contact for Better Measurements
- Small, Rugged Light Frees Both Hands for Work
- 8" Test Probe Extenders Keep Hands Always From Live Circuits



Mfg. Part No.	Description	Stock No.	Price Each
L215	SureGrip Kit with Probe Light and Probe Extender	96H1189	72.55

(79136)

**TLK-225 SUREGRIP™ MASTER ACCESSORY SET**

FLUKE®

**SureGrip™ Set Includes:**

- AC220 Plunger Style Alligator Clips
- AC280 Plunger Style Hook Clips
- AC283 Plunger Style Pincer Clips
- AC285 Large Jaw Alligator Clips
- TP220 Sharp Test Probes
- TL224 Right-to-Straight Test Leads
- 6-Pocket Storage Pouch



Special value SureGrip™ Master Set is a complete selection of test tool accessories for any industrial application. Includes a convenient roll-up pouch that neatly stores each accessory. 1000V CAR III, 600V CAT IV rated.

Mfg. Part No.	Description	Stock No.	Price Each
TLK-225	SureGrip Master Accessory Set	02J7895	117.00

(79146)

**LVD2 VOLT LIGHT NON-CONTACT AC VOLTAGE DETECTOR AND LED FLASHLIGHT**

FLUKE®

- Dual Sensitivity
- Ultra-bright LED light with 100,000 hour-life
- Detects from 90 to 600V AC



**Mfg. part no. LVD2** non-contact AC voltage detector and LED flashlight are combined into one easy-to-use, pen-style design. Suitable for commercial and industrial applications. Dual levels of detection — blue indicates proximity (1" to 5") to AC voltage source and red indicates when at the source. CAT IV 600V rated. Includes one AAA battery.

Mfg. Part No.	Description	Stock No.	Price Each
LVD2	Volt Light	30M9568	32.10

(90367)

**CIRCUIT ALERT™ AC VOLTAGE TESTER**



Non-contact voltage tester detects AC voltage through a fully insulated probe tip without the risk of contacting live electrical wires. Dual audible (beeping) and visual (flashing) indicators signal the presence of AC voltage. Tests from 50-600VAC. Ideal for locating breaks in wires and voltage at receptacles, switches, and motors. Quickly locates the hot and neutral terminals in any receptacle. Built-in "safe-test" feature indicates tester and batteries are operating properly. UL listed.



Mfg. Part No.	Stock No.	Price Each
2557	92N4750	19.97

(16531)

**FLUKE 320 SERIES CLAMP METERS**

FLUKE®

- Precise Low Current Measurements With Better Than 2% Basic Accuracy
- Controls Positioned for One-Hand Operation
- Auto Shut-Off, Display Hold, Continuity Test
- Safety Rating: IEC 1010-2-031, 600V CAT III
- Two-Year Warranty
- Includes (2) AAA Batteries, Test Leads, Instruction Card, Safety Information and Soft Carrying Case
- Recommended accessories: H3 Holster, TL223 Test Lead Set, AC285 Alligator Clips



Fluke-321

Certificate of calibration available on all models, go online or call Newark.

Specifications	321	322
AC Current Range	0-400.0A	0-40.00A, 40.0-400.0A
AC Volts	0-400.0V, 400-600V	0-400.0V, 400-600V

▶ CONTINUED ▶

CLAMP METERS • PROCESS METERS & CALIBRATORS

**FLUKE 320 SERIES CLAMP METERS (CONT.)**

Specifications	321	322
DC Volts	N/A	0-400.0V, 400-600V
Resistance Range	0-400.0Ω	0-400.0Ω

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-321	Type 321 Clamp Meter	39C5515	102.95
FLUKE-322	Type 322 Clamp Meter	39C1688	111.95

**CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT**

FLUKE-322 CALIBRATED	Calibrated Mfg part no 322 Clamp Meter	57K9820	161.95
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**FLUKE-330 SERIES CLAMP METERS**



FLUKE®

- Small Body and Jaws
- In-Rush Current Function (Except mfg. part no. FLUKE-333A) for Measuring Motor Starting Current
- True-RMS (Except mfg. part nos. FLUKE-333A and -334A)
- Large Backlit Display (Except mfg. part nos. FLUKE-333A)
- Microprocessor Technology for Low-Current Measurement Accuracy
- Display Hold and Continuity Tester
- Frequency Measurement (mfg. part nos. FLUKE-337A): 5 - 400Hz
- Auto Shut-Off to Maximize Battery Life
- 3-Year Manufacturer's Warranty
- Meets 600V CAT III Safety Standards (IEC 1010-1)
- Recommended accessories: H3 Holster, TL223 Test Lead Set, AC285 Alligator Clips
- UL listed, CSA certified, CE compliant

Certificate of calibration available on all models, go online or call Newark.

FLUKE-337A



**SPECIFICATIONS**

Mfg. Part No.	FLUKE-333A	FLUKE-334A	FLUKE-335A	FLUKE-336A	FLUKE-337A
AC Current Range	0-400.0A	0-600.0A	0-600.0A	0-600.0A	0-999.9A
DC Current Range	N/A	N/A	0-600.0A	0-600.0A	0-999.9A
AC/DC Volts	0-600.0V	0-600.0V	0-600.0V	0-600.0V	0-600.0V
Resistance Range	0-600Ω	0-600Ω 601-6000Ω	0-600Ω 601-6000Ω	0-600Ω 601-6000Ω	0-600Ω 601-6000Ω
True-rms	No	No	Yes	Yes	Yes
Average Responding	Yes	Yes	No	No	No

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-333A	Fluke-333A Clamp Meter	49M0849	150.95
FLUKE-334A	Fluke-334A Clamp Meter	50M7408	171.95
FLUKE-335A	Fluke-335A Clamp Meter	46M4415	231.95
FLUKE-336A	Fluke-336A Clamp Meter	31M3539	317.95
FLUKE-337A	Fluke-337A Clamp Meter	30M9512	368.95

**CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT**

FLUKE-335A CALIBRATED	Calibrated Fluke-335A Clamp Meter	59M9152	281.95
FLUKE-336A CALIBRATED	Calibrated Fluke-336A Clamp Meter	54M4076	367.95
FLUKE-337A CALIBRATED	Calibrated Fluke-337A Clamp Meter	42M9978	418.95

(68964)

**FLUKE 350 SERIES TRUE-RMS 2000A CLAMP METERS**

FLUKE®



- Reliably handle a wide range of high-current applications with 2000A ac + dc true-rms, 1400A ac, and 2000A dc
- 2.3 in. jaw capacity is suitable for large, or multiple conductors
- In-rush current measurement captures 'power-on' surge current with accuracy and repeatability high voltage measurement of 1000V ac + dc true-rms, 600V ac, and 1000V dc allows users to perform multiple tests with only one tool (355 only)
- Resistance to 400kΩ coupled with a continuity beeper, provide the convenience of a multimeter (355 only)
- Accurately measure frequency up to 1kHz for optimum troubleshooting
- Quickly analyze readings using the MIN, MAX, and AVG functions
- Large backlit display allows for easy visibility in low-lit areas
- Use display hold feature to capture readings even when the display cannot be viewed
- Use the low-pass filter to smooth out noisy loads and stabilize readings
- CAT IV 600 V, CAT III 1000 V rating for added user protection



Fluke 350 series clamp meters address the need for accurate high current measurements up to 2000A. Meters come complete with C43 soft carrying case, 6 AA batteries, and users manual. Mfg. part no. Fluke-355 also includes TL224 1.5 m silicone rubber test leads, TP2 test probes and AC285 alligator clips. Perfect for electrical contractors and industrial service technicians.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-353	AC/DC True-rms Clamp Meter, 2000 A, Amps only	64M1119	585.95
FLUKE-355	AC/DC True-rms Clamp Meter, 2000 A	64M1120	706.95

(103501)

**FLUKE-360 AC LEAKAGE CURRENT CLAMP METER**



FLUKE®

- Measures current from from 1mA to 60A with 1mA of resolution
- Durable clamp withstands over 50,000 operations — wide 1.5" jaw size
- Dual display — 3200-count digital, 32-segments LCD bargraph
- "Display-Hold" button to capture readings in hard-to-reach places
- Auto power-Off with warning buzzer
- Conforms to IEC1010 and EMC standards
- Meets safety standard VDE0404-4 and VDE0702 requirements

Mfg. part no. FLUKE-360 AC leakage current clamp meter, designed for noninvasive checks of insulation condition, allows user to perform tests without powering down the installation or disconnecting equipment — saving time, without compromising on quality or safety. Unique jaw design eliminates the influence of adjacent current conductors, and minimizes the effects of external magnetic fields, even at low currents — perfect for performing accurate and reliable tests in todays crowded electrical environments. Uses one 3V Lithium button-cell battery. Meter comes complete with soft carrying pouch and multi-language user's manual. Overall dimensions: 6.9L x 2.8W x 1.7H.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-360	AC Leakage Current Clamp Meter	30M2188	642.95

(90373)

**FLUKE 770 SERIES MILLIAMPS PROCESS CLAMP METER**



FLUKE®

**771 Milliamp Process Clamp Meter:**

- Measures 4-20mA output signals from transmitters without breaking the loop
- Measures 10 to 50mA signals in older control systems using the 99.9mA range
- Accuracy: 0.2%
- Resolution and sensitivity to 0.01mA
- Hold function captures and displays changing measurements
- Dual backlit display with both mA measurement and percent of 4 to 20mA span

**772 and 773 Milliamp Process Clamp Meters:**

- DC voltage measurement to verify 24 V power supplies or voltage I/O signals
- Source dc voltage to test input devices that accept a 1 to 5 volt or 0 to 10 volt signal
- Scaled mA output provides a continuous mA signal that corresponds to a 4 to 20 mA signal measured by the mA clamp
- Output signal enables a logging DMM or other device to record the 4 to 20 mA signal without breaking the loop
- mA in/out: simultaneously measure the mA signal
- Apply a mA input signal to a device and measure its' 4 to 20 mA output on devices such as valves or mA isolators
- Voltage output linear ramp of 25% step output
- Automatically change the voltage output for remote testing

Mfg. part no. FLUKE-771 compact process clamp meter measures mA signal for PLC and control systems analog I/O. Detachable clamp with extension cable allows user to take measurements in tight locations, and the built-in spotlight illuminates hard to see wires in dark enclosures. Features automatic power-off after 15 minutes and 2 minute automatic-off for backlight and spotlight. Uses two AA 1.5V alkaline batteries. Meter includes soft carrying case, user's manual and manufacturer's warranty: 3-years for electronics, 1-year for clamp cable assembly.

**SPECIFICATIONS**

Mfg. Part No.	Function	Resolution and Range	Accuracy	Notes
771, 772, 773	mA measurement	0 to 20.99 mA 21.0mA to 100.0 mA	0.2% + 2 counts	measured by clamp
772 and 773	mA measurement	0 to 24.00 mA	1% + 5 counts	measured in series by test jacks
772 and 773	mA source	0 to 24.00 mA	0.2% + 2 counts	Maximum mA drive: 24mA into 1,000 ohms
772 and 773	mA simulate	0 to 24.00 mA	0.2% + 2 counts	Maximum voltage 50 V dc
773	voltage source	0 to 10.00 V dc	0.2% + 2 counts	2 mA maximum drive current
773	voltage measure	0 to 30.00 V dc	0.2% + 2 counts	...

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-771	Milliamp Process Clamp Meter	30M9567	499.00
FLUKE-772	Milliamp Process Clamp Meter	09R2350	695.00
FLUKE-773	Milliamp Process Clamp Meter	09R2351	995.00

(90370)



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(148830)

## CLAMP METERS

### FLUKE 902 TRUE RMS HVAC CLAMP METER

- Designed for HVAC applications with capacitance, DC Current (µA), and temperature measurements
- Small body and jaws fit perfectly in your hand and into tight places
- Handy 'Display Hold' button keeps measurements on the display
- Meter controls are positioned so current measurements can be done with one hand (index finger on clamp opening lever and thumb on rotary switch)
- Large, backlit display is easy-to-see in less than ideal conditions
- Auto shut-off maximizes battery life so the meter works when you need it
- Three year warranty



FLUKE®

True-rms HVAC clamp meter includes two AA alkaline batteries, one pair TL75 test leads, one 80BK integrated DMM temperature probe, soft carrying case and a users manual with safety information.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-902	True-rms HVAC Clamp Meter	05M4770	229.99

(147930)

### FLUKE-1630 EARTH GROUND CLAMP METER

- Easy, clamp-on, stakeless testing — no ground stakes required
- Measures ground resistance from 0.025Ω to 1500Ω
- Measures ground leakage current from 0.2mA to 1000mA
- AC current measurement range from 0.2 A to 30A
- Continuity loop test with audible alarm
- User-defined "HI/LO" alarm limits for rapid measurement evaluation
- "Display-Hold" button to capture readings in hard-to-reach places
- Time-saving memory function automatically records and stores up to 99 measured values
- Automatic self-calibration
- Overload protection: 200A

Mfg. part no. **FLUKE-1630** earth ground clamp meter provides ground loop and continuity testing without breaking the circuit and enables non-intrusive leakage current measurement. Ideal for commercial, industrial, and utility applications, such as high-voltage pylon installations, cell phone substations, RF transmitters and inspection of lightning protection systems. Compact, rugged design features a large, 1.38" jaw opening to accommodate a variety of conductors. Meter comes complete with a hard carrying case with shoulder strap, resistance test loop, 9V battery and multi-language user's manual.



FLUKE®

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1630	Earth Ground Clamp Meter	30M9565	1429.95

(90372)

### i5s SERIES LOW-LEVEL 5A AC CURRENT CLAMP

- Ideal for use with **Fluke 433** and **434 series** 3-Phase Power Quality Analyzers
- Measures 10mA to 5A AC
- Accuracy 10mA to 1A: 1% ±5mA (48 to 65Hz)
- Accuracy 1A to 5A: 1% (48 to 65Hz)
- Bandwidth from 40Hz to 5kHz
- Output level: 400mV/A
- Buy the 3-Pack and Save



i5sPQ3

FLUKE®

Specially configured to provide low-current accuracy while taking measurements on secondary current transformers. Mfg. part no. **i5s** AC current clamp accommodates conductors up to 0.6" (15mm). Compact shape makes transporting and storing convenient; the clamp measures only 4.6 x 1.7 x .9" (116 x 43 x 23mm). Takes accurate readings without breaking the circuit. Output cable is 2.5 meters long with BNC connector termination. Rated CAT III 600V (insulated conductors only). One-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
i5S	Low-Level 5A AC Current Clamp	43K8757	433.80
i5SPQ3	5A AC Current Clamp	43K8758	997.85

(85474)

### DIGITAL AC/DC CLAMP-ON MULTIMETERS

All are designed to conform to UL, ULC, TÜV, CE, IEC standards, except **mfg. part no. ACDC-400** CATIII 600, CE. Also included are test leads, carrying case, battery, and instruction manual.



AMPROBE®



#### SPECIFICATIONS

Mfg. Part No.	ACDC-400
AC Voltage	600 V
DC Voltage	600 V
AC AMPS	400A

▶ CONTINUED ▶

### DIGITAL AC/DC CLAMP-ON MULTIMETERS (CONT.)

Mfg. Part No.	ACDC-400
DC AMPS	400A
Resistance	X

Mfg. Part No.	Description	Stock No.	Price Each
ACDC-400	400A Clamp-On Digital Multimeter	02J0397	179.95

#### ACCESSORIES

DKTA-620	Single-to-Dual Input Temperature Adapter	48F5520	29.95
TAC-DMM	Type-K Temperature Adapter	48F5519	17.95

(85524)

### AC CLAMP-ON MULTIMETERS

NEW TECHNOLOGY

AMPROBE®



#### SPECIFICATIONS

	ACD-15 TRMS PRO	ACD-15 TRMS PRO	ACD-16 PRO	ACD-16 TRMS PRO
Mfg. Part No.	ACD-15 PRO	ACD-15 TRMS PRO	ACD-16 PRO	ACD-16 TRMS PRO
True RMS		X		X
AC AMPS	2000A	2000A	1000A	1000A
AC/DC Voltage	600	600	600	600
Resistance	X	X	X	X
Capacitance	X	X		
Frequency	X	X	X	X
Temperature			X	X
AC/DC micro-Amps				
Non-contact voltmeter	X	X		
PC Connection			X	X
Safety	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V

Mfg. Part No.	Description	Stock No.	Price Each
ACD-14 PLUS	600A Clamp-On Multimeter with Dual Display	40P3919	99.95
ACD-14 TRMS-PLUS	600A Clamp-On Multimeter with Dual Display TRMS	40P3920	139.95
ACD-15 PRO	Clamp-on, 2000A AC	66K6275	149.95
ACD-15 TRMS PRO	TRMS Clamp-on, 2000A AC	66K6276	159.95
ACD-16 PRO	Clamp-on, 1000A AC, PC connection	66K6277	149.95
ACD-16 TRMS PRO	TRMS Clamp-on, 1000A AC, PC connection	66K6278	169.95

(85778)

### DIGITAL CLAMP MULTIMETER WITH FREQUENCY

TENMA®

- Features:
- 3999 count autoranging display
  - 1" Clamp diameter
  - Diode test
  - Continuity buzzer
  - Data hold
  - Sleep mode
  - Full icon display
  - Low battery indicator

#### Specifications: Range

- DC voltage: 400mV, 4V, 40V, 400V, 600V
- AC voltage: 4V, 40V, 40V, 600V
- DC current: 40A, 400A
- AC current: 40A, 400A
- Resistance: 400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ
- Frequency: 10Hz - 100MHz
- Duty cycle: 0.1 - 99.9%
- \*TRMS AC voltage frequency: 40Hz - 400Hz
- \*TRMS AC current frequency: 50Hz - 60Hz

Digital Clamp Multimeter with Frequency Measurement is perfect for general purpose applications. Comes complete with zipper case, test leads, 9V battery and owners manual.



72-7226

Mfg. Part No.	Description	Stock No.	Price Each
72-7226	Digital Clamp Multimeter with Frequency and True RMS AC Measurement	45M5526	84.95
72-7224	Digital Clamp Multimeter with Frequency	45M5525	63.95

\*Mfg. part no. 72-7226 only (83047)

CLAMP METERS • ANALOG METERS

DIGITAL TRUE RMS CLAMP METER

Features:

- 5999 count autoranging display
- Backlit display
- True RMS AC measurement
- AC surge current measurement
- 10MΩ input impedance
- Diode test
- Continuity buzzer
- Max hold
- Data hold
- Full icon display
- Sleep mode
- Low battery indicator
- Includes zipper case, test leads, owners manual
- Requires one 9V battery (292-035), included

Specifications: Range

- DC voltage: 6.6V, 66V, 600V (±0.8% +1)
- AC voltage: 6.6V, 66V, 600V (±1.2% +5)
- DC current: 66A, 1000A (±1.5% +8)
- AC current: 66A, 1000A (±2% +8)
- Resistance: 660Ω, 6.6KΩ, 66KΩ, 660KΩ, 6.6MΩ, 66MΩ (±1% +2)
- Frequency: 660Hz ~ 66MHz (±0.1% +3)
- Duty Cycle 0.1-99.9%

Perfect for applications where higher accuracy is critical. This compact clamp meter measures AC/DC voltage, AC/DC current, resistance and frequency.



Mfg. Part No.	Description	Stock No.	Price 1-999
72-7228	Digital Clamp Amp Meter, TRMS, AC/DC Voltage, Current, Frequency	01N4892	105.00

(116529)

BK PRECISION CLAMP METERS



BK Precision offers a wide variety of current clamps for safe non-invasive current measurement. Measure up to 1000A with these reliable, rugged instruments. All clamps are much more than a current clamp offering the ability to measure voltage, resistance, capacitance and even frequency. Additionally, special features allow for the recording of minimum and maximum values, peak values, test diodes and for continuity.



Mfg. Part No.	330B	313A	350B	369A
Jaw Opening:	2.24"	0.98"	2.24"	2.24"
Autoranging:	...	X	...	...
Bargraph:	...	...	X	X
Display Counts:	2000	...	3200	4000
True RMS:	...	...	...	X
AC (A):	1000 A	600 A	1000 A	1000 A
DC (A):	...	600 A	...	1000 A
AC (V):	750 V	600 V	750 V	750 V
DC (V):	1000 V	600 V	1000 V	1000 V
Resistance:	2000 Mohm	1 kohm	30 Mohm	40 Mohm
Frequency:	...	...	32kHz	400kHz
Capacitance:	...	...	...	4 nF-400 nF
Continuity:	X	X	X	X
Data Hold:	X	X	X	X
Max Hold:	X	...	...	...
Peak Hold:	...	...	X	X
Range Hold:	...	...	X	X
Min/Max:	...	...	...	X
Relative Mode:	...	...	...	X

Mfg. Part No.	Description	Stock No.	Price Each
330B	Clamp-On Meter	92F385	110.88
313A	Mini Clamp-On Meter	68H8394	159.00
350B	Clamp-On Meter	92F383	183.68
369B	Clamp-On Meter	92F382	224.00

AC LINE SEPARATOR

Used with AC current clampmeter to separate conductors on 110VAC devices with 2-conductor power cords. Separator plugs into wall outlet and the device is plugged into the separator. Openings in separator then allow X1 or X10 current measurements.

Mfg. Part No.	Description	Stock No.	Price Each
301	AC Line Separator	54M5379	21.00

(85502)

260 SERIES ANALOG VOM

The 260 series is for monitoring fluctuating trends and rates. Large color-coded dial with mirrored scale to eliminate parallax error. More than 20 measuring ranges for DC voltage, AC voltage, DC current, resistance, and dB level. Also measures AC current up to 250A with Mfg. part no. 150-2 amp clamp accessory, ordered separately; go online or call. Mfg. part nos. 260-8P and 260-8PRT also feature additional relay overload protection that is resettable and audible continuity check. Mfg. part nos. 260-8RT and 260-8PRT include roll-top case. All models include batteries, test leads with alligator clips, and manual. Carrying cases and other accessories ordered separately; on this page.



260-8 and 260-8Xi

Mfg. Part No.	Description	Stock No.	Price Each
12388 (260-8)	Analog Voltmeter	62F300	219.43
12389 (260-8RT)	Analog Voltmeter	62F303	263.25
12391 (260-8P)	Analog Voltmeter	62F1191	292.37
12392 (260-8PRT)	Analog Voltmeter	62F2270	335.44

Mfg. part nos. 260-8Xi, 260-8XPI offer the same features in a highly-visible yellow, durable ABS plastic housing designed for the toughest environments. Mfg. part no. 260-6XLM has special low power ohms. Mfg. part no. 260-6XLMP also features overload protection.

Mfg. Part No.	Description	Stock No.	Price Each
12395(260-8Xi)	Analog Voltmeter	50F3533	236.99
12396(260-8XPI)	Analog Voltmeter	50F3534	309.93
12206(260-6XLM)	Analog Voltmeter	98F3358	291.17
12211	Analog Voltmeter	01B6875	349.55

(5320)

270-5 SERIES HIGH-ACCURACY VOM

Extra-high accuracy VOM for applications requiring critical measurements: 1.25% f.s. DC volt accuracy, 2% f.s. AC volt accuracy. Large color-coded dial with mirrored scale to eliminate parallax errors. Self-shielding meter movement. More than 20 measuring ranges for DC voltage, AC voltage, DC current, resistance, and dB level. Also measures AC current with mfg. part no. 150-2 amp clamp accessory, order separately; go online or call. Both models include test leads with alligator clips, batteries, and manual. Mfg. part no. 270-5RT comes with roll-top case. Order other accessories separately; go online or call.



Mfg. Part no.	Description	Stock No.	Price Each
12226 (270-5)	High Accuracy Analog Voltmeter	62F380	249.29
12227 (270-5RT)	Analog Voltmeter with Roll-Top Case	16F2247	292.37

(5321)

MODELS 228 AC/DC AND 229-2 CURRENT LEAKAGE TESTERS



228

229-2

Model 228 AC/DC is designed to mimic the human body's sensitivity to electrical shock (Let-Go, reaction, and burn hazard). Model 229-2 detects small leakage currents in appliances, motors, and other equipment. Model 228 complies with UL, IEC, and ANSI guidelines. Model 229-2 checks both 120 and 240VAC equipment. Conforms to ANSI C101.1-1986 and UL safety standards. Both include test leads, battery, and manual. Carrying cases and other accessories ordered separately, on this page.

Mfg. Part No.	Description	Stock No.	Price Each
40027	Model 228 Current Leakage Detector	93F6825	613.70
12267 (229-2)	Model 229-2 Current Leakage Detector	62F324	333.34

(13528)

TEST EQUIPMENT ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
00832	Nylon Case-Yellow*	50F3535	59.13
00834	Nylon Case-Black*	50F8971	59.13
00805 CASE	Leatherette Case*	62F302	73.99
00248	Roll-Top Case (260-8, 8P, 270-5)	62F204	59.74
00043	Probe Leads w/Screw Clips (260-8, 8P, 270-5)	62F3012	18.76
00125	Probe Leads w/Alligator Clips (260-6XLM, 6XLMP, 8Xi, 8XPi, 228, 229-2)	01B6608	18.76
00545	150-2 AC Amp-Clamp (260-8, 8P, 270-5)	62F2377	117.96

\*For use with mfg. part nos. 260-8, 8P, 8Xi, 8XPi, 6XLM, 6XLMP, 270-5, 228, 229-2 (5376)

ANALOG METERS • SIGNAL & FUNCTION GENERATORS

DELUXE ANALOG DISPLAY VOM



Features:

- Large three-color mirrored scale
- Carry handle doubles as a stand
- Continuity buzzer

Specifications: Range

- DC voltage: 600mV, 3V, 12V, 60V, 300V, 1000V
- AC Voltage: 600mV, 3V, 12V, 60V, 300V, 1000V
- DC Current: 120uA, 3mA, 30mA, 300mA, 10A
- Resistance: x1Ω, x100Ω, x1KΩ, x10KΩ
- Battery Test: 1.5V @ 300mA, 9V @ 30mA
- Continuity: Audible indication, less than 100Ω
- Input Impedance: 20KΩ/V (DC), 9KΩ/V (AC)
- Dimensions: 6.7" x 4.9" x 1.9" (H x W x D)



Deluxe Analog Display VOM is perfect for educational purposes or in applications where unstable readings make digital displays inconvenient. Comes complete with test leads, instruction manual, one 9V battery and two AA batteries.

Mfg. Part No.	Description	Stock No.	Price Each
72-8170	Deluxe Analog Display VOM	20M0354	31.95

(852286)

FLUKE-271 DIRECT DIGITAL SYNTHESIS (DDS) FUNCTION GENERATOR WITH ARB



- Four row alphanumeric LCD
- Arbitrary capability with storage for five user defined waveforms
- Multiple standard and complex waveforms recalled from internal memory
- Extensive modulation capabilities include Sweep, AM, Gating, Trigger/Burst, FSK and Hop
- Variable symmetry, variable duty cycle
- RS-232 and IEEE-488 interfaces



Mfg. part no. 271 is a high-performance function generator using Direct Digital Synthesis (DDS) techniques. Standard waveforms include: sine, square, positive pulse, negative pulse, triangle, ramp up, ramp down. Additionally arbitrary waveforms include multi-level squarewaves, waveform hopping and pseudo-random noise. Extensive modulation capabilities make this a highly versatile signal source. Up to five arbitrary waveforms of 1024 10-bit words can be stored in non-volatile memory. All waveforms can be swept over their full frequency range at a rate variable between 10 milliseconds and 15 minutes. All functions are accessible via the front panel. Size: 3U, 5.11" (130mm) high; half-rack 8.34" (212mm) wide, 12.99" (330mm) deep. Weight: 9 lbs. Power: 110 to 120VAC or 220 to 240VAC +/- 10%, 50/60Hz AC by internal adjustment. Includes user manual, power cord. Order mfg. part no. Y200H 19" rack mounting kit separately below. Also available, mfg. part no. SW200ARB Window<sup>®</sup>-based Waveform Manager Plus software, allows advanced waveform creation, editing and management. Order separately, go online or call.

SPECIFICATIONS

Frequency Range	0.0MHz to 10MHz
Frequency Resolution	7 Digits or 0.1MHz
Output Impedance	50Ω or 600Ω Switchable
Amplitude	5mV to 20V pk-pk Open Circuit (2.5mV to 10V into 50Ω/600Ω) Output can be specified as V-H: 2

Mfg. Part No.	Description	Stock No.	Price Each
271-U 115V	Direct Digital Synthesis (DDS) Function Generator with ARB	43K0433	1595.00
Y200H	19" Rack Mounting Kit, Half-Rack	43K0432	345.00

(85277)

280 SERIES ARBITRARY WAVEFORM GENERATORS



- Choice of 1, 2 and 4 independent or linked channels
- Uses Direct Digital Synthesis (DDS) techniques
- 40MS/s max. sampling speed
- 16MHz function generator
- 10MHz pulse generator
- Pulse train pattern generator
- 12-bit arbitrary generator
- Link 16 (max.) arbitrary waveforms in a sequence
- Powerful modulation capabilities
- Built-in trigger generators
- Multi-channel phase locking and summing
- Waveform Manager Plus for Windows<sup>®</sup> software included
- Multiple standard waveforms recalled from internal memory
- RS-232 and IEEE-488 interfaces

280 series universal waveform generators combine many generators in one instrument. Their extensive signal simulation capabilities include arbitrary waveforms, function generator, pulse/pulse train generator, sweep generator, trigger generator, tone generator, and amplitude modulation source. These waveform generators use Direct Digital Synthesis (DDS) techniques and variable clock sampling technology to provide a fully featured programmable function and arbitrary waveform capability. Standard waveforms include: sine, square, triangle, dc, positive ramp, negative ramp, sine(x)/x, pulse, pulse train, cosine, haversine and haversine. By using the Versatile Pulse generator capabilities each channel can generate complex pulse trains. Fully programmable via RS-232 or IEEE-488 interfaces. All functions are accessible via the front panel. Size: 3U, 5.11" (130mm) high; half-rack 8.34" (212mm) wide, 12.99" (330mm) deep. Weight: 9 lbs. Power: 110 to 120VAC or 220 to 240VAC +/- 10%, 50/60Hz AC by internal adjustment. Includes power cord, user manual, and Window<sup>®</sup>-based mfg. part no. SW200ARB Waveform Manager Plus software, that allows advanced waveform creation, editing and management. Order mfg. part no. Y200H or Y200F 19" rack mounting kit separately below.

Mfg. Part No.	Description	Stock No.	Price Each
281-U 115V	1-Channel Arbitrary Waveform Generator	43K0434	2125.00
282-U 115V	2-Channel Arbitrary Waveform Generator	43K0435	3620.00

▶ CONTINUED ▶

280 SERIES ARBITRARY WAVEFORM GENERATORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
284-U 115V	4-Channel Arbitrary Waveform Generator	43K0436	5860.00
Y200H	19" Rack Mounting Kit, Half-Rack for Type 281	43K0432	345.00
Y200F	19" Rack Mounting Kit, Full-Rack for Types 282 and 284	43K0431	345.00

(85278)

290 SERIES WAVEFORM GENERATORS



291



292-294

- Choice of 1, 2 and 4 independent or linked channels
- 100 MS/s 12-bit arbitrary waveform capability
- 1M point waveform memory
- 40 MHz function generator capabilities using DDS (50MHz for square waves)
- 10ns pulse pattern generator
- Waveform sequencing with up to 1024 segments
- Unlimited waveform storage using CF<sup>®</sup> memory card
- Waveform Manager Plus software for Windows
- USB interface in addition to RS-232 and GPIB

290 series uses Direct Digital Synthesis techniques and variable clock sampling technology to provide fully featured programmable function and arbitrary waveform capability, combining many generators into one instrument. Signal simulation capabilities include arbitrary waveforms, function generator, pulse/pulse train generator, sweep generator, trigger generator, tone generator, and amplitude modulation source. Maximum arbitrary waveform size is 1 M points. Up to 500 user-defined waveforms may be stored on the removable memory card. Arbitrary waveforms can be defined by front panel editing controls, by downloading of waveform data via RS-232,USB or GPIB, or by writing directly to the removable memory card using the USB card reader/writer connected to a PC. Waveforms: Sine, square, triangle, DC, positive ramp, negative ramp, sin(x)/x, pulse, pulse train, cosine, haversine and haversine.

Mfg. Part No.	Description	Stock No.	Price Each
291-U 115V	1-Channel 100 MS/s Arbitrary Waveform Generator	61M3743	3515.00
292-U 115V	2-Channel 100 MS/s Arbitrary Waveform Generator	61M3744	5325.00
294-U 115V	4-Channel 100 MS/s Arbitrary Waveform Generator	61M3745	7730.00

(102973)

CATV SIGNAL LEVEL METER



Features:

- Direct channel input of off-air channels 2-69 and CATV channels 2-136
- Direct frequency input from 5-870MHz
- Simultaneously displays video carrier and audio carrier strength
- Selectable dBmV and dBμV units
- Spectrum scan and channel scan modes
- Tilt measurement of seven user definable channels
- Carrier/noise ratio measurement
- Trunk voltage measurement
- Self recalibration
- Large 1 1/2" x 2 1/4" dot matrix LCD display
- Data logging
- RS-232C port with serial print function



Fully portable, compact signal level meter is essential when installing CATV or off-air antenna systems. Easily verify proper signal level of any channel at each drop throughout a structure. FM demodulator and internal speaker provide audio output of measured channel. Compact ergonomic unit is less than 9" tall, and is easily held in one hand. Internal NiMH battery with included wall charger. Battery life: 5-8 hours. Includes carry case, carry strap and manual

Mfg. Part No.	Description	Stock No.	Price Each
72-805	CATV Analog Signal Level Meter	01N4889	613.00

(114929)

FUNCTION AND SIGNAL GENERATORS



3001



4011A

SPECIFICATIONS

Mfg. Part No.	Sine	Square	Triangle	TTL	CMOS	Pulse	Ramp	Burst	Stock No.
4011A	X	X	X	X	X	X	X	X	22C6860
4017A	X	X	X	X	X	X	X	X	22C6861
4017B	X	X	X	X	X	X	X	X	36M2369
3001	X	X							90F2312
4040A	X	X	X	X	X	X	X	X	96B4096
4012A	X	X	X	X	X	X	X	X	97J8431

▶ CONTINUED ▶

SIGNAL & FUNCTION GENERATORS • SPECTRUM ANALYZERS

FUNCTION AND SIGNAL GENERATORS (CONT.)

NON-CALIBRATED

Mfg. Part No.	Description	Stock No.	Price Each	
			1-2	
4011A	5MHz Function Generator	22C6860	371.85	
4017A	10MHz Sweep Function Generator	22C6861	465.09	
4017B	10MHz DDS Sweep Function Generator	36M2369	582.75	
3001	Audio Generator	90F2312	94.08	
4040A	20MHz Sweep Function Generator	96B4096	728.00	
4012A	5MHz Sweep Function Generator	97J8431	375.00	

(5299)

FIELDFOX RF ANALYZER

NEW TECHNOLOGY



Features:

- Bright 6.5" color anti-glare LCD display with LED backlight
- Task-driven keys are grouped to easily perform standard field measurements
- Portrait design and large buttons for easy operation, even with gloves on
- Dedicated marker keys for quick marker function access
- Backlit keypad
- Easily accessible battery compartment
- LAN port for fast data transfer
- SD flash card slot for additional data storage
- USB ports for convenient data transfer
- Connector covers help keep dust out
- Convenient side strap makes it easy to hold and carry
- Meets MIL-PRF-28800F Class 2 specification
- Dimensions: 11.5"H x 7.4"W x 2.8"D (292 x 188 x 72mm)
- Lightweight: 6.2 lbs/2.8kg including battery

Measurements:

- Cable and antenna analyzer for return loss, one-port cable loss, distance to fault, line sweeping, and VSWR measurements
- Vector network analysis display (S11, S21, phase, and Smith chart)
- Built-in spectrum analyzer
- Optional preamplifier; order separately below

Calibration:

- Integrated QuickCal allows user to calibrate FieldFox without a calibration kit, providing worry-free accuracy and repeatability
- Immediate calibration with FieldFox's CalReady makes unit calibration ready at the test port immediately following power-up
- Broadband calibration with automatic interpolation eliminate re-calibration when test frequency or number of points changes
- Mechanical open, short, load calibration support

Cable and Antenna Analyzer:

- Frequency range: 2MHz to 4GHz or 6GHz
- Directivity: > 42dB
- Measurement speed: 1.5ms / per point

Network Analyzer:

- Vector measurements, S11 phase and S11 magnitude
- Scalar measurement, S21 magnitude
- Display: log, linear, phase, VSWR, Smith chart

Spectrum Analyzer:

- Frequency range: 100kHz to 4GHz or 6GHz
- DANL (Displayed Average Noise Level): -148dBm
- Phase noise: -88dBc at 10kHz
- TOI (Third Order Inter-modulation distortion): +18dBm
- Sweep speed: 1 second / full span (6GHz)

Power Meter:

- 9kHz to 24GHz
- U2000 Series USB power sensor dependent

**N9912A series** 4GHz or 6GHz FieldFox RF analyzer is an integrated hand-held instrument for wireless network installation and maintenance. Combines 4GHz or 6GHz cable/antenna analysis, spectrum analysis, power meter measurements and vector network analysis into one rugged, compact, lightweight and weather-resistant package. Comes complete with AC/DC adapter, lithium ion battery, soft carrying case, user manual, CD-ROM with FieldFox Data Link software and one-year manufacturer's warranty. Order license key software upgrade options and accessories separately below.

Mfg. Part No.	Description	Stock No.	Price Each
N9912A-104	FieldFox RF Analyzer with 4GHz Cable and Antenna Analyzer	46P5209	7614.00
N9912A-106	FieldFox RF Analyzer with 6GHz Cable and Antenna Analyzer	46P5210	8617.00

FIELDFOX OPTIONS

OPTION	Description	Stock No.	Price Each
OPTION 110	Transmission Measurement Software Upgrade Key for Insertion Loss or Gain Measurement	46P5211	1363.00
OPTION 111	QuickCal Calibration Software Upgrade Key	46P5212	952.00
OPTION 230	4GHz Spectrum Analyzer Capability Software Upgrade Key — For N9912A-104 Only	46P5213	3706.00
OPTION 231	6GHz Spectrum Analyzer Capability Software Upgrade Key — For N9912A-106 Only	46P5214	6713.00
OPTION 235	Preamplifier Software Upgrade Key for Spectrum Analysis Capability (Requires Option 230 or 231; order separately above)	46P5215	751.00
OPTION 302	External USB Power Sensor Support Software Upgrade Key	46P5216	500.00
OPTION 303	Network Analysis Capability Software Upgrade Key for 1 Port (Requires Option 110 for 2nd Port; order separately above)	46P5217	8114.00
OPTION 308	Vector Voltmeter Software Upgrade Key	46P5218	1550.00

FIELDFOX ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
N9910X-800	T-Calibration Kit, DC-6GHz, Type-N(m)	46P5190	651.00
N9910X-801	T-Calibration Kit, DC-6GHz, Type-N(f)	46P5191	892.00
N9910X-802	T-Calibration Kit, DC-6GHz, 7/16 DIN(m)	46P5192	892.00
N9910X-803	T-Calibration Kit, DC-6GHz, 7/16 DIN(f)	46P5193	892.00
N9910X-810	Rugged Phase Stable Cable, Type-N(m) to Type-N(m), 5-ft.	46P5194	550.00
N9910X-811	Rugged Phase Stable Cable, Type-N(m) to Type-N(f), 5-ft.	46P5195	550.00
N9910X-812	Rugged Phase Stable Cable, Type-N(m) to Type-N(m), 12-ft.	46P5196	782.00
N9910X-813	Rugged Phase Stable Cable, Type-N(m) to Type-N(f), 12-ft.	46P5197	782.00
N9910X-820	Antenna, Directional, Multiband, 800-2500MHz, 10dBi	46P5198	500.00
N9910X-821	Antenna, Telescopic Whip, 70MHz - 1GHz	46P5199	50.02

▶ CONTINUED ▶

FIELDFOX RF ANALYZER (CONT.)

FIELDFOX ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
N9910X-843	Coaxial Adapter, Type-N(m) to 7/16 DIN(f)	46P5200	80.23
N9910X-845	Adapter Kit: Type-N(f) to 7/16 DIN(f), Type-N(f) to 7/16 DIN(m), Type-N(f) to Type-N(f)	46P5201	156.00
N9910X-860	Fixed Attenuator, 40dB, 100W, 3GHzDC, Type-N(m) to Type-N(f)	46P5202	601.00
N9910X-861	Fixed Attenuator, 40dB, 50W, 8.5GHzDC, Type-N(m) to Type-N(f)	46P5203	487.00
N9910X-870	Replacement Battery	46P5204	100.00
N9910X-872	External Battery Charger	46P5205	276.00
N9910X-873	AC/DC Adapter	46P5206	151.00
N9910X-874	External Bias-Tee, 2.5MHz to 6GHz, 1W, 0.5A	46P5207	201.00
N9910X-881	Hard Transit Case	46P5208	401.00

(141917)

HAND-HELD 3GHZ RF SPECTRUM ANALYZER



Features:

- 6.5" transfective LCD with 640 x 480 resolution
- Multi-language user interface: 11 languages
- Modern USB connectivity for PC control and data transfer
- Low SSB phase noise helps detect low signals close to carrier
- Narrow RBW helps to resolve close-in signals
- Measurement applications for HD radio and DSL interference testing
- Four hours of battery life

Authorized Distributor



Mfg. part no. N9340B provides good usability and exceptional performance for installation and maintenance, spectrum monitoring, and on site tasks. Supports one-button measurement in occupied bandwidth, channel power and adjacent channel power ratio, virtually eliminating set up time in the field. Comes with multi-language quick start tutorial, CD-ROM of manual, and a soft carrying case. 3 GHz pre-amplifier, 3 GHz tracking generator and a hard-side transit case are available; go online or call.

SPECIFICATIONS

Frequency Range	100 kHz to 3 MHz
Setting Resolution	1% of Reference Level
Resolution Bandwidth	30 Hz to 1 MHz in 1-3-10 Sequence
Displayed Average Noise Level (DANL)	-126 dBm at 50 MHz
Sweep Time	10 ms to 1000 s
Flatness	±3 dB at 50 MHz
3 <sup>rd</sup> Order Intercept	+10 dBm

Mfg. Part No.	Description	Stock No.	Price Each
N9340B	Hand-Held 3 GHz RF Spectrum Analyzer	94M4922	7987.00

(94377)

HAND-HELD SPECTRUM ANALYZERS, 3.3 GHz AND 8.5 GHz

NEW TECHNOLOGY

BK PRECISION®

- Frequency range 50kHz to 3.3GHz or 8.5GHz
- Portable, weighs 1.8 kg including the battery
- 4 hour battery life; easy-to-replace rechargeable lithium-ion battery
- USB interface for PC connectivity
- PC software for remote control and documentation of measurement results
- Conveniently save measurement data to USB flash drive
- Large easy-to-read color display
- External trigger for zero span measurements
- SCPI-like remote control commands



Full-featured spectrum analyzers are compact, light weight for quick and precise signal investigations. Built-in tracking generator to rapidly determine transmission characteristics of 2 port devices (model 2652A). Measurement functions: channel and adjacent channel power, occupied bandwidth, electric and magnetic field strength. Smart one button "Auto Tune" function automatically scans the full frequency range, detects and centers the maximum signal, and configures optimum values for RBW, VBW, sweep time and reference level. All models include AC adapter, PC software and USB cable, lithium-ion battery, soft carrying case, accessory pouch and users manual.

Mfg. Part No.	Description	Stock No.	Price Each
2650A	Handheld 3.3 GHz Spectrum Analyzer	09R1812	6450.00
2652A	Handheld 3.3 GHz Spectrum Analyzer with Tracking Generator	09R1813	8450.00
2658A	Handheld 8.5 GHz Spectrum Analyzer	09R1814	10995.00

ACCESSORIES

CC265	Deluxe Spectrum Analyzer Accessory Kit for 2650/2650A Series	54M4448	155.00
CC560	Deluxe Spectrum Analyzer Accessory Kit	75M0242	650.00

(147959)



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(148833)

SPECTRUM ANALYZERS • DATA ACQUISITION • PROCESS METERS & CALIBRATORS

SPECTRUM ANALYZER



- Frequency Range: 0.15MHz to 1050MHz
- 4½-Digit Display (Center and Marker Frequency: 0.1MHz Resolution)
- -100 to +13dBm Amplitude Range
- Dynamic Range: 80dB
- Level Accuracy: ±2dB
- 100kHz/div to 100MHz/div Spanwidth
- Frequency Accuracy: ±100kHz
- 4 x 10dB Attenuators
- Input Impedance: 50Ω
- AM/FM Demodulation
- 6" CRT
- Built-in Tracking Generator



- TG Level: -50dBm to +1dBm
- TG Attenuation: 0 to 40dB (4 x 10dB)
- TG Output Impedance: 50Ω
- Comes Complete with Instruction Manual and Power Cord

Mfg. Part No.	Description	Stock No.	Price Each
2630	Spectrum Analyzer	52F6288	2458.40

(6515)

MEASURINGPAD ALL-IN-ONE DATA ACQUISITION SYSTEM



- Multipurpose data acquisition solution for maintenance, troubleshooting, quality control, variable speed drive, and energy measurement applications
- Combines the latest high-speed data acquisition technology with a user-friendly front end
- Rapidly collects, monitors, and displays multiple sensor inputs
- Ideal for troubleshooting, process tuning, fault recording, control-loop monitoring, R&D, and trend analysis
- Color icon-based touch screen and super-simple setups



Provides live readout of up to 16 differential analog channels sampling at 10 kHz/input and 8 digital TTL-level sampling at 40 kHz/channel. Interchangeable input pods provide instrument versatility as user can quickly change measurement scheme by varying pods (thermocouples, current sources, and voltage sources). Digital inputs may be used to trigger datalogging, perform counting and timing operations, and monitor frequency and quadrature. Additional cross-channel math calculations can be used to display and monitor process variable such as efficiency, horsepower, and signal min/max/avg values.

MeasuringPAD monitors data continuously, records automatically and "by exception" using limit-sensitive and logic on/off triggers (by event). Data is stored internally on removable memory card and may be easily exported without any special software or equipment. Records pre- and post-trigger data up to 10,000 times/second. Data may be displayed in a variety of formats, including bargraphs, trend charts, oscilloscope mode, and Discrete Fourier Transforms for harmonic analysis. Touch screen pages are intuitive and speed setup. Multiple setups can be stored for instant reloading.

Mfg. Part No.	Description	Stock No.	Price Each
MP	MeasuringPAD: Color touch LCD display, AC Power adapter/battery charger, carry strap, one MP-32M 32 Megabyte Compact Flash Memory Card, user guide	59K9488	4850.00
MP600V	High Voltage POD	59K9502	175.00
MP300V	Medium Voltage POD	59K9501	175.00
MP30V	Low Voltage POD	59K9500	175.00
MP20MA	Low Current POD	59K9499	175.00
MPUT	Thermocouple POD	59K9498	200.00
MP-32M	32M memory	59K9496	105.00
MP-64M	64M memory	59K9497	160.00
MP-128M	128M memory	59K9495	265.00
MP-SSC	Soft Sided Carry Bag	59K9494	145.00
MP-RSC	Re-usable shipping container	59K9493	305.00
FR-USB	FLASH Reader USB	59K9487	135.00
MP-HVC	High Voltage Cable Set	59K9491	325.00
MP-LVC	Low Voltage Cable Set	59K9492	236.00

(8556)

VOLTAGE AND CURRENT USB DATA LOGGERS



- 0-30VDC (EL-USB-3) or 4-20mA (EL-USB-4) measurement range
- USB interface for setup and download
- More than 32,000 reading capacity
- Programmable sample rates from 1 sec. to 12 hrs.
- Two programmable alarm thresholds with LED indication
- Replaceable internal battery (included)
- Connection via screw terminals in cap
- Includes free Windows® data logging configuration and graphing software



The EL-USB-3 accepts voltage inputs from 0-30VDC, permitting the recording of measurements from a wide range of sensors. EL-USB-4 enables quick and easy monitoring of manufacturing processes with a 4-20mA range. Connection to the circuit is via screw terminals housed in the cap.

Mfg. Part No.	Description	Stock No.	Price Each	
			1-24	25-249
EL-USB-3	0-30VDC USB Datalogger	80K5461	92.56	81.27
EL-USB-4	4-20mA USB Datalogger	80K5462	92.56	81.27

(88047)

HAND-HELD LOOP CALIBRATORS



FLUKE-705 FLUKE-707 FLUKE-715 787 FLUKE-789

These powerful loop calibrators are ideal for loop calibration, maintenance and repair applications. Mfg. part no. 707 features a one-handed user interface with "Quick-Click" detented knob making it extremely fast and easy to use. Its intrinsically-safe version, mfg. part no. 707EX, is for use in explosion endangered areas and is certified in accordance with the ATEX directive (Ex II 2 G Eex ia IIC T4) in Zones 1 and 2, ZELM 02 ATEX 0120 X. All models come complete with alligator test clips, safety-designed test lead set, protective holster with Flex-Stand™, one 9V battery (mfg. part no. 789 has four AA batteries), instructions and a three-year manufacturer's warranty (mfg. part no. 707EX has a one-year manufacturer's warranty and includes Instruction manual on CD-ROM). Mfg. part nos. 787 and 789 ProcessMeter™ also include Quick-Reference guide and users manual. Recommended accessories: Mfg. part no. C50 Case, Mfg. part no. TL71 Test Leads, Mfg. part no. TPAK Meter Hanger (for 705 and 707), Mfg. part no. C25 Case, Mfg. part no. 171 Test Leads, Mfg. part no. AC72 Alligator Clips (for 715) Mfg. part no. C116 Case, Mfg. part no. TLK225 Accessory Set, Mfg. part no. Mfg. part no. Meter Hanger (for 787 and 789).

COMPARISON AT A GLANCE:

Mfg. Part No.	789	787	715	707, 707EX	705
VDC			0 to 20		
mA DC	0 to 20	0 to 20	0 to 24	0 to 20	0 to 20
24V Loop Supply	X		X	X	X
<b>MEASUREMENTS</b>					
VDC	1000	1000	10	28	28
VAC True-rms	1000	1000			
Ohms	40MΩ	40MΩ			
mA DC	1000	1000	24	24	24
mA AC	1000	1000			
Frequency	20kHz	20kHz			
Min./Max.	X	X			
Hold	X	X			
IEC 61010 Category	Cat. IV	Cat. III			

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-705	Loop Calibrator	48F2058	599.00
FLUKE-707	Loop Calibrator with "Quick Click" Control Knob	39C2941	649.00
FLUKE-707EX	Intrinsically-Safe Loop Calibrator with "Quick Click" Control Knob	63H2496	949.00
FLUKE 715	Voltage/mA Calibrator	83F4183	895.00
FLUKE 787	ProcessMeter	91F6067	699.00
FLUKE-789	ProcessMeter	81C7984	795.00

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

FLUKE 715 CALIBRATED	Voltage/mA Calibrator	60K7384	985.00
FLUKE 787 CALIBRATED	Calibrated ProcessMeter	60K7405	818.00

(34070)

FLUKE-718 AND FLUKE-717 SERIES PRESSURE CALIBRATORS



Just Added



FLUKE-718 Series FLUKE-717 Series

FLUKE-718 AND -717 SERIES MODELS

- DC current measurement: 0 to 24mA
- Loop supply: 24VDC
- Min./Max. and Hold Functions
- Clear, 5-digit display
- EMI tolerant, dust- and splash-resistant
- CSA certified, CE compliant
- Recommended accessories - TL220 Test Lead Set, 700PTP Pneumatic Test Pump

FLUKE-718 SERIES MODELS ONLY

- Built-in hand pump — sources -11psig to full scale

FLUKE-718 and FLUKE-717 series pressure calibrators include: protective yellow holster, test leads, alligator clips, single 9V alkaline battery (two with FLUKE-718 series models), instructions and three-year manufacturer's warranty. NOTE: Pressure may also be measured using 1 of 29 mfg. part no. 700Pxx pressure modules ordered separately; go online or call.

FLUKE-718 SERIES

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-718-1G	1psi Pressure Calibrator	83K0435	1995.00
FLUKE-718 30US	30psi Pressure Calibrator	48F2059	1995.00
FLUKE-718 100US	100psi Pressure Calibrator	48F2060	1995.00
FLUKE-718-300G	300psi Pressure Calibrator	83K0436	1995.00
FLUKE-718EX 300	Intrinsically-Safe 300psi Pressure Calibrator	14N6781	2795.00

CONTINUED



PROCESS METERS & CALIBRATORS

FLUKE-718 AND FLUKE-717 SERIES PRESSURE CALIBRATORS (CONT.)

FLUKE-717 SERIES

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-717-1G	1psi Pressure Calibrator	83K0428	995.00
FLUKE-717 30G	30psi Pressure Calibrator	83F9129	1095.00
FLUKE-717 100G	100psi Pressure Calibrator	55C4468	1095.00
FLUKE-717-300G	300psi Pressure Calibrator	83K0431	995.00
FLUKE-717-500G	500psi Pressure Calibrator	83K0433	995.00
FLUKE-717-1000G	1000psi Pressure Calibrator	83K0429	1095.00
FLUKE-717-1500G	1500psi Pressure Calibrator	83K0430	1095.00
FLUKE-717-3000G	3000psi Pressure Calibrator	83K0432	1095.00
FLUKE-717-5000G	5000psi Pressure Calibrator	83K0434	1095.00

(34075)

FLUKE 719 ELECTRIC PRESSURE CALIBRATORS



Features:

- Electric pump for one handed pressure calibration
- Best in class pressure measurement uncertainty of 0.025%
- Measure and source mA with best in class 0.015% accuracy
- Precision pressure adjust vernier
- Variable release rate bleed valve for easy pressure adjustment
- Ideal performance for high accuracy transmitter calibration
- Programmable pump limit allows:
  - Protection from damage due to over-pressurization
  - The user to program target pressures for pumping
- Extended measurement range with any of twenty nine (29) 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to test valves and I/PS
- Simulate mA signals to troubleshoot 4-20 mA loops
- Test pressure switches with built in switch test function
- Power transmitters during test using 24 V loop supply with simultaneous mA measurement
- Proven cleanout ports reduce pump failures



FLUKE 719

With built-in electric pump, the Fluke 719 provides pressure calibrator makes it possible to calibrate and test pressure devices quickly and easily with one hand saving valuable time. Use the programmable pump limit settings to avoid over-pressurization, and to set 'pump to' pressure values. The unique cleanout port design reduces pump failures, and makes the 719 easy to clean without repair. The compact, lightweight form, combine with one-handed use, makes this pressure calibrator the ideal tool for process professionals.

Function Measure or Source	Range	Resolution	Accuracy	Notes
Pressure 719-30G	-12 to 36 psi, -850 mbar to 2.4 bar	0.001 psi, 0.1 mbar	0.025 % Range	6 month spec., 0.035% of Range for 1 year
Pressure 719-100G	-12 to 120 psi, -850 mbar to 8 bar	0.01 psi, mbar		
mA	0 to 24 mA	0.001 mA	0.015% Rdg + 2 counts	Max load, 1000 Ω 750 Ω in HART mode
Loop Supply	24 V dc	N/A	10%	...

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-719 30G	Electric Pressure Calibrator, 30 PSI	08P4409	2795.00
FLUKE-719 100G	Electric Pressure Calibrator, 100 PSI	08P4408	2795.00

(134285)

RTD AND THERMOCOUPLE CALIBRATORS



- Compact and lightweight
- Simple controls
- Clear, easy-to-read display
- Three-year manufacturer's warranty
- CSA certified



FLUKE-712



FLUKE-714



FLUKE-724

Mfg. part nos. FLUKE-712 and FLUKE-714 calibrators include protective yellow holster with test lead storage, test leads and alligator clips (except mfg. part no. FLUKE-714), instruction sheet, single 9V alkaline battery and NIST-traceable calibration report and data. Mfg. part no. FLUKE-724 calibrator includes test clips, test leads, one pair of stackable test leads and users manuals on CD-ROM.

COMPARISON AT A GLANCE:

Measure/Simulate	Mfg. Part No.		
	FLUKE-712	FLUKE-714	FLUKE-724
RTD	-200° to 800°C	...	-200° to 800°C
RTD Types	Pt 100, 200, 500, 1000 (385); Pt 100 (392); Pt 100 (392) JIS; Ni120 (672)	...	Pt 100, 200, 500, 1000 (385); Pt 100 (393); Pt 100 JIS; Ni120
Resistance	15 to 3200Ω	...	15 to 3200Ω
Thermocouple	...	-200° to 1800°C	-200° to 1800°C

➔ CONTINUED ➔

RTD AND THERMOCOUPLE CALIBRATORS (CONT.)

Measure/Simulate	Mfg. Part No.		
	FLUKE-712	FLUKE-714	FLUKE-724
Thermocouple Types	...	J, K, T, E, R, S, B, L, U	J, K, T, E, R, S, B, L, U, N, XK, BP
mV	...	-10 to 75	-10 to 75
mA DC	...	...	24 Measure Only

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE 712	RTD Process Calibrator	83F4179	895.00
FLUKE 714	Thermocouple Calibrator	83F4182	895.00
FLUKE-724	Temperature Calibrator	10C2607	1595.00

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

FLUKE-724 CALIBRATED	Temperature Calibrator	60K7394	1725.00
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THERMOCOUPLE PLUG KITS

Mfg. part no. FLUKE-700C kit contains 10 thermocouple mini-plugs supporting each of the thermocouple types supported by the mfg. part nos. FLUKE-714 and FLUKE-724 calibrators. The kit includes one each of the following: Type J (black), Type K (yellow), Type T (blue), Type E (purple), Type R/S (green), Type B or Cu (white), Type L (J-DIN) (blue), Type U (T-DIN) (brown), Type C (red), and Type N (orange). Recommended accessories: Mfg. part no. C25 Case, Mfg. part no. TL71 Test Leads, Mfg. part no. TPAK Meter Hanger (for 724), Mfg. part no. C25 Case, Mfg. part no. T71 Test Leads, Mfg. part no. AC72 Alligator Clips (for 714), Mfg. part no. TL220 Test Leads, Mfg. part no. TPAK Meter Hanger (for 724).

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE 700TC1	10-Piece Thermocouple Plug Kit	83F4188	79.00

Mfg. part no. FLUKE-700TC2 kit contains seven thermocouple mini-plugs supporting the most popular thermocouple types supported by mfg. part nos. FLUKE-714 and FLUKE-724 calibrators. The kit includes: two Type J (black), two Type K (yellow), one Type T (blue), one Type E (purple), and one Type R/S (green).

FLUKE 700TC2	7-Piece Thermocouple Plug Kit	83F4189	69.00
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(65175)

FLUKE-725 AND FLUKE-726 MULTIFUNCTION PROCESS CALIBRATORS



All Models:

- Streamlined, hand-held design
- Reliably-built to stand up to tough field use
- Two-channel, measure/source screen, for viewing input and output simultaneously
- Easy-to-read display with backlight for poorly lit areas
- Measures volts, mA, RTDs, thermocouples, frequency, resistance to test sensors and transmitters
- Source/simulate volts, mA, RTDs, thermocouples, frequency, resistance, pressure to calibrate transmitters
- Supports flow meter testing with frequency function
- Auto-Step and Auto-Ramp for fast linearity testing
- Power transmitters during test using 24V loop power supply with simultaneous mA measurement
- Stores frequently-used test setups for later use
- Three-year manufacturer's warranty
- CSA certified, CE compliant
- Recommended accessories - C280 Case, TL220 Test Leads, TPAK Meter Hanger (for 725) C115 Case, TL220 Test Leads, TPAK Meter Hanger (for 726)



FLUKE-725



FLUKE-726

FLUKE-726 Only:

- Precise measuring and calibrating — accuracies of 0.01%
- Transmitter error % calculation — no calculator needed
- Memory storage for later analysis
- Enhanced flow meter testing with frequency pulse train source mode
- HART mode inserts 250Ω resistor in mA measure
- Integrated pressure switch test
- Custom RTD curves for enhanced temperature measurement
- Voltage input protection for improved reliability

COMPARISON AT A GLANCE:

Mfg. Part No.	FLUKE-725, -725EX	FLUKE-726
Documenting	...	Memory Storage for up to 8 Calibrations
mA Accuracy	0.025%	0.015%
RTD Accuracy	0.33C	0.15C
RTD Coefficient	...	X
Pressure+	29 Rgs., 0.05%	29 Rgs., 0.05%
Switch Test	...	X
TC/RTD Ranges	12/7	12/8
Error Calculation	...	X

+Measure or source\* pressure (\*pressure pump required) using any of the FLUKE-700P series pressure modules; order separately, go online or call Newark.

Mfg. part no. FLUKE-725 multifunction process calibrator is a powerful, yet easy-to-use field calibrator for the maintenance and troubleshooting of process control instrumentations. Mfg. part no. FLUKE-725EX, its intrinsically safe version, is able to calibrate almost any process instrument likely to need service in an area where explosive gases may be present and is in compliance with safety specifications ATEX II 1 G Ex ia IIB 171°C KEMA 04ATEX 1303X; I.S. Class I, Division 1 Groups B-D, 171°C. Mfg. part no. FLUKE-726 precision multifunction process calibrator is designed specifically for broader workload coverage, calibration power and unsurpassed accuracy. It interprets results without the help of a calculator and stores measurement data for later analysis. All models operate on 4 AA batteries and come complete with one-set each of mfg. part no. TL75 test leads, mfg. part no. AC72 alligator clips, and stackable test leads, plus a product manual and a users guide on CD.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-725 US	Multifunction Process Calibrator	48F6885	2095.00
FLUKE-725EX	Intrinsically-Safe Multifunction Process Calibrator	19K1381	2895.00
FLUKE-726	Precision Multifunction Process Calibrator	64K0072	2795.00

➔ CONTINUED ➔

PROCESS METERS & CALIBRATORS

FLUKE-725 AND FLUKE-726 MULTIFUNCTION PROCESS CALIBRATORS (CONT.)

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-725 US CALIBRATED <small>(85726)</small>	Multifunction Process Calibrator	60K7385	2230.00

FLUKE-740 SERIES DOCUMENTING PROCESS CALIBRATORS



FLUKE®

Mfg. part no. FLUKE-744 offers all of the capabilities of the mfg. part no. FLUKE-743B 120, plus the ability to maintain and calibrate selected HART transmitters without a second tool.

FLUKE-744

FLUKE-740 series documenting process calibrators help with troubleshooting problems or running routine maintenance. They do many different tasks quickly and well to help get the job done fast. Recommended accessories - C789 Case, 700PTP Pneumatic Test Pump, 700PXX Pressure Modules.

Mfg. part no. FLUKE-741B 120 offers simultaneous source and measure capabilities for all common process parameters. Create and execute automated procedures and automatically capture the results. Mfg. part no. FLUKE-743B 120 offers all the capability of mfg. part no. FLUKE-741B 120, plus adds a serial interface for 2-way communication with popular PC-based instrumentation management applications. Each FLUKE-740 series process calibrator includes: mfg. part no. TL224 test leads (2 sets), mfg. part no. AC220 test clips (2 sets), mfg. part no. TP220 test probes (1 set), battery pack, battery charger, serial port cable (except mfg. part no. FLUKE-741B 120), HART communications cable (mfg. part no. FLUKE-744 only), DPC/TRACK sample with free PC communication utility software (except mfg. part no. FLUKE-741B 120), instruction manual, and NIST traceable calibration report and data. 3-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-741B 120	Process Calibrator with Simultaneous Source and Measuring	83F9130	3795.00
FLUKE-743B 120	Process Calibrator with 2-Way Serial Interface	83F9131	4795.00
FLUKE-744	Pressure Calibrator with HART Transmitter	48F2061	5795.00

CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT

FLUKE-741B 120 CALIBRATED	Process Calibrator with Simultaneous Source and Measuring	60K7395	3975.00
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ACCESSORIES

FLUKE-700SW	DPC/TRACK Software	83F9126	2099.00
FLUKE-700-IV	Current Shunt	83F9097	246.00
BC7217 120	Battery Charger	48F5502	146.00
BE9005 120	Battery Eliminator	83F9093	157.00
BP7235	Nickel Metal Hydride Battery Pack	50B9873	199.00
C700	Hardshell Carrying Case	83F9094	189.00
C781	Compact Softshell Carrying Case	91F6072	47.65
C789	Large Softside Fabric Carrying Case	92F7017	101.65

(34076)

700 SERIES FILTER AND PUMPS

FLUKE®



FLUKE-700PTP-1



FLUKE-700HTP-1



700-PMP

FLUKE-700PTP-1 PNEUMATIC PRESSURE PUMP

Mfg. Part No. 700PTP-1 For use with 700 series pressure modules or test gauges. Can be directly connected to the reference port consolidating two separate pieces when performing pressure calibration and testing. Can also be used with 717 pressure calibrators. Ideal for calibrating pressure transmitters, pressure switches and pressure gauges up to 600 PSI/40 bar.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-700PTP-1	Hand-Held Pressure Pump	55M0610	578.00

FLUKE-700PMP PRESSURE PUMP

700PMP is a hand-operated pressure pump to provide pressures up to 150 psi/1000 kPa. Output fitting: 1/8 FNPT.

700P-PMP	Pressure Measuring Pump	31C1618	379.00
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FLUKE-700HTP-1 HYDRAULIC TEST PUMP

Mfg Part No. 700HTP-1 is a hand operated hydraulic pressure pump designed to generate calibration pressures up to 10,000 psi/690 bar. Designed for use with Fluke-700 series high pressure modules such as mfg. part nos. Fluke-700P09, 700P29, 700P30 and 700P31.

FLUKE-700HTP-1	Hydraulic Test Pump	55M0607	925.00
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(68957)

FLUKE-700P SERIES PRESSURE MODULES



FLUKE®

FLUKE-700P22

Mfg. Part No.	Description	Range/Resolution 1 year	Maximum Over-pressure	Stock No.	Price Each
FLUKE 700P00	Differential	1in. H <sub>2</sub> O/0.001	30 in. H <sub>2</sub> O	18C0609	1494.00
FLUKE-700P01	Differential	10.000 in. H <sub>2</sub> O/2.4910kPa	30 in. H <sub>2</sub> O	83F9098	1112.00
FLUKE-700P02	Differential	1.0000 psi/6.8948kPa	3 psi	83F9099	1112.00
FLUKE-700P22	Differential	1.0000 psi, Wet/6.8948kPa	3 psi	83F9107	1112.00
FLUKE-700P03	Differential	5.0000 psi/34.474kPa	15 psi	83F9100	1112.00
FLUKE-700P23	Differential	5.0000 psi, Wet/34.474kPa	15 psi	83F9108	1112.00
FLUKE-700P04	Differential	15.000 psi/103.42kPa	45 psi	83F9101	1112.00
FLUKE-700P24	Differential	15.000 psi/103.42kPa	45 psi	83F9109	1112.00
FLUKE-700P05	Gage	30.000 psi/206.84kPa	90 psi	83F9102	1112.00
FLUKE-700P06	Gage	100.00 psi/689.48kPa	300 psi	83F9103	1112.00
FLUKE 700P27	Gage	300.00 psi/0.001	900 psi	18C0619	1112.00
FLUKE-700P07	Gage	500.00 psi/3447.4kPa	1500 psi	83F9104	1112.00
FLUKE-700P08	Gage	1000.0 psi/6894.8kPa	3000 psi	83F9105	1112.00
FLUKE-700P09	Gage	1500.0 psi/10342kPa	3000 psi	83F9106	1112.00
FLUKE-700P29	Gage	3000.00 psi/20.684 MP.	6000 psi	83F9110	1812.00
FLUKE-700P30	Gage	5000.0 psi/34.474 mp	10000 psi	83F9111	1812.00
FLUKE-700P31	Gage	10000 psi/68.948 mp	15000 psi	83F9112	1812.00
FLUKE-700PA3	Absolute	5.0000 psi/34.474kPa	20 psia	83F9113	1282.00
FLUKE-700PA4	Gage	15.000 psi/103.42kPa	60 psi	83F9114	1282.00
FLUKE-700PA5	Absolute	30.000 psi/206.84kPa	105 psia	83F9115	1282.00
FLUKE-700PA6	Absolute	100.00 psi/689.48kPa	315 psia	83F9116	1282.00
FLUKE-700PV3	Vacuum	-5.0000 psi/-34.474kPa	15 psi	83F9124	1282.00
FLUKE-700PV4	Vacuum	-15.000 psi/-103.42kPa	45 psi	83F9125	1282.00
FLUKE-700PD2	Dual	±1.0000 psi/±6.8948kPa	5 psi	83F9118	1282.00
FLUKE-700PD3	Dual	±5.0000 psi/±34.474kPa	15 psi	83F9119	1282.00
FLUKE-700PD4	Dual	±15.000 psi/±103.42kPa	45 psi	83F9120	1282.00
FLUKE-700PD5	Dual	-15/30.000 psi/-100/208.84kPa	90 psi	83F9121	1282.00
FLUKE-700PD6	Dual	-15/100.00 psi/-100/689.48kPa	300 psi	83F9122	1282.00
FLUKE-700PD7	Dual	-15/200.00 psi/-100/1379.0kPa	600 psi	83F9123	1282.00

(34077)

HANDHELD MULTI-FUNCTION CALIBRATOR/METER

Agilent Technologies

Authorized Distributor

NEW TECHNOLOGY

Simultaneous source and measure in a single instrument:

- Conveniently source voltage, current or pulse signals and perform DMM measurements at the same time, with the same tool

Process calibration tool incorporated with complete DMM features:

- Full-featured DMM capable of measuring AC and DC signals, resistance, frequency, temperature as well as perform diode and continuity checks
- Auto SCAN and RAMP modes to ease automated testing

Reliability and value:

- Mfg. part no. U1401A comes complete with certificate of calibration, stylish carrying case, protective holster, rechargeable battery pack, AC power adapter and power cord, calibrator and meter standard test lead kit, yellow test lead for mA simulation, printed Quick Start Guide.
- Data logging software and optional IR-USB cable for PC connectivity
- Three-year manufacturer's warranty



Mfg. part no. U1401A handheld multi-function calibrator/meter incorporates complete DMM performance into a process calibration tool, with the unique ability to both source and measure simultaneously. Capable of generating constant voltage and current, it also functions as a pulse signal generator, well-suited for calibration of process control devices such as flow meters. Simultaneously, the U1401A allows users to conveniently utilize its DMM functions as well, such as to measure output mA readings from devices such as transmitters and isolators. Calibration needs that require both sourcing and measuring at the same time are met. Its standalone DMM features are just as versatile to be used on the electronics bench. Capable of measuring both AC and DC signals, it readily tackles everyday DMM tasks such as measuring resistance, frequency, temperature and diode checking.

Mfg. Part No.	Description	Stock No.	Price Each
U1401A	Handheld Multi-Function Calibrator/Meter	51P3341	751.00

U1401A ACCESSORIES

U5481A	IR to USB cable	51P3342	30.01
U1160A	Standard Test Lead Kit	04M7389	60.47
U1161A	Extended Test Lead Kit	04M7390	42.33
U1181A	Immersion Temperature Probe	53M4046	59.39
U1182A	Surface Temperature Probe	53M4047	180.00

CONTINUED

PROCESS METERS & CALIBRATORS • TACHOMETERS • MOTOR PHASE/ROTATION TESTERS

**HANDHELD MULTI-FUNCTION CALIBRATOR/METER (CONT.)**

**U1401A ACCESSORIES**

Mfg. Part No.	Description	Stock No.	Price Each
U1183A	Air Temperature Probe	53M4048	69.47
U1184A	Temperature Probe Adaptor	53M4049	10.07
U1186A	Thermocouple (K-type) and Adaptor	53M4051	20.04

(142152)

**COMBO TACHOMETER**

**Just Added**



**FEATURES:**

- Measures rotational and surface speed
- Built-in memory
- Digital Display
- Auto power off function
- Easy to select units and mode functions
- Contact and non-contact measurement
- Agency Approvals & Certifications: CE

**SPECIFICATIONS:**

- Accuracy: ±0.02% v. reading ±1 Digit
- Length: 0...99999 m / 0...99999 ft / 0...99999 in
- Measuring Ranges(rpm): optical: 1 - 99999 min; mech.: 1 - 19999 min
- Sensing Distance (optical): max. 600 mm (24 in)
- Battery type: 2x AA 1.5V Battery LR6 (ALKALINE) or rechargeable
- Operating Temperature: 32 to 122°F
- Size: 175x60x28 mm (7x2.5x1 in)

**SPECS FOR SPEED:**

Mfg. Part Nos.	TACH20			
	Speed	Dia. 1 m	Dia. 6 in	Dia. 12 in
	0.10 ...1999 m/min	0.10 ...1524 m/min	0.40 ...609.6 m/min	
	0.40 ...6550 ft/min	0.40 ...5000 ft/min	0.40 ...2000 ft/min	
	4.00 ...78700 in/min	4.00 ...60000 in/min	4.00 ...24000 in/min	
	0.10 ...33.30 m/sec	0.10 ...25.40 m/sec	0.10 ...10.16 m/sec	
	0.10 ...109 ft/sec	0.10 ...83.33 ft/sec	0.10 ...33.30 ft/sec	

Mfg. Part No.	Description	Stock No.	Price Each
TACH20	Tachometer	11P0029	349.95

(135707)



**POCKETTACH MINI® TACHOMETERS**



- Hold button freezes display reading
- Ergonomically designed and pocket sized housing with protective finger guard
- Easy to operate by simply contacting the rotating object with the sensor tip and read
- (Mfg Part No. 461750) Contact model with surface wheels enable tachometer to measure linear surface speeds in ft/min, m/min, and yd/min
- (Mfg Part No. 461700) Non-contact integral light beam model with ideal measurement range up to 6" (150 mm) distance
- One year warranty

Complete with 9V battery: Mfg. part no.461700 includes reflective tape and mfg. part no. 461750 includes surface wheels

**SPECIFICATIONS**

Mfg. Part No.	461700	461750
Display Counts:	99,999 count LCD	99,999 count LCD
Range rpm:	10 to 99,999rpm	10 to 9,999rpm
ft/min:	—	3 to 6560ft/min
m/min:	—	1 to 1999.9m/min
yd/min:	—	1 to 5,000yd/min
Basic accuracy:	±(0.1%rdg +2d)	±(0.1%rdg +2d)
Max rpm Resolution:	0.001	0.001
ft/min Resolution:	—	0.0001
Dimensions:	4.88x1.97x1.3" (124x50x33mm)	5.87x1.97x1.3" (149x50x33mm)
Weight: 4oz (114g)	5oz (142g)	

Mfg. Part No.	Description	Stock No.	Price Each
461700	Mini Photo Tachometer	26K9266	139.99
461750	Mini Contact Tachometer	26K9267	139.99
461937	Spare Reflective Tape (5pkts 23" each roll)	27K9916	39.99

(91074)



461750

**MODEL 93 HAND HELD TACHOMETER KIT**



- Combination unit - photo and contact
- Laser sighting operating range up to 40.0" [1000mm]
- Auto ranging - fixed decimal
- Low battery indicator
- Carrying case included, Tripod mounting bushing

The Redington Model 9300-HTK hand tachometer is simple to use... push the measurement button to record the speed. It also has a Max/Min/Avg recall with 40 points of memory standard. The tachometer can be used for contact or non-contact measurement on rotating machinery or surface speed. The 9300-HTK can indicate RPM or rotational speed, length measurement, meters, yards, or feet per minute. The photoelectric probe is used with reflective tape to detect rotating objects. The accessory adaptor with pointed tip can be added for contact measurement or wheels can be used for surface speed measurement. Optional equipment include: 9V battery, Instruction manual, Certificate of calibration, Cone adapter, Funnel adapter, Contact adapter, Master wheel 3.94" [100mm], Reflective tape 0.59" x 20.67" [15mm x 525mm].

Mfg. Part No.	Description	Stock No.	Price Each
			Each
9300-HTK	Hand Tachometer Kit; RPM Measuring Range:6.0 to 99999 RPM; Tach Display:LCD; Tach Features:Memory; Tach Type:Contact/Non-Contact	05N0111	181.00

(115443)

**DIGITAL PHOTO TACHOMETER**



- Large 5-Digit LCD
- 1 Second Response Time at Distances from 2" to 6"
- Stores Last/Min./Max. Readings
- Includes 23" Reflective Tape, Carrying Case and Owners Manual
- Requires (4) 1.5V "AA" Batteries (Not Included)

Accurate non-contact measurements from 5 to 100,000RPM. Simply place a reflective marker on a rotating object, point and measure.

**SPECIFICATIONS**

Range	5-99,999RPM
Resolution	0.1RPM <1000RPM, 1RPM ≥1000RPM
Accuracy	±(0.05% + 1 digit)
Dimensions	2 7/8"W x 7 1/2"L x 1 1/2"H
Weight	8.8 oz.

Mfg. Part No.	Description	Stock No.	Price Each
			1-4
72-6633	Digital Photo Tachometer	50N1386	159.90

**CALIBRATION WITH PRINTED CERTIFICATION AND DATA REPORT**

72-6633 CALIBRATED W/DATA	Digital Photo Tachometer Calibrated w/Data	50N2290	179.99
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(73438)

**PHASE ROTATION INDICATOR**



**Features:**

- Three phase indication
- Indication of phase rotation
- Large LCD display
- Voltage range: 40 to 700V
- Frequency range: 15-400Hz
- No battery required — power supplied by unit under test
- Rated CAT III 600V to ground
- Two-year manufacturer's warranty

Mfg. part no. FLUKE-9040 phase rotation indicator is a portable, handheld instrument designed to detect and measure the phase rotation in all areas where three phase supplies are used to feed motors, drives and electrical systems. Provides clear indication of the three phase via an LCD display and the phase rotation direction (clockwise or counterclockwise) to determine correct connections. It allows rapid determination of phase sequence and has a voltage and frequency range suitable for commercial and industrial applications. Meets IEC 61010/EN 61010, IEC 61557-7/EN 61557-7 electrical safety specifications. Comes complete with three self-retaining test leads, probes, alligator clips and users manual.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-9040	Phase Rotation Indicator	52K4229	249.95

(85494)

MOTOR PHASE/ROTATION TESTERS • GAUSSMETERS

PHASE SEQUENCE AND MOTOR ROTATION TESTER

NEW TECHNOLOGY



- Features:**
- Identifies 3-phase sequence and open phase check
  - Motor shaft rotation indication protected by CAT III circuitry
  - CAT III 600V rated for both testing segments
  - Meets EN61010 safety requirements, CSA, EN61557-7

Mfg. part no. PRM-4 phase sequence and motor rotation tester comes complete with test leads (red, green, and blue) with alligator clips mfg. part no. TL-PRM-4, 9 V battery, soft vinyl case and users manual.

Mfg. Part No.	Description	Stock No.	Price Each
PRM-4	Phase Sequence and Motor Rotation Tester	78M6840	109.95

(147132)

PHASE AND MOTOR ROTATION METER



- Features:**
- Indicates phase presence
  - Indicates phase rotation
  - Indicates motor rotation/wiring
  - Indicates battery status
  - Phase and motor rotation indicator works as low as 1VAC
  - Phase presence indication from as low as 100VAC

Mfg. part no. 302 is a 3-phase presence and rotation meter combined with a 3-phase motor rotation tester. Can be used on a powered system (supply side) or on an unpowered motor (load side). Fused. Includes color-coded test leads, soft case.

Mfg. Part No.	Description	Stock No.	Price Each
302	3-phase presence and motor rotation tester	54M5380	79.00

(101647)

4100 GAUSS METER



Just Added

- Gauss or Tesla Display Units
- Waveform and RMS Analog Output (4190)
- Selectable X, Y, or Z Axis plus Vector Summation
- Min/Max Hold
- True RMS Reading and Relative Mode
- Measuring Range: 0.1mG to 199.9  $\mu$ T
- Resolution: 0.1 mG / 0.01  $\mu$ T
- Frequency Response +/-5%: 30 to 2kHz

Lightweight and completely self contained, the easy to use 4100 Series ELF Meters are ideal for commercial or home use. The 4100 Series accurately measures Extremely Low Frequency Magnetic Fields generated by electrical equipment. Applications include detecting magnetic field emissions from a wide variety of sources, including video display terminals, AC power lines office equipment, household appliances, and all types of electronic equipment. The 4100 Series Hand-Held Gaussmeter's built-in software eliminates the need for complex calibration procedures. User prompts on the custom formatted LCD allow fast, simple push button operation. All models come with instruction manual, soft carrying case, and four AAA batteries.

Mfg. Part No.	Basic Accuracy	Analog Output	Stock No.	Price Each	
				Each	Each
4180	+/- (2% + 1 digit)	None	96M1812	282.32	
4190	+/- (1% + 1 digit)	8K samples/sec	38M8608	517.96	

(135713)

5100 GAUSS METER & PROBES

Just Added



- Auto Zero, Min/Max/Peak Hold
- Auto Range and Relative Mode
- Gauss, Tesla or Ampere/Meter readings
- 5180 features a corrected analog output (+/- 3V FS) and a USB communication port

This new design incorporates the use of digital signal processing technology making it the world's first hand-held gaussmeter to have a digital signal processor (DSP) on board. F.W. Bell's exclusive Dynamic Probe Correction allows measurements from 0 to 30 kG with a basic accuracy of 1%. Built-in software eliminates the need for complex calibration procedures. User prompts on the custom formatted LCD allow fast, simple push button operation. All models come equipped with a detachable transverse probe, zero gauss chamber, instruction manual, hard carrying case, and four AA batteries. Axial, ultra thin transverse and low-field probes are available as options.

Mfg. Part No.	Basic DC Accuracy	Frequency Bandwidth	Digits	Stock No.	Price Break 1	
					Each	Each
5170	2 %	DC-20 kHz	3 1/2	60K8441	999.78	
5180	1.1 %	DC-30 kHz	3 2/3	89J5968	1344.88	

MODEL 5170 PROBES

Mfg. Part No.	Description	Stock No.	Price Each	
			Each	Each
HTD18-0604	4" Probe Length, 0.180" dia.	85J8874	304.50	
STH17-0404	4" Probe Length, 0.158" dia. (incl. w/5170)	89J4103	304.50	
STH17-0402	2" Probe Length, 0.158" dia.	89J4102	304.50	

CONTINUED

5100 GAUSS METER & PROBES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each	
			Each	Each
SAH17-1904	4" Probe Length, 0.187" dia.	89J1899	304.50	
SAH17-1902	2" Probe Length, 0.187" dia.	89J1898	304.50	

MODEL 5180 PROBES

HTH17-0604	4" Probe Length, 0.180" dia.	85J8888	304.50
STD18-0404	4" Probe Length, 0.158" dia. (incl. w/5180)	89J4065	304.50
STD18-0402	2" Probe Length, 0.158" dia.	89J4064	304.50
SAD18-1904	4" Probe Length, 0.187" dia.	89J1855	304.50
SAD18-1902	2" Probe Length, 0.187" dia.	89J1854	304.50

MODEL 5170/5180 GAUSSMETER PROBES

STB1X-0201	1" Probe Length, 0.050" dia.	89J4053	421.23
MOS51-3204	4" Probe Length, 0.285" dia.	85J8922	779.07

(135712)

6000 SERIES HALL-EFFECT GAUSSMETER



- Large Format LCD
- Dual 3 1/2-Digit Readouts
- Temperature Measurement
- Displays in Gauss, Tesla or Ampere/Meters
- Peak Hold
- Max./Min. Hold
- Corrected Analog Output
- Auto Range
- Temperature Compensated Probes
- Auto Zero/Auto Calibration
- RS-232 Interface
- Rechargeable Battery
- Compatible with Type 9200 Probes
- CE Compliant



Mfg. part no. 6010 Hall-effect gaussmeter represents the latest innovations and state-of-the-art design. Exclusive Dynamic Probe Correction feature, along with temperature compensation, allows measurements up to 300kG with a basic accuracy of 0.25%. Key features include: peak hold, max./min. hold, auto zero, auto range, relative mode, and temperature measurement. Mfg. part no. 6010 also features a corrected analog output ( $\pm$  3V Full Scale for each range), an RS-232 communications port, a rechargeable battery and probe temperature compensation which allows the user to take temperature readings (-40°C to +85°C) while monitoring the magnetic field. The easy-to-read large format alpha-numeric LCD with dual 3 1/2-digit read out gives the user magnetic field flux density reading while also displaying temperature (or peak hold, or max./min. hold). User prompts on the custom formatted LCD allow fast, simple push button operation. All models come equipped with a zero gauss chamber, accessory hard case, built-in rechargeable battery, quick reference card and instruction manual.

Mfg. Part No.	Description	Stock No.	Price Each
6010	Hall-Effect Gaussmeter	83F9146	2896.28

AVAILABLE PROBES

HAD61-2508-05	Axial Probe	93C9428	759.51
HAD61-2508-05-T	Temperature Compensated Axial Probe	93C9429	906.95
HTD61-0608-05	Transverse Probe	93C9430	811.55
HTD61-0608-05-T	Temperature Compensated Transverse Probe	93C9431	913.32

(41770)

CABLE HEIGHT METERS



- Shortens measuring time
- Inherently safe — 3 button operation
- Easy to use and compact
- Calibration and maintenance free operation
- Non-contact measurement
- Measures the height of up to six overhead cables



CHM series cable height meters use ultrasonic techniques to determine the height of overhead power cables up to 75 feet. Results may be displayed in either meters or feet and inches. The meters measure the lowest cable's height and the spacing between the next five cables. A battery and instruction manual are included.

Mfg. Part No.	Minimum Cable Size			
	1.00 inch	0.50 inch	0.25 inch	0.125 inch
659600 (CHM600)	10-50 feet	10-50 feet	10-39 feet	10-32 feet
659600E (CHM600E)	10-75 feet	10-50 feet		

Mfg. Part No.	Description	Stock No.	Price Each
659600 (CHM600)	Cable Height Meter, 50 Feet Max	60K8346	840.00
659600E (CHM600E)	Cable Height Meter, 75 Feet Max	70K7561	960.00

(89378)

Expert technical support

Chat online to our team of engineers, or connect to them through your representative.

(148838)

INSPECTION • COMPONENT TESTERS

**FLUKE LASER DISTANCE METERS**

Just Added



**FEATURES:**

- Reduction of estimation errors, saving both time and money
- Instant measurement with one-button operation
- Easy targeting with bright laser
- Quick calculation area (square footage) and volume
- Pythagoras calculation for determining distance indirectly from two other measurements
- Two-year warranty



FLUKE 411D

FLUKE 416D

The compact and handy Fluke laser distance meters were designed for indoor and limited outdoor applications. Both models are simple to operate, with the Fluke durability and quality you expect. And, with shortcut keys for addition, subtraction, area and volume, measurements could not be simpler.

**SPECIFICATIONS:**

Mfg. Part Nos.	FLUKE 411D	FLUKE 416D
<b>Range (for extended distances, use a target plate)</b>	0.1 m to 30 m (0.33 ft to 100 ft)	0.05 m to 60 m (0.16 ft to 200 ft)
<b>Measuring accuracy</b>	± 3 mm (0.118 in)	± 1.5 mm (± 0.059 in)
<b>Units displayed</b>	00.000 m, 000 ft 00in 1/16, 000.00 ft	00.000 m, 000 ft 00in 1/16, 000.00 ft
<b>Laser Class</b>	II	II
<b>Laser type</b>	635 nm, < 1 mW	635 nm, < 1 mW
<b>Automatic power off</b>	after 180 seconds	after 180 seconds
<b>Continuous measurement</b>	•	•
<b>Addition/subtraction</b>	•	•
<b>Battery life</b>	up to 3,000 measurements	up to 5,000 measurements
<b>LCD illumination</b>	-	•
<b>Data locations</b>	-	10
<b>Min/Max</b>	-	•
<b>Audible feedback</b>	-	•
<b>Pythagoras (Indirect measurement)</b>	Simple	Full
<b>Ingress protection</b>	IP40	IP54
<b>Dimensions</b>	123 mm x 50 mm x 26 mm (4.84 in x 1.97 in x 1.02 in)	135 mm x 46 mm x 31 mm (5.31 in x 1.81 in x 1.22 in)
<b>Weight</b>	150 g (5.29 oz)	110 g (3.88 oz)
<b>Temperature Storage range</b>	-25 °C to 70 °C (-13 °F to 158 °F)	-25 °C to 70 °C (-13 °F to 158 °F)
<b>Temperature Operation range</b>	0 °C to 40 °C (32 °F to 104 °F)	0 °C to 40 °C (32 °F to 104 °F)
<b>Operating altitude (ISO 9022)</b>	up to 3500 m	up to 3500 m
<b>Storage humidity (at 35 °C)</b>	maximum 85% for 24 h	maximum 85% for 24 h
<b>Batteries</b>	AAA (2)	AAA (2)

Mfg. Part No.	Description	Stock No.	Price Each
<b>FLUKE-411D</b>	Laser Distance Meter, 100 ft.	06P9669	109.00
<b>FLUKE-416D</b>	Laser Distance Meter, 200 ft.	06P9670	229.00

(133292)

**HANDHELD CAPACITANCE/LCR METERS (CONT.)**

**ACCESSORIES**

Mfg. Part No.	Description	Stock No.	Price Each
<b>U1701A-SMD</b>	Soft Carrying Case and SMD Tweezer Bundle	51P3611	30.11
<b>U1732A-SMD</b>	Soft Carrying Case and SMD Tweezer Bundle	51P1540	306.11
<b>U1174A</b>	Soft Carrying Case	78M8406	20.04
<b>U5481A</b>	IR to USB cable	51P3342	30.01
<b>U1782A</b>	SMD Tweezer	51P3616	30.01
<b>U1780A</b>	Power Adapter and Cord	51P3615	150.00

(142151)

**DIGITAL MINI MICROSCOPE**

NEW TECHNOLOGY



- 1.8" TFT color LCD screen with 2MB memory
- 7x to 108x magnification range
- Optical Zoom: 7x to 27x
- Digital Zoom: 4x
- Four white LEDs with adjustable brightness for object illumination
- 5 Image Effect modes: normal, gray, inverse, emboss, and dual window view
- Dual Window View simultaneously displays the magnified image next to the original image
- One year warranty



**Mfg. part no. MC108** dual window view simultaneously displays the magnified image next to the original image. Includes microscope stand, three AAA Ni-MH rechargeable batteries, adaptor/charger, Windows® compatible PC software with mini USB cable, cleaning cloth, and wrist strap. Dimensions: 4.7 x 2.2 x 0.8" (120 x 56 x 20mm). Wt. 2.5 oz. without batteries. CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each
<b>MC108</b>	Digital Mini Microscope	71P2407	299.99

(148527)

**875B 3½-DIGIT LCD LCR METER**



- 8 Capacitance Ranges: 200pF to 20mF
- 7 Resistance Ranges: 2Ω to 20MΩ
- 7 Inductance Ranges: 200μH to 200H



Rotary switch allows easy function/range selection. Measure dissipation factor of capacitors and 1/0 of inductors. Low battery and overload indicator. Overload: fuse protected 250VAC, 100mA. Measurement rate: 2.5 per second, nominal. Includes test clips, 9V battery, spare fuse, instructions.

Mfg. Part No.	Description	Stock No.	Price Each
<b>875B</b>	LCR Meter	46F8205	1-2 222.88

(5293)

**HANDHELD CAPACITANCE/LCR METERS**

NEW TECHNOLOGY



**Features:**

- Min/Max/Average values recordings
- Visible and audible tolerance mode for component sorting
- Guard terminal for better noise immunity (to be used with SMD tweezers)
- Dual display with backlight (U1701A/32A)
- Data Hold function to freeze readings
- Relative Mode



**Mfg. part nos. U1731A/32A** feature dissipation factor and quality factor, one-touch access to capacitance, inductance and resistance measurements, 20,000 counts resolution and 2 to 4 selectable test frequencies. Additionally, **mfg. part no. U1732A** provides auto calculation of phase angle and back light. **Mfg. part no. U1701A** features 11,000 counts resolution. PC data logging is optional to all units via IR-to-USB cable. Each unit comes complete with certificate of calibration, alligator clip leads, 9V alkaline battery, data logging software, quick start user's and service guides. Three-year manufacturer's warranty.

**SPECIFICATIONS**

Mfg. Part No.	U1701A	U1731A	U1732A
<b>Test Signals</b>	DC	120Hz, 1kHz	100/120Hz, 1k/10kHz
<b>Functions</b>	C	L, C, R, Q, D	L, C, R, Q, D, θ
<b>Primary Counts</b>	11,000	20,000	20,000
<b>Inductance</b>	-	Up to 999.9H	Up to 999.9H
<b>Capacitance</b>	Up to 199.99mF	Up to 19.99mF	Up to 19.99mF
<b>Resistance</b>	-	Up to 9.999MΩ	Up to 9.999MΩ

Mfg. Part No.	Description	Stock No.	Price Each
<b>U1701A</b>	Handheld Capacitance Meter	51P3610	150.00
<b>U1731A</b>	Handheld LCR Meter	51P3612	276.00
<b>U1732A</b>	Handheld LCR Meter	51P3614	331.00

▶ CONTINUED ▶

**878A AND 879 DUAL DISPLAY LCR METERS WITH AUTORANGING**



- 8 Capacitance Ranges: 1000pF to 10mF
- 7 Resistance Ranges: 10Ω to 10MΩ
- 8 Inductance Ranges: 1mH to 10,000H



**Mfg. part nos. 878A and 879** LCR meters also measure capacitor dissipation factor and inductor Q factor. Simultaneously displays these values and remembers minimum and maximum. Keeps running average of tested component values. Relative mode displays difference between measured and reference values. Tolerance mode beeps to indicate component outside 1%, 5%, 10%, (20% **mfg. part no. 879** only) reference value. **Mfg. part no. 878A** has two test frequencies (120Hz, 1kHz); **mfg. part no. 879** has four test frequencies (100Hz, 120Hz, 1kHz, 10kHz). 4½-digit LCD displays values to 19,999, and the secondary 3-digit 1,000 count display reads D or Q. **Mfg. part no. 879** has backlit display for poorly lit areas. Both models can be used in either auto or manual ranging modes. Includes pair of test alligator clips, DC 9V battery and user manual.

Mfg. Part No.	Description	Stock No.	Price Each
<b>878A</b>	Dual Display LCR Meter with Autoranging	07J0231	276.39
<b>879</b>	Deluxe Dual Backlit Display LCR Meter with Autoranging	96H7063	299.00

(5294)

COMPONENT TESTERS • CABLE & CONTINUITY TESTERS (COPPER)

BATTERY CAPACITY ANALYZERS



These battery capacity analyzers are ideal for testing lead acid batteries used in UPS devices, emergency lighting, sprinkler systems, communications equipment and alarm systems. All testers display stored charge capacity along with loaded and unloaded voltage. **Mfg. part nos. 601 and 602** also display batteries internal resistance.

SPECIFICATIONS	600	601	602
Battery Test Voltages	12	6, 12	24, 36, 42
Selectable Amp-Hours	7, 12, 24, 42, 65, 100	1-100 Amp-Hrs. in 1 Amp-Hr. Steps	
Dimensions	6.3(H) x 3.14(W) x 1.6"(D)	9.5(H) x 3.14(W) x 1.6"(D)	

Mfg. Part No.	Description	Stock No.	Price Each
			1-4
600	12V Lead-Acid Battery Capacity Analyzer	29C9349	376.14
601	6V and 12V Lead-Acid Battery Capacity Analyzer	84H9306	465.09
602	24V, 32V, and 42V Lead-Acid Battery Capacity Analyzer	84H9307	471.75

(68948)

INTELLITONE™ PRO KITS WITH TONER AND PROBE

- IntelliTone digital processing eliminates noise and false signals
- New SmartTone™ analog toning precisely isolates individual wire pairs
- Locates cables safely and effectively on active networks
- Verifies twisted-pair installation with visual end-to-end continuity test
- Identifies, diagnoses, and troubleshoots datacom/telecom services

INTELLITONE™ Pro 200 also features:

- Identifies and diagnoses 10/100/1Gb Ethernet link connectivity with NIC/Hub indication
- Identifies and diagnoses POTS with Line 2 service and polarity
- Validates twisted pair installation with Cablemap capability, which identifies common cable miswires

IntelliTone™ Pro's breakthrough digital and analog toning finds cables other toners/probes can't. **Mfg. part no. MT-8200-50A** IntelliTone Pro 100 toner and probe kit includes: toner and probe, coax F connector adapter, RJ-11 and RJ-45 patch cable, test leads with alligator clips, lanyards, owner's CD, quick-start guide and two 9V batteries. **Mfg. part no. MT-8200-60A** IntelliTone Pro 200 toner and probe kit includes: toner and probe, coax F connector adapter, two RJ-11 and two RJ-45 patch cable, test leads with alligator clips, lanyards, owner's CD, quick-start guide and two 9V batteries.

Mfg. Part No.	Description	Stock No.	Price Each
MT-8200-50A	IntelliTone Pro 100 Kit with Toner and Probe	92H6882	146.00
MT-8200-60A	IntelliTone Pro 200 Kit with Toner and Probe	92H6885	198.00

ACCESSORIES

MT-8202-05	IntelliTone Pro Carrying Case	92H6889	20.00
MT-8203-20	IntelliTone Pro Test Leads with Bed of Nails	92H6894	19.00
MT-8203-22	IntelliTone Pro Test Leads with Alligator Clips	92H6895	11.00

(79293)



MICROSCANNER2 CABLE VERIFIER



- Length meter shows distance to termination, open or short
- PoE detection rules out insufficient power
- Detail mode gives additional test status information
- Intuitive icons show what's at the end of any cable
- Modular port accepts RJ45 and RJ11 plugs
- Coax connector for video and audio testing

MicroScanner2 displays all key test results -- wiremap, pair lengths, distance to fault, cable ID and far-end devices -- on one screen. Both the main unit and the far-end identifiers can be used to test telephone jacks, Ethernet jacks, and CATV outlets right out of the box. Built-in IntelliTone digital and analog toning to precisely locate virtually any wire pair. **Mfg. part no. MS2-KIT** MicroScanner2 kit includes: Cable Verifier, remote identifiers #2-7, IntelliTone Pro 200 probe, shielded twisted pair RJ45 patch cord, RJ11 patch cord, clip-set RJ45 to 8 alligator clip bare wire adapter, F coax push-on patch cord, accessory soft pouch, batteries and operator guides, all packaged in a deluxe carry case.

➔ CONTINUED ➔

MICROSCANNER2 CABLE VERIFIER (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
MS2-100	MicroScanner2 Cable Verifier	47M2208	449.00
MS2-KIT	MicroScanner2 Cable Verifier Kit	47M2205	749.00

ACCESSORIES

MS2-IDK27	MicroScanner2 Remote Identifier Kit 2-7	47M2204	249.00
MS2-CPK	MicroScanner2 Professional Kit Carrying Case	47M2203	79.00

(100939)

CABLE-CHECK™ TESTERS



1577

PC CABLE-CHECK™ PRO

- Auto and manual scanning modes
- True cable mapping
- Easy-to-read LED Indicators
- Power shut-off conserves battery
- Rugged case with built-in handle
- Non-slip rubber feet grip desk or bench
- Cable length: 1000' max. (600' 75Ω coax)
- Output signal: 8V DC @ 10mA

**Mfg. part no. 1577** PC Cable-Check™ Pro cable tester is designed to test popular PC cable by identifying the wire connection status: open, short, or cross, in LAN, telephone, Serial, coaxial, USB, VGA, Mini-USB, S-video, FireWire, PS/2 keyboard and parallel printer cable. It is a simple and easy-to-use troubleshooting tool ideal for cable assembly testing and quick diagnostic checking of cable with the following terminations: RJ45, RJ11 and RJ12 UTP/STP modular plugs, BNC and CATV "F" coaxial, 9-, 15- and 25-pin D-sub, 15-pin HD-sub, A, B, and mini 5-pin USB, 4- and 6-pin 1394 FireWire and 36-pin Centronics printer. Requires 9V battery (included). Size: 11"H x 6.56"W x 1.60"D. One-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
			1-4
1577	PC Cable-Check™ Pro	63K9834	207.59

**Mfg. part no. 1594** LAN and A/V Cable-Check™ tester is designed for quick and easy testing of RJ45, UTP or STP modular plugs, CATV "F" coaxial, RCA, and BNC cabling used in smart home installations. Tests RJ45 patch cords and network installations to identify good connections, opens, shorts or cross-connections. Identifies data and telephone connection schemes and maps cable pin-out. Tests continuity of network and coaxial cable (Cat5, Cat5e, Cat6, RG6, RG6 Quad, RG59) and installed cable runs. Includes main and remote units, two RJ45 patch cords, 75-ohm male terminator, CATV "F" female adapter, two CATV "F"(male)-to-BNC (female) adapter, two CATV "F"(male)-to-RCA (female) adapter, 9V battery and durable nylon carrying case. Battery life for 15 hours continuous use. One-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
1594	LAN and A/V Cable-Check™	63M4214	44.99

(7559)

CABLE FAULT LOCATORS



- Simple operation
- Tough ABS case
- IP 54 protection
- 3-year manufacturers warranty

TDR cable fault locators find faults in metallic electrical cables, including twisted pair, coaxial, and parallel cables. **TDR500**, for use on de-energized cable only, has a warble tone for tracing with any tone tracing probe. **65510F (TDR1000/2)**, suitable for both energized and de-energized cables, has a display that is twice the size, TX null feature for finding near end faults, and a fast find feature to locate faults in seconds. Six AA batteries, test leads, and instruction manual are included.

SPECIFICATIONS

	TDR500	65510F (TDR1000/2)
Ranges (feet)	100, 300, 1000, 3000, 10,000	30, 100, 300, 1000, 3000, 10000
Accuracy	+ 1% range + 1 pixel	+ 1% range + 1 pixel
Resolution	1%	1%
Output Pulse	5V peak to peak	5V peak to peak
Gain	Automatic	4 selectable steps per range
Velocity Factor	0.30 to 0.99, 0.01 per step	0.20 to 0.99, 0.01 per step
De-Energized Cable	Yes	Yes
Energized Cable	Yes	Yes
Input Protection		IEC61010-1, 300V CAT3
TX Null		0 to 120 Ohms
Refresh Rate		1 to 3 times per second, selectable
Warble Tone	5V peak to peak	
Display	122 x 32 pixel graphic LCD	128 x 64 pixel graphic LCD
Connectors	BNC	Two 4mm safety terminals
Test Leads (two)	300mm long with crocodile clips	2-meters long, shrouded connectors to miniature crocodile clips

➔ CONTINUED ➔

CABLE & CONTINUITY TESTERS (COPPER) • CABLE TESTERS (FIBER)

CABLE FAULT LOCATORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
TDR500	Cable Fault Locator	63K9719	655.00
655510F (TDR1000/2)	Cable Fault Locator	43K9843	1610.00

(89379)

PC CABLE TESTER

- Test For Open, Shorted and Miswired Cables, Continuity, and Pin Configuration
- Auto and Manual Scanning
- Adjustable Scan Speed
- Easy-to-Read Multi-LED Display



Mfg. part no. 72-6707 cable tester is a stand-alone unit. It is designed to test popular PC data cables, monitor, printer, modem, mouse extension, BNC coax, RJ-45, 1394, and USB cables by identifying the wire connection status: open, short, cross, miswire, and continuity of wires and pin configuration. It is a simple and easy-to-use trouble shooting tool ideal for cable assembly testing or by system integrator to quickly check the pin configurations. Requires 9V battery (not included).

Mfg. Part No.	Description	Stock No.	Price Each
72-6707	PC Cable Tester	18C2273	139.13

(65112)

MULTI-NETWORK AND MODULAR CABLE TESTER

- Easy Verification of Cable Continuity, Open, Short and Miswiring
- Remote Terminator Tests Installed Cables up to 1000' Away
- Grounding Test
- Auto or Manual Scanning of Pin-Outs



Mfg. part no. 72-6706 multi-network and modular cable tester easily reads the correct pin configuration of 10Base-T cable (category 5), 10Base-2 cable (coax), RJ-45/RJ-11 modular cables, 356A, TIA-568A/568B and Token Ring cable by comparing transmitting end to the corresponding receiving end. Includes: 2 BNC adapter cables, BNC male/male adapter, RJ-45 modular cable, carrying case and owners manual, requires 9V battery (not included).

Mfg. Part No.	Description	Stock No.	Price Each
72-6706	Multi-Network/Modular Cable Tester	18C2275	89.95

(65110)

TONE TEST KIT



Mfg. part no. 72-6068 is designed to help identify the termination point of wires or to trace their paths. Built of high-impact plastic. Kit contains tone generator (Mfg. part no. 72-6065), inductive amplifier (Mfg. part no. 72-6066) and carrying case (Mfg. part no. 72-6067). The tone generator includes polarity, continuity and 1kHz warble or solid tone emission. A hanging strap minimizes strain on leads supporting the unit. The inductive amplifier offers features such as wrist wrap, low battery light and buttset connections with weather cover. It is crushproof up to 4000 lbs. One-year limited warranty. *Tone generator, inductive amplifier, and carrying case can also be ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
72-6068	Combo Kit	66F6719	105.07

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
72-6065	Tone Generator	66F6716	32.02
72-6066	Inductive Amplifier	66F6717	59.75
72-6067	Carrying Case	66F6718	15.94

(5390)

**Huge Expanded Selection of Semiconductors**

Go online to find new technologies and proven solutions from world-class and specialist suppliers.

(148843)

DTX SERIES CableAnalyzer™ AND ACCESSORIES



- Exceeds Cat 5e/6/7 requirements
- Fast 9-second Cat 6 Autotest
- Fast diagnostics pinpoint faults and suggest fixes
- 900MHz capability for 10 Gig Ethernet, Class F, CATV
- Resident fiber modules allow one-button switching from copper to fiber
- Fast, reliable, and rugged
- Color display
- 12-hour battery life
- Reduces certification costs by as much as 33% a year
- All models are upgradable to the top model



DTX-1800

DTX series CableAnalyzers™ significantly reduces total time to certify by improving every aspect of testing. Three times faster and more accurate than other testers.

DTX SERIES MAINFRAMES AND PACKAGES

Mfg. part no. DTX-1800 CableAnalyzer™ includes DTX-1800 main unit and smart remote, LinkWare PC software, 16MB MMC card, Cat 6/Class E permanent link adapters (2), Cat 6/Class E channel adapters (2), Headsets for talk (2), AC chargers (2), carrying case, USB interface cable (mini-B), serial RS-232 cable (DB9 to IEEE 1394), and a user manual.

Mfg. Part No.	Description	Stock No.	Price Each
DTX-1800	CableAnalyzer; Test to 900MHz, Certifies Cat. 6 Links in 12 Seconds	07J2396	8595.00

Mfg. part no. DTX-1200 CableAnalyzer™ includes DTX-1200 main unit and smart remote, LinkWare PC software, Cat 6/Class E permanent link adapters (2) Cat 6/Class E channel adapters (2), headsets for talk (2), AC chargers (2), carrying case, USB interface cable (mini-B), and a user manual.

Mfg. Part No.	Description	Stock No.	Price Each
DTX-1200	CableAnalyzer; Tests to 350MHz, Certifies Cat. 6 in 12 Seconds	07J2395	8268.00
DTX-1200-M	Copper and Multimode Fiber Certification Kit	23J8041	11475.00
DTX-1200-MS	Copper and Multimode/Singlemode Fiber Certification Kit	20J7037	15655.00

DTX SERIES FIBER MODULE SETS

DTX series fiber modules add record-fast fiber certification and fault location to the DTX series CableAnalyzers™; ordered separately above. Quickly certify multimode and singlemode fiber attenuation, length, and polarity.

Mfg. Part No.	Description	Stock No.	Price Each
DTX-MFM2	Set of 2 DTX multimode Fiber Modules--850nm and 1300nm LED Sources	84K0583	4655.00
DTX-SFM2	Set of 2 DTX Gigabit Multimode Fiber Modules--850nm VCSEL and 1310nm Laser Sources	18M6085	6490.00
DTX-GFM2	Set of 2 DTX Singlemode Fiber Modules--1310nm and 1550nm Laser Sources	18M6084	5310.00

DTX SERIES NETWORK SERVICE MODULE

Mfg. part no. DTX-NSM network service module certifies cabling, verifies network service availability and link connectivity, and documents findings in one LinkWare report. Documentation provides clear evidence that the job was done right. Module plugs into the back of the DTX series CableAnalyzer main unit; order separately above.

Mfg. Part No.	Description	Stock No.	Price Each
DTX-NSM	Network Service Module	76K2751	1090.00

DTX SERIES OTDR MODULES

Optical Time Domain Reflectometer (OTDR) module snaps onto the Fluke Networks DTX CableAnalyzer and makes the DTX powerful certification tool a complete, easy-to-use OTDR that shoots and analyzes traces on singlemode and multimode fiber. Plugs into the back of the DTX series CableAnalyzer main unit.

Mfg. Part No.	Description	Stock No.	Price Each
DTX-OTDR-KIT	Includes DTX Compact OTDR Module, launch fibers, accessories and carrying case	50M3537	11955.00
DTX-OTDR-QMOD	DTX Compact OTDR Module. Includes 850/1300/1310/1550 OTDR Module and carrying case	50M3538	10395.00
DTX-QUAD-OTDR 120	Includes DTX-1800 CableAnalyzer and DTX Compact OTDR Module	50M3542	13515.00

DTX SERIES ACCESSORIES

Mfg. part no. DTX-10GKIT enables testing and certification of twisted pair cabling for 10 Gigabit Ethernet deployments – whether it is an existing Cat 6 or newly installed Augmented Cat 6 cabling system. Includes two mfg. part no. DTX-AXTLK1 communication modules, AxTalk Analyzer™ software, mfg. part nos. DTX-PLA002S and DTX-CHA01AS, and a total of 8 terminators (2 sets of mfg. part no. DTX-AXTERM).

Mfg. Part No.	Description	Stock No.	Price Each
DTX-10GKIT	DTX-1800 Alien Crosstalk Analyzer Kit	18M6086	2865.00
DTX-AXTERM	Alien Crosstalk Link Terminators - Set of Four	33M7448	270.00
DTX-CHA001AS	Cat6/Class E Channel Adapter (AXTalk) - Set of Two	31M9537	255.00
DTX-PLA002S	Cat6A/Class EA Permanent Link Adapter - Set of Two	46M2473	835.00
DTX-COAX	DTX Series Coax Cable Adapter Kit	73J6920	625.00
DTX-CH003	DTX Series Coax Cable Replacement Adapter	73J6919	325.00
DTX-FTK	DTX Series Multimode Fiber Test Kit	73J6921	1249.00
DTX-PCU6S	DTX Series UTP Cat 6 Patch Cord Adapter Kit	73J6923	735.00
DTX-PCU6S/MN	DTX-PCU6S/MN UTP Cat 6 Patch Cord Main Adapter	73J6924	350.00
DTX-PCU6S/SR	DTX-PCU6S/SR UTP Cat 6 Patch Cord Smart Remote Adapter	73J6925	350.00
DTX-TERA	TERA Adapter Kit	73J6927	1130.00
DTX-CHA011	TERA Channel Adapter	73J6918	170.00
DTX-PLA011	TERA Permanent Link Adapter	73J6926	425.00

(79290)

## CABLE TESTERS (FIBER)

### VISIFAULT™ VISUAL FAULT LOCATOR



- Accelerates end-to-end fiber continuity checks
- Speeds fiber tracing and identification
- Simplifies fiber polarity verification
- Aids in location of fiber faults including tight bends, breaks and bad connectors
- Features continuous and flashing modes
- Connects to 2.5mm standard and 1.25mm SFF connectors
- Over 80 hours of battery life with two AA batteries

VisiFault™ Visual Fault Locator (VFL) traces optical fibers, verifies continuity and fiber polarity, and helps find breaks in cables, connectors and splices. The bright red laser light is easily visible from a distance. Continuous and flashing output modes makes identification easier. Ruggedly constructed with an energy-absorbing, impact-resistant case to ensure years of trouble-free use. A handy lanyard attachment and a carrying case make it easy to attach the VisiFault™ to your belt where it is readily available.

Mfg. Part No.	Description	Stock No.	Price Each
VISIFAULT	Visual Fault Locator	56J8969	300.00
NF380	1.25 VisiFault Adapter	56J8967	92.00

(83018)

### SIMPLIFIBER PRO OPTICAL POWER METER AND FIBER TEST KITS



- Dual-wavelength testing – complete testing in half the time
- Additional wavelengths to include 1490 and 1625 – calibrated to extend from typical enterprise wavelengths for broader applications
- Min/Max – automated precision tracking of intermittent power fluctuations
- FindFiber – quick end-to-end cable routing identification
- CheckActive™ – audible tone and display icon alerts you to a live wire
- Saves 1000 results – large internal memory enables continuous testing and recording; fully compatible with our popular LinkWare™ Cable Test Management Software
- Quickly locate cable fault, polarity, and connector problems with VisiFault™ VFL\*
- Inspect end-faces at 200x magnification with the FT120 FiberViewer or FT500 FiberInspector Mini\*



FTK1450

With new advanced capabilities that make testing simple, SimpliFiber® Pro Optical Power Meter and Fiber Test Kits are the best "go-to" kits for anyone involved in first-line optical fiber cabling installation and verification. Whether you are a fiber technician or contractor, our expertly configured kits contain all the tools necessary to quickly measure loss and power levels, locate faults and polarity issues, and inspect and clean connector end-faces. Industry-leading features such as single-port dual-wavelength testing and auto-wavelength detection, combined with time-saving capabilities such as CheckActive™, FindFiber™, and Min/Max make SimpliFiber Pro the best fiber test kit on the market.

**BASIC VERIFICATION KIT (MULTIMODE)**

Includes SimpliFiber Pro power meter, 850/1300 multimode source (SC port), and carrying case.

**BASIC VERIFICATION KIT (SINGLEMODE)**

Includes SimpliFiber Pro power meter, 1310/1550 singlemode source (SC port), and carrying case.

**FULL-FEATURED VERIFICATION KIT with FIBERVIEWER**

Includes SimpliFiber Pro power meter, 850/1300 source (SC port), FindFiber Remote ID source, FT120 FiberViewer optical microscope, VisiFault VFL, LC and ST adapters, and carrying case.

**FULL-FEATURED VERIFICATION KIT with FIBERINSPECTOR MINI**

Includes SimpliFiber Pro power meter, 850/1300 source (SC port), FindFiber Remote ID source, FT500 FiberViewer video microscope, VisiFault VFL, LC and ST adapters, and carrying case.

**COMPLETE FIBER VERIFICATION KIT**

Includes SimpliFiber Pro power meter, 850/1300 and 1310/1500 sources (SC port), two (2) FindFiber Remote ID sources, FT500 FiberViewer video microscope, VisiFault VFL, LC and ST adapters, NFC-KIT-BOX cleaning equipment, and carrying case.

**KIT CONTENTS AT A GLANCE**

Mfg. Part No.	FTK-1000	FTK-2000	FTK-1300	FTK-1350	FTK-1450
SimpliFiber Pro®	●	●	●	●	●
SimpliFiber Pro® 850/1300 Multimode Source	●			●	●
SimpliFiber Pro® 1310/1500 Singlemode Source		●			●
VisiFault™ Visual Fault Locator			●	●	●
FT120 Fiber Viewer Optical Microscope			●		
FT500 FiberInspector Mini				●	●
FindFiber Remote ID Sources			●	●	●
NFC-Kit-Box fiber optic cleaning kit					●
Carrying Case for protection and easy transport	●	●	●	●	●

Mfg. Part No.	Description	Stock No.	Price Each
SFPOWERMETER	SimpliFiber Pro Power Meter w/ SC Adapter, Carrying Pouch	45P8143	925.00
SFSINGLEMODESOURCE	SimpliFiber Pro SingleMode Source 1310/1500 w/ SC Port, Carrying Pouch	45P8144	1695.00

▶ CONTINUED ▶

### SIMPLIFIBER PRO OPTICAL POWER METER AND FIBER TEST KITS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
FTK1000	Basic Verification Kit (Multimode)	45P6662	1995.00
FTK2000	Basic Verification Kit (Singlemode)	45P6666	2795.00
FTK1300	Full-Featured Verification Kit with FiberViewer	45P6663	2965.00
FTK1350	Full-Featured Verification Kit with FiberInspector Mini	45P6664	4118.00
FTK1450	Complete Fiber Verification Kit	45P6665	6045.00
FINDFIBER	FindFiber Remote ID source w/ SC Port, Carrying Pouch	45P6657	150.00
FINDFIBER-6	Set of Six (6) FindFiber Remote ID Sources, Carrying Pouch	45P6658	900.00

**ACCESSORIES**

NFK1-SMPLX-LC	62.5 uM Simplex Test Reference Cord Set (SC/LC, LC/LC), 1m; Mandrel	45P7931	100.00
NFK1-SMPLX-SC	62.5 uM Simplex Test Reference Cord Set (SC/SC), 1m; mandrel	45P7932	100.00
NFK1-SMPLX-ST	62.5 uM Simplex Test Reference Cord Set (SC/ST, ST/ST), 1m; Mandrel	45P7933	100.00
NFK2-SMPLX-LC	50 uM Simplex Test Reference Cord Set (SC/LC, LC/LC), 1m; Mandrel	45P7934	100.00
NFK2-SMPLX-SC	50 uM siSimplex Test Reference Cord Set (SC/SC), 1m; Mandrel	45P7935	100.00
NFK2-SMPLX-ST	50 uM Simplex Test Reference Cord Set (SC/ST, ST/ST), 1m; Mandrel	45P7936	100.00
NFK3-SMPLX-LC	Singlemode Simplex Test Reference Cord Set (SC/LC, LC/LC), 1m	45P7937	100.00
NFK3-SMPLX-SC	Singlemode Simplex Test Reference Cord Set (SC/SC), 1m	45P7938	100.00
NFK3-SMPLX-ST	Singlemode Simplex Test Reference Cord Set (SC/ST, ST/ST), 1m	45P7939	100.00
NFA-SC-SINGLE	SC Interchangeable Connector Adapter (1)	45P7929	98.00
NFA-LC-SINGLE	ST Interchangeable Connector Adapter (1)	45P7928	98.00
NFA-ST-SINGLE	LC Interchangeable Connector Adapter (1)	45P7930	98.00
NF-MANDREL-625	Multimode Fiber Mandrel for 62.5/125 µm Fiber with 3 mm Jacket (Gray)	53H7347	10.00
NF-MANDREL-50	Multimode Fiber Mandrel for 50/125 µm Fiber with 3 mm Jacket (Red)	53H7346	10.00

**SUPPORT**

GLD-FTK	Gold Support Package for SimpliFiber Pro	70M9806	445.00
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\*Not available in all kit configurations (142261)

### CableIQ™ VoIP ENTERPRISE SERVICE KIT



- Includes the CableIQ Advanced IT Kit and NetTool VoIP Enterprise Service Kit
- Use the CableIQ Qualification tester to check existing cabling to see if it can support VoIP bandwidth
- Do a VoIP Performance Check using the NetTool Series II inline network tester, or quickly troubleshoot if issues arise once you are up and running.
- Locate and trace network cables with the included IntelliTone™ Probe
- Save cable and network test reports to PC with included reporting software

**Mfg. part no. CIQ-VOIP** CableIQ VoIP Enterprise Service Kit is the all-in-one solution for IT desktop professionals who need to deploy VoIP. The Cable IQ VoIP Enterprise Service Kit bundles two great tools together to support your VoIP deployment. **CableIQ Advanced IT Kit** includes: CableIQ main unit with remote adapter, CableIQ reporter software CD, IntelliTone 200 digital probe, remote IDs #2-7, (2) RJ45-RJ45 patch cord, USB cable, coax "F" push-on adapter, 75-ohm coax patch cord, RJ45/11 universal coupler, RJ11-RJ11 patch cord, owners CD and quick start guide, (4) AA batteries, test accessory soft pouch, and hard carry case. **NetTool Series II Pro VoIP network tester** includes: 10/100/1000Mbps inline, VoIP option, NetProbe diagnostics, IntelliTone toning, NetTool Connect PC software, wireview wiremapper #1, (4) AA alkaline batteries, USB to mini-USB cable, ethernet cable, getting started guide, CD with multi language user manuals, and soft carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
CIQ-VOIP	CableIQ VoIP Enterprise Service Kit	13P0343	3995.00

(143698)



CABLE TESTERS (FIBER)

**SIMPLIFIBER™ OPTICAL LOSS TEST KIT**



- Tests singlemode and multimode links
- Verify system loss and power levels at 850nm, 1300nm, 1310nm, 1550nm with **SimpliFiber™ Power Meter and Sources**

SimpliFiber™ optical loss test kits provide all the tools needed to verify proper installation and maintain optical fiber cabling infrastructures in one protective carrying case.

**BASIC FIBER VERIFICATION TEST KIT**

**Mfg. part no. FTK-150** is a starter kit for installing and maintaining fiber links with multimode optical fiber. Verifies optical loss and power levels at 850nm and 1300nm. *Order singlemode sources, microscope, and visual fault locator as needed; go online or call.*

**FIBERINSPECTOR MINI™ AND CLEANING KIT**

**Mfg. part no. FT525.** Use FiberInspector™ Mini to examine installed fiber terminations or ensure terminations are smooth and clean. Avoid the #1 cause of fiber link failure: dirty end-faces. Includes cleaning cube, 10 cleaning cards, solvent pen, port cleaning swabs and soft carry case.



**KIT CONTENTS AT A GLANCE**

Mfg. Part No.	Description	FTK-150
	<b>SimpliFiber™ Power Meter</b>	•
	<b>SimpliFiber™ Sources 850nm and 1300nm</b>	•
	<b>SimpliFiber™ Sources 1310nm and 1550nm</b>	
	<b>VisiFault™ Visual Fault Locator</b>	
	<b>FT120 200X Fiber Viewer</b>	
	<b>FiberInspector Mini Video Viewer</b>	
	<b>CableIQ™ Advanced IT Kit</b>	
	<b>Carrying Case</b> for protection and easy transport	•

Mfg. Part No.	Description	Stock No.	Price Each
FTK150	Basic Fiber Verification Test Kit	76K2754	1695.00
FT525	Fiber Inspector Mini and cleaning kit	62M4288	1670.00

(87530)

**OPTIFIBER™ CERTIFYING OTDR**



- Boost productivity with an easy-to-use interface and small, lightweight design
- Diagnose fiber cabling issues with integrated ChannelMap™, auto OTDR and fiber end-face inspection
- Certify fiber with integrated Auto OTDR analysis, automated loss and length measurements and fiber end-face inspection
- Enhance visibility into premise, campus and metro networks with short event dead zones
- Document fiber with LinkWare PC data management and reporting software

OptiFiber™ Professional OTDR gives private network owners the visibility into fiber network to quickly isolate faults, restore network performance and meet the emerging requirements for fiber testing and certification. In addition, OptiFiber™ integrates loss and fiber length measurement, OTDR analysis, and fiber connector end-face imaging to provide extended certification and diagnostics. The companion LinkWare PC software documents, reports and manages all test data.

OptiFiber™ has several models to choose from. All come with a mainframe, battery, carrying strap, AC power supply, USB cable, 32MB MMC card, compact disk with quick reference guide, manuals, LinkWare management software and 62.5um launch fiber cable.



Mfg. Part No.	Description	Stock No.	Price
OF-500-01/50M	OptiFiber Multimode OTDR (50um Accessories)	85K1327	13995.00
OF-500-02/50M	OptiFiber Advanced Multimode OTDR (50um Accessories)	85K1328	14995.00
OF-500-03	OptiFiber Singlemode OTDR	17M8965	12760.00
OF-500-10	OptiFiber Certifying Multimode OTDR	87H9533	19995.00
OF-500-10/50M	OptiFiber Certifying Multimode OTDR (50um Accessories)	85K1329	19995.00
OF-500-13	OptiFiber Singlemode SR Certifying OTDR	18M6177	23351.00
OF-500-15	OptiFiber SR Certifying OTDR	21J6262	24990.00
OF-500-15/50M	OptiFiber SR Certifying OTDR (50um Accessories)	85K1330	24990.00
OF-500-35	OptiFiber Pro Inspector LL OTDR	21J6263	30795.00
OF-500-35/50M	OptiFiber MM/SM Pro Inspector LL OTDR (50um and SM Accessories)	85K1331	30795.00
OF-500-45	OptiFiber MM/SM Certifying OTDR	18M6178	39126.00

**SMART REMOTE MODULES**

**Mfg. part no. OFSR-MMREM** OptiFiber™ smart remote with multimode module package is used with the OptiFiber™ mainframe to certify multimode fiber using standards-based two fiber, dual wavelength DTX fiber module methodology.

**Mfg. part no. OFSR-SFM** singlemode module for smart remote is used with the OptiFiber™ smart remote to certify singlemode fiber using standards-based two fiber, dual wavelength DTX fiber module methodology. **Mfg. part no. OFSR-MFM** multimode module for smart remote is used with the OptiFiber™ smart remote to certify multimode fiber using standards-based two fiber, dual wavelength DTX fiber module methodology.

Mfg. Part No.	Description	Stock No.	Price Each
OFSR-MMREM	Smart Remote with Multimode Module Package, USB, Mini B Connector	21J6276	4995.00
OFSR-SFM	Singlemode Module for Smart Remote	21J6278	2995.00
OFSR-MFM	Multimode Module for Smart Remote	21J6279	1995.00

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**FIBERINSPECTOR PRO™ VIDEO MICROSCOPE**



- Easily inspects installed fiber end-faces on patch panels, patch cords and hardware devices
- Eliminates hazards of inspecting live fiber
- Ten times faster than traditional microscopes
- New displays provide crisp, clear images of microscopic debris and end-face damage
- Various probe adapter tips allow for inspection through different connector port types



FiberInspector Pro Video Microscope is a portable video microscope that provide superior vision to inspect fiber while it's still in place. It works 10 times faster than traditional scopes — saving valuable time inspecting installed fiber terminations in hardware devices and patch panels. Eliminate the #1 cause of fiber failure: contamination. The displays provides crisp, clear images of microscopic debris and end-face damage. Simply insert the video probe and inspect installed fiber connectors through the bulkhead adapters without accessing the backside of the patch panels.

**Mfg. part no. FT600** includes 250/400x dual magnification probe, display with 3.5" screen, AC adapter/battery charger, probe adapter tips (ST, SC, FC and universal 2.5mm patch cord tip) and hard carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
FT600	FiberInspector Pro	56J8960	3495.00
OFTM-5352	FiberInspector Pro for OptiFiber Certifying OTDR	41J2293	2495.00
NF366	FiberInspector E2000 Video Probe Adapter Tip	21J6271	567.00

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**CableIQ™ QUALIFICATION TESTER, KITS AND ACCESSORIES**



- Qualifies — sees if existing cabling has the bandwidth to support voice, 10/100, VoIP or gigabit Ethernet
- Troubleshoots — shows why existing cabling cannot support the network's bandwidth requirement (e.g. crosstalk at 11 meters)
- Discovers — detects what's at the end of any cable and displays device configuration (Speed/Duplex/Pairing)
- Identifies unused switch ports that can be reallocated
- Graphically maps wiring configuration and shows distance to faults with intelligent wiremap
- Tests all copper cabling media: twisted-pair, coax, and audio cable



**Mfg. part no. CIQ-100** CableIQ™ qualification tester is designed to meet the emerging needs of network technicians who need to upgrade to higher network speeds and troubleshoot connectivity problems. It allows network technicians to perform a series of troubleshooting steps to better isolate causing from network problems and identifies whether insufficient cabling bandwidth is the cause of the problem. Supports UTP, STP, FTP, SFTP, RG6, RG59, audio and security type cable. Supported tests include wiremap, length, cable signal performance, digital and analog toner, Ethernet port detection and ID, analog phone and video signal detection, continuity, and cable fault finding. Measures crosstalk and impedance and compares against appropriate limits based on qualification test selected. Tester stores up to 250 qualification test results.

**CableIQ™ TESTER AND KITS**

**Mfg. part no. CIQ-100** CableIQ™ qualification tester comes complete with remote adapter, CableIQ™ Reporter software CD, two RJ-45-RJ45 patch cords, USB cable, coax "F" push-on adapter, CD and user guides, softside carrying case and four AA batteries.

Mfg. Part No.	Description	Stock No.	Price Each
CIQ-100	CableIQ Qualification Tester	73J6912	1075.00

**Mfg. part no. CIQ-Kit** advanced IT kit includes CableIQ™ qualification tester with remote adapter, CableIQ™ Reporter software CD, Intellitone 200 digital probe, 6 remote office ID's, (2) RJ-45-RJ45 patch cords, USB cable, coax "F" push-on adapter, 75-ohm coax patch cord, RJ45/11 universal coupler, CD and user guides, test accessory soft pouch, hardside carrying case, and (4) AA batteries.

Mfg. Part No.	Description	Stock No.	Price Each
CIQ-KIT	CableIQ Advanced IT Kit	73J6909	1625.00

**Mfg. part no. CIQ-KRQ** residential qualifier kit includes CableIQ™ qualification tester, (2) RJ-45 patch cords, (2) RJ11 patch cords, USB and coax cable, bare wire and speaker wire adapters, coax BNC and RCA adapters, pack of 50 "Qualified" labels, CD and user guides, softside carrying case, and (4) AA batteries.

Mfg. Part No.	Description	Stock No.	Price Each
CIQ-KRQ	CableIQ Residential Qualifier Kit	44K0059	1175.00

**Mfg. part no. CIQ-SVC** service kit includes CableIQ™ qualification tester with remote adapter, LinkRunner Network Multimeter, IntelliTone 200 Probe, six remote office IDs, rugged carrying case and all needed batteries.

Mfg. Part No.	Description	Stock No.	Price Each
CIQ-SVC	CableIQ Service Kit	17M9683	2025.00

**Mfg. part no. CIQ-GSV** includes CableIQ™ Qualification Tester with remote adapter, LinkRunner Pro Network Multimeter, IntelliTone 200 Probe, six remote cable IDs, rugged carrying case, and all needed batteries

Mfg. Part No.	Description	Stock No.	Price Each
CIQ-GSV	CableIQ Gigabit Service Kit	50M3437	2475.00

**CableIQ™ ACCESSORIES**

**Mfg. part no. C1Q-Coax** CableIQ™ coax adapter kit includes F, BNC, and RCA connectors.

Mfg. Part No.	Description	Stock No.	Price Each
CIQ-IDK24	CableIQ Remote Identifier Kit, Numbers 2-4	73J6907	235.00
CIQ-IDK57	CableIQ Remote Identifier Kit, Numbers 5-7	73J6908	235.00
CIQ-COAX	CableIQ Coax Adapter Kit	73J6906	19.95
CIQ-SPKR	CableIQ Speaker Wire Adapter	73J6911	54.95
CIQ-RJA	CableIQ RJ45/11 Modular Adapter	73J6910	44.95
CIQ-QL	CableIQ "Qualified" Labels , Pkg. of 50	44K0060	6.95
CIQ-CIT	CableIQ Hardside Carrying Case	73J6905	79.00

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LAN TESTERS

NETWORK TECHNICIAN TOOL KITS

NEW TECHNOLOGY



- Maximize value when purchasing a DTX CableAnalyzer™ and EtherScope™ together in a kit!
- Install, validate and troubleshoot LANs fast
- Get two of the best in class solutions for cable certification and Ethernet performance assessment
- DTX-1800 CableAnalyzer™ reduces the total time to certify network cabling
- EtherScope™ Series II Network Assistant reduces the time to measure Ethernet performance and validate LAN services

Pro technician kit includes both **mfg. part no. DTX-1800-M** and **mfg. part no. ES2-PRO-SX/I-KIT** plus everything needed for copper and fiber cable certification, Ethernet performance assessment, and wired and wireless LAN troubleshooting. Handles 10Mbps-to-10Gig copper cable certification, multimode fiber certification (Tier I), 10/100/Gig Ethernet troubleshooting, 802.11 wireless LAN troubleshooting, Gigabit Ethernet performance measurement with LinkRunner™ Pro Reflector and service performance assessment. The DTX-1800M includes DTX-1800 CableAnalyzer™ with a set of DTX-MFM2 multimode fiber modules, and user manual. The EtherScope™ Series II Network Assistant PRO-SX/I-KIT includes mainframe with LAN option, 802.11a/b/g adapter with WLAN option, SX SFP with fiber option, ITO/RFC2544 option, external directional antenna, rechargeable Li-Ion battery pack (installed), protective holster, carrying strap, carrying case, AC adapter/battery charger, wire map remote, RJ-45 coupler, patch cable, 128MB CompactFlash™ card and resource CD, and LinkRunner™ Pro with Reflector, Li-Ion battery, AC adapter/battery charger, and carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
ES2-DTX-PRO-KIT	Pro Technician Tool Kit — DTX-1800-M and ES2-PRO-SX/I-KIT	73P9500	23215.35

LAN technician kit includes both the **mfg. part no. DTX-1800** and **mfg. part no. ES2-LAN-SX** plus all the basics for copper cable certification and wired LAN troubleshooting. Handles 10Mbps-to-10Gig copper cable certification and 10/100/Gig Ethernet troubleshooting. The DTX-1800 CableAnalyzer™ includes main and smart remote, LinkWare PC software, 128MB MMC card, Cat 6A/Class EA permanent link adapters, Cat 6/Class E channel adapters, headsets for talk, AC chargers, carrying case, USB interface cable (Mini-B), Serial RS-232 cable (DB9 to IEEE1394), and user manual. The EtherScope™ Series II Network Assistant LAN-SX includes mainframe with LAN option, SX SFP with fiber option, rechargeable Li-Ion battery pack (installed), protective holster, carrying strap, carrying case, AC adapter/battery charger, wire map remote, RJ-45 coupler, patch cable, 128 MB CompactFlash™ card and resource CD.

Mfg. Part No.	Description	Stock No.	Price Each
ES2-DTX-LAN-KIT	LAN Technician Tool Kit — DTX-1800 and ES2-LAN-SX	73P9499	15474.00

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LINKRUNNER™ NETWORK MULTIMETER, KIT AND ACCESSORIES



**Mfg part nos. LRPRO-1000** and **LINKRUNNER** Network Multimeters are the essential tools to quickly verify and troubleshoot network drops. **Mfg. part no. LR-KDW** includes the LinkRunner Network Multimeter as well as Key Device Watch software to monitor networks and alert user of failures, reports and network maps. **Mfg. part no. LINKRUNNER-KIT** extended test kit includes: LinkRunner™ Network Multimeter, cable ID kit (#1-8), wiremap adapter, RJ-45 coupler, IntelliTone 100 probe, test clip set, NiMH battery pack, NiMH battery charger, custom carrying case, and PC Inspector. **Mfg. part no. LRPRO-KIT** includes LinkRunner Pro, IntelliTone Pro 200 Probe, WireView Cable IDs #1-6, CLIP-SET RJ45 to 8-alligator-clip bare wire adapter, LinkRunner Connect software CD, test accessory soft pouch, USB cable, LinkRunner Pro Getting Started Guide, IntelliTone Pro Getting Started Guide, 4 AA alkaline batteries, one 9V alkaline battery, carry case.

Features	LinkRunner	LinkRunner Pro
Link/Ping Speed	10/100	10/100/1000
POTS/ISDN/Ethernet Detection	●	●
Cable Wiremap	●	●
Discovery Protocols	CPD/EPD	CPD/EPD/LLPD
IntelliTone Digital Toning		●
PoE Verification		●
Configurable Ping List		10 IP Addresses
802.1X Authentication		●
Link Status Reports		●
USB Application Port		●
Protective Rubber Mold		●

Mfg. Part No.	Description	Stock No.	Price
LRPRO-1000	LinkRunner Pro Network Multimeter	43M0075	999.00
LINKRUNNER	LinkRunner Network Multimeter	76C0203	450.00
LINKRUNNER-KIT	LinkRunner Network Multimeter Extended Test Kit	76C0204	895.00
LRPRO-KIT	LinkRunner Pro Extended Test Kit	50M4150	1499.00

LINKRUNNER™ ACCESSORIES

NT-BATT-CHG	NiMH Battery Charger, 1.25A	18C2620	62.00
BATT-AA-NIMH	Rechargeable AA NiMH Battery Pack	18C2610	15.00
LR-HOLSTER	Holster Storage Case	44K0061	20.00

(74095)

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(148886)

NETTOOL™ SERIES II NETWORK TESTERS AND ACCESSORIES



- NetProbe™ diagnostics – isolate device and application connectivity issues in seconds
- Quickly resolve and document network problems with powerful inline visibility into 10/100/Gig links between switches, PCs, IP phones and other devices
- Connect inline for visibility into VoIP calls to quickly diagnose IP phone boot-up and call control problems and to measure key call quality metrics
- Verify readiness of PoE systems and troubleshoot PoE device problems
- IntelliTone™ digital cable location and isolation technology speeds cable troubleshooting

NETTOOL™ SERIES II NETWORK TESTERS

Mfg. Part No.	Description	Stock No.	Price Each
NTS2-VOIP	10/100/1000 Inline Testing, VoIP Application, NetProbe, PoE, IntelliTone Toning, Reporter	18M6175	2995.00
NTS2-PRO	10/100/1000 Inline Testing, NetProbe, PoE, IntelliTone Toning, Reporter	18M6174	2495.00
NT-VOIP	10/100 Inline Testing, VoIP Application, Reporter	27K6765	1995.00
NT	10/100 Single-Ended Testing	18C2600	995.00

NETTOOL™ SERIES II UPGRADE

NTS2-VOIP-OPT	VoIP Option to Upgrade NTS2-PRO to NTS2-VOIP	18M6176	595.00
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ETHERSCOPE™ SERIES II NETWORK ASSISTANT LAN ANALYZERS



- Analyze 10/100/Gigabit twisted pair and Gigabit fiber optic Ethernet LANs
- Troubleshoot performance and connection issues
- Monitor traffic statistics
- Measure throughput, latency and frame loss per RFC 2544 at rates up to 1 Gbps over copper or optical fiber cabling
- Analyze 802.11a/b/g wireless LANs
- Secure your WLAN by identifying and locating unauthorized rogue devices

EtherScope™ Series II Analyzers are the essential toolkits for first responders. They combine the right troubleshooting tools in a handheld platform to help network professionals solve a wide range of problems fast. Features include troubleshooting switched networks, characterizing the performance of LAN and WAN links, and discovering access points, devices, mobile clients, networks and VLANs.

Mfg. Part No.	Description	Stock No.	Price Each
ES2-LAN-SX/I	EtherScope S2 LAN Analyzer with SX Fiber and ITO	05M6677	9995.00
ES2-PRO-SX/I	EtherScope S2 LAN and Wireless LAN Analyzer, SX Fiber and ITO	30M8899	10900.00
ES2-PRO-SX/I-AA	EtherScope S2 LAN and Wireless LAN Analyzer, SX Fiber, ITO and AnalyzeAir Software	30M8900	12995.00
ES2-PRO-SXLX-I/S	EtherScope S2 LAN and Wireless LAN Analyzer, SX and LX Fiber, ITO and ES-ACCY KIT*	18M6111	10995.00

ACCESSORIES

ES2-SX	SX Gig Fiber SFP Transceiver (850nm VCSEL, Replacement Item)	18M6114	199.00
ES2-LX	LX Gig Fiber SFP Transceiver (1310nm FP Laser, SX Fiber Option Required)	18M6109	399.00
ES2-ZX	ZX Gig Fiber SFP Transceiver (1550nm DFB Laser, SX Fiber Option Required)	18M6116	2295.00
ES-ACCY-KIT*	Etherscope S2 Accessories Kit	62K4573	895.00
DSP-FTK	Fiber Optic Test Kit, 850nm and 1300nm LED Source, and 850/1300/1550 nm Meter	16F9098	1249.00
ES-BATTERY	Replacement Battery	56J8958	350.00
ES-BATT-CHG	External Battery Charger	56J8957	195.00
WIREVIEW 2-6	Remote Identifiers 2-6	62K5705	315.00
OPV2-KB	Mini USB Keyboard	33K4161	125.00
ES-WCARD	Replacement WLAN Card (Hardware Only)	62K4583	395.00
DTX-ACUN	Universal AC Charger	40K6052	50.00
OPV-POE	Power Over Ethernet Adapter	29K6247	68.00
MT-8200-63A	IntelliTone Pro 200 Probe	92H6887	104.00
MT-8200-53A	IntelliTone Pro 100 Probe	92H6884	83.00
944806	Null Modem Cable (DB9)	45M5783	13.97

\*Mfg. part no. ES-ACCY-KIT contains an EtherScope battery, external battery charger, AC charger and line cord, USB mini keyboard, WireView identifiers #2 - #6 and a larger carrying case.

(63015)

POWER QUALITY ANALYZERS

**FLUKE-345 POWER QUALITY CLAMP METER**



- Clamp-on measurement without breaking the circuit
- Accurate in noisy environments even with distorted waveforms
- Datalogging power parameters for minutes or months
- Troubleshoot, analyze and log harmonics digitally or graphically
- Capture and analyze nuisance tripping, from 3 to 300 seconds
- 3-Phase power — built-in capability for balanced loads
- View graphs and generate reports with Power Log software
- 600V CAT IV safety rating, CSA certified, CE compliant

**Mfg. part no. FLUKE-345** power quality clamp meter features a bright, color LCD display with 2-level backlight to analyze the harmonic spectrum, a low-pass filter to remove high frequency noise, and a high EMC immunity design. Ideal for commissioning, troubleshooting and measuring modern electrical switching loads, such as variable frequency drives, electronic lighting and UPS systems. Additionally, the Hall Effect measurement system makes measurement of DC current possible without the need to break the circuit, and the internal memory enables long-term datalogging for analysis of trends or intermittent problems. Meter comes complete with Power Log software, test leads and probes, alligator clips, USB cable, international AC adapter/battery eliminator, soft carrying case, printed user manual and multi-language manual on CD.



**SPECIFICATIONS**

<b>Current Measuring Range</b>	0 to 2000A DC or 1400 AC rms
<b>Voltage Measuring Range</b>	0 to 825V DC or AC rms
<b>Watts Measuring Range (Single- and Three-Phase)</b>	0 to 1650kW DC or 1200kW AC
<b>VA Measuring Range (Single- and Three-Phase)</b>	0 to 1650kVA DC or 1200kVA AC
<b>VAR Measuring Range (Single- and Three-Phase)</b>	0 to 1250kVAR
<b>Frequency (From Current or Voltage Sources)</b>	15Hz to 1kHz
<b>Jaw Opening/Capacity</b>	2.36"/2.28" Dia.
<b>Overall Size</b>	12L x 3.75W x 2"H

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-345	Power Quality Clamp Meter	30M9566	1707.00

(90371)

**FLUKE VR1710 VOLTAGE QUALITY RECORDER**



- Fast and easy recording of voltage trends, dropouts, and power quality
- Easy to use
- Continuous recording of all values with no gaps
- Clear graphical summary of data and quick overview of key power quality parameters
- Min, Max, Average RMS values (1/4 cycle) with time stamps
- Actual transient display (>100 µs) with time stamp
- Flicker according to EN 61000-4-15, individual harmonic and THD values with trends
- Statistical analysis of voltage event
- Includes PowerLog software package for quick download, analysis, and automatic reporting



**Mfg. part no. Fluke VR1710** is a single-phase, plug-in voltage quality recorder for detecting and recording voltage quality problems. Voltage quality parameters including RMS average, transients, flicker, and harmonics up to the 32nd are recorded using a user-selected average period from 3 seconds to 10 minutes. The Fluke VR1710 satisfies the needs of maintenance and facilities management personnel in industrial, utilities, and large service organizations where reliable voltage quality is essential.

Specifications	Fluke VR1710
<b>Operating Voltage</b>	70V to 300V
<b>MIN/MAX/AVG RMS value</b>	Resolution 0.125
<b>Number of Events</b>	175,000
<b>Voltage Resolution</b>	0.125V
<b>Harmonics Measurement</b>	EN 61000-4-7 (up to 32nd)
<b>Number of Recording Channels</b>	1 Phase to Neutral 2 Phase/Neutral to Ground
<b>Frequency Range</b>	50 Hz ± 1 Hz and 60 Hz ± 1 Hz
<b>Harmonics Measurement</b>	Cat II 300V

Mfg. Part No.	Description	Stock No.	Price Each
VR1710	VR1710 Plug-in Voltage Quality Recorder	64M6536	779.00

(103578)

**FLUKE-430 SERIES THREE-PHASE POWER QUALITY ANALYZERS**



FLUKE-434/003



FLUKE-435/003

- Both Models Feature:**
- Troubleshoot real-time: Analyze the trends using the cursors and zoom tools — even while background recording continues
  - Highest safety rating in the industry — 600V CAT IV / 1000V CAT III
  - Automatic transient mode captures 200kHz waveform data on all phases simultaneously — up to 6kV

➔ CONTINUED ➔

**FLUKE-430 SERIES THREE-PHASE POWER QUALITY ANALYZERS (CONT.)**

- Measure all three phases and neutral with included four current probes
- AutoTrend: every measurement is always automatically recorded, without any setup
- System-Monitor: Up to seven power quality parameters on one screen according to EN50160
- Inrush mode for troubleshooting nuisance circuit breaker tripping
- Rugged, hand-held troubleshooter with three-year manufacturer's warranty
- Seven hours operating time per charge on NiMH battery pack
- View graphs and generate reports with included analysis software

**In Addition — Only Fluke-435 Features:**

- Fully Class A Compliant — conduct tests according to the stringent international IEC 61000-4-30 Class A standard
- Logger function — configure for any test condition with memory for over 400 parameters at user defined intervals
- Mains signaling — measure interference from ripple control signals at specific frequencies

**Mfg. part nos. Fluke-434 and Fluke-435** three-phase power quality analyzers help locate, predict, prevent and troubleshoot problems in three- and single-phase power distribution systems. Troubleshooting is faster with on-screen display of trends and captured events, even while background recording continues. Measures voltage, current, dips, sags, interruptions, harmonics, inter-harmonics, flicker, power, energy, transients, frequency, unbalance, inrush, EN50160 overview. The new IEC standards for flicker, harmonics and power quality are built right in to take the guess work out of power quality. Both models include USB cable, color localization set, FlukeView™ analysis software, five test leads (four black, one green), five test clips (four black, one green), current probes, NiMH battery pack and charger, hard carrying case, user manual CD, and printed "getting-started" manual.

**COMPARISON AT A GLANCE:**

Mfg. Part Nos.	Fluke-434*	Fluke-435
Fully Class A Compliant		●
Report Generation and Logger Analysis Software Power Log		●
Logger Function with Multi-Parameter Logging, Mains Signaling	*To Add These Three Features Order <b>Fluke-434/LOG</b> Upgrade Kit separately below	●
Mains Signaling		●
Voltage Accuracy	0.5% of nominal	Class A - 0.1% of nominal
Memory	8Mb	
Current Probes	40A/400A Clamp (Four)	4000A Flexible (Four)
Carrying Case	Rugged Hard Case	Watertight Hard Case with Rollers
GPS Time Synchronization	When used with <b>Mfg. Part No. GPS430</b> Module; order separately below	When used with <b>Mfg. Part No. GPS430</b> Module; order separately below

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-434/003	Power Quality Analyzer, Three-Phase	56J9491	5212.00
FLUKE-435/003	Logging Power Quality Analyzer, Three-Phase	83K1732	7293.00

**ACCESSORIES**

Mfg. Part No.	Description	Stock No.	Price Each
C435	Watertight Hard Storage Case with Rollers	83K1711	432.00
GPS430	GPS Time Synchronization Module	83K1734	1150.00
FLUKE-434/LOG	Firmware/Software Upgrade Kit	83K1731	1654.00
I430-FLEX	3000A Flexible Current Probe; <b>Sold Individually</b>	83K1735	358.10
ISSPQ3	5A AC Current Clamp	43K8758	997.85
TLS430	Replacement Test Leads	56J9494	93.60

(82913)

**FLUKE-43B POWER QUALITY ANALYZER**



**Mfg. part no. FLUKE-43B** power quality analyzer performs the measurements you need to maintain power systems, troubleshoot power problems and diagnose equipment failures. Combines capabilities of a power quality analyzer, multimeter and scope. Calculates 3-phase power on balanced loads, from a single-phase measurement. Measures power harmonics, captures voltage sags, transients and inrush current. Monitoring functions help track intermittent problems. Single keystroke toggle for most commonly-used power quality modes. Records 2 selectable parameters for up to 16 days. Flukeview software provides a complete harmonic profile up to 51st harmonic. Measures resistance, diode voltage drop, continuity, and capacitance. Includes voltage probes, 500A current clamp, Flukeview™ software and optically isolated interface cable. 3-year manufacturer's warranty on the **FLUKE-43B** analyzer, 1-year manufacturer's warranty on accessories. Order **mfg. part no. 1400S AC current clamp** separately below.

**SPECIFICATIONS**

Volts/Amps/Hz	Transients
True-Rms Voltage: (AC + DC) 5.0V to 1240V*	Minimum Pulse Width: 40ns Voltage Threshold Settings: 20%, 50%, 100%, 200%
True-Rms Current: (AC + DC) 50.00 to 1250KA Frequency: 10.0Hz to 15.0KHz	
Power Display	Inrush Current
Watts, VA, VAR Reactive Power 1-Phase and 3-Phase, on Balanced Loads: 250W to 1.56 GW PF Power Factor: 0.00 to 1.0 DPF Displacement Power Factor: 0.00 to 0.25	Current Ranges (Selectable): 1A to 1000A Inrush Times (Selectable): 1sec. to 5 min.

➔ CONTINUED ➔

POWER QUALITY ANALYZERS

FLUKE-43B POWER QUALITY ANALYZER (CONT.)

Volts/Amps/Hz	Transients
Volts, Amps, Watts: 2 to 512 Harmonic Phase: 2nd (±3°) ... 51st (±15°)	Input Impedance: 1MΩ Bandwidth Input: 1 (Voltage): DC to 20 MHz TimeBase: 60 s/div to 20 ns/div Sampling Rate: 25MS/s
General	DMM
Rated: 600Vrms Category III Surge Protection: 6KV on Input 1 and 2 Floating Measurements: 600Vrms From Any Terminal to Ground	Resistance: 500.0Ω to 30.00 MΩ Capacitance: 50.00nF, to 500.0µF Temperature:** -100.0°C to 400.0°C

\*Rated 600V CAT III, \*\*Requires Optional Temperature Accessory

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-43B/003	Power Quality Analyzer	31C1557	2762.00
1400S	AC Current Clamp	56J9493	218.95

(68961)

FLUKE-1735 POWER LOGGER-ANALYST



- Record loading according to NEC 30-day load study requirement
- Monitor demand at 15 minute or user-defined averaging periods
- Prove the benefit of efficiency improvements with energy consumption tests
- Measure harmonic distortion caused by electronic loads
- Improve reliability by capturing voltage dips and swells from load switching
- Easily confirm instrument setup with color display of waveforms and trends
- Measure all three phases and neutral with included 4 flexible current probes
- View graphs and generate reports with included Power Log software
- Compact, rugged design with IP65 case
- Rated 600V CAT III
- 2-year manufacturer's warranty



**Fluke 1735** Power Logger-Analyst is the ideal electrician's tool for conducting load studies according to National Electric Code 220.65. Sets up in seconds with the included flexible current probes and color display. Logs most electrical parameters and harmonics as well as capturing voltage events. Includes soft carrying case, 4 flexible current probes (15A/150A/3000A), Power Log software, voltage leads and clips, color localization set, PC interface cable, universal AC adapter, printed English manual, and multi-language manual CD.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1735	Power Logger-Analyst	83K1727	2842.00

ACCESSORIES

MBX CLAW-GRIP	MBX CLAW-GRIP Safety Claw-Grip Test Lead with Built-in 2A Fuse	66K7479	95.00
MBX USB-RS232	MBX USB-RS232 USB-to-Serial (DB-9 Male) Converter	66K7488	41.00
MBX 300 POLESET	MBX 300 POLESET Pole Mounting Kit — Incl. One Plate, One Strap	66K7491	39.00

(89084)

FLUKE-1740 SERIES POWER QUALITY LOGGERS-MEMOBOX



Just Added



FLUKE-1743, FLUKE-1744



FLUKE-1745

- Measure all three phases and neutral with included 4 flexible current probes
- No power supply or batteries required – logger and current probes are powered from voltage inputs
- Accurately validate system performance with IEC 61000-4-30 class A voltage accuracy (0.1% of V) and EN50160 overview
- Trend recorded data, generate reports, and monitor real-time with included PQ Log software
- Set up in minutes with the self-identifying current probes and single lead voltage connections
- Assess severity of power quality problems by capturing up to 13,000 dips, swells, or interruptions
- 600 V CAT III
- 2-year manufacturer's warranty

**Fluke 1740 series** power quality loggers-memobox are the power quality technician's everyday instrument. Capable of logging over 500 parameters for up to 85 days, these power quality loggers help uncover intermittent and hard-to-find issues. The included PQ Log software quickly assesses the quality of power at the service entrance, substation, or at the load according to the latest EN50160 standard. All three logger models include a soft carrying case, four flexible current probes (15A/150A/1500A /3000A), PQ Log software, voltage test leads and clips, color localization kit, PC interface cable, international plug adapters, printed English manual, and multi-language manual CD.

➤ CONTINUED ➤

FLUKE-1740 SERIES POWER QUALITY LOGGERS-MEMOBOX (CONT.)

COMPARISON AT A GLANCE:

Mfg. Part Nos.	FLUKE-1743	FLUKE-1744	FLUKE-1745
Logs Voltage, Current, Dips, Swells, Interruptions, Voltage Harmonics, Power Energy	●	●	●
Logs Current Harmonics, Interharmonics, Flicker, Frequency		●	●
Dust/Water Resistance	IP65	IP65	IP50
Display	LEDs	LEDs	LEDs + LCD
UPS	1s	1s	>5 hrs.
Memory	4MB	4MB	8MB

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1743	60Hz Power Quality Logger-Memobox	83K1728	4295.00
FLUKE-1744	60Hz Power Quality Logger-Memobox	83K1729	5395.00
FLUKE-1745	60Hz Power Quality Logger-Memobox	83K1730	6495.00

ACCESSORIES

MBX CLAW-GRIP	MBX CLAW-GRIP Safety Claw-Grip Test Lead with Built-in 2A Fuse	66K7479	95.00
MBX USB-RS232	MBX USB-RS232 USB-to-Serial (DB-9 Male) Converter	66K7488	41.00
MBX 300 POLESET	MBX 300 POLESET Pole Mounting Kit — Incl. One Plate, One Strap — Incl. One Plate, One Strap	66K7491	39.00
120A/200A CLAMP PQ4	Clamp PQ3 3-Phase 1A/10A	46P4452	649.00
15A/50A CLAMP PQ4	Clamp PQ3 3-Phase 1A/10A	58M2823	649.00
11A/10A CLAMP PQ4	Clamp PQ3 3-Phase 1A/10A	58M2824	649.00
15A/50A CLAMP PQ3	Clamp PQ3 3-Phase 1A/10A	71M4066	495.00
11A/10A CLAMP PQ3	Clamp PQ3 3-Phase 1A/10A	71M4064	495.00
3000/6000A FLEX 4	36 in. Flexi Probe 4 Phase	72M5141	1658.00

(89085)

FLUKE 1750 3-PHASE POWER QUALITY RECORDER



- Premium accuracy and measurement techniques: Guaranteed for all power quality parameters, with IEC 61000-4-30 Class A measurement systems
- Quick and reliable configuration: PDA wireless "front panel interface" provides a window into what the instrument is recording, enabling quick and reliable configuration even in awkward test locations
- Threshold-free set up: Apply thresholds after data is collected with Fluke Power Analyze Software
- Captures everything: Cross-channel and current triggering capture every measurement, on every channel, every time
- Intuitive PC software: Easily analyze data and generate reports
- Plug and play: Set up in minutes with self-identifying current probes and single-lead voltage connections
- No need to reconnect wires: Swap channels internally with the wireless PDA or PC when connections are not correct
- Measure every parameter: Voltage and current on three phases, neutral, and ground
- 5 MHz, 8000 Vpk waveform capture: Get a detailed picture of even the shortest events
- Quickly retrieve data: With included SD memory card or via the 100BaseT high-speed Ethernet connection



Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1750	3-Phase Power Quality Recorder	23M4644	11485.00

(94364)

POWER QUALITY RECORDER KITS

Just Added



- True RMS (TRMS)
- Works with single and three phase systems (Y and Delta)
- Records up to 64 parameters (single or three phase) simultaneously
- Megohmmeter functions: selectable test voltages up to 1000V
- Ground resistance and resistivity functions: three measuring modes
- Phase sequence indication



**Mfg. part nos. DM-III Multitest and DM-III Multitest F** measure and record a broad spectrum of power quality parameters: AC current, AC voltage to 600V including sags and surges, harmonics (THD and individual up to 49th), active, reactive and apparent power and energy, peak demand, power factor, frequency measurement and phase sequence. Both are compatible with a wide range of current transducers, DM-CT-HTA supplied with DM-III Multitest and AM-FLEX33 supplied with DM-III Multitest F. Kits include: CTs, voltage leads, ground probes and leads, PC software and download cable.

SPECIFICATIONS

Supplied Current Transducer	DM-CT-HTA 1000A Standard CT 2" internal diameter CT +/- (0.5% Rdg + 2 LSD)
AC Current	DM-CT-100:0.5A to 100A / DM-CT-HTA:5 - 1000A /AM-FLEX33: Selectable: 5 - 1000A or 15 - 3000A +/- (0.5% Rdg + 2 LSD)
AC Voltage Including Sags and Surges	0 - 600V +/- (0.5% Rdg + 2 LSD)

➤ CONTINUED ➤

POWER QUALITY ANALYZERS

POWER QUALITY RECORDER KITS (CONT.)

Harmonics	THD, DC and individual up to 49th +/- (0.5% Rdg + 2 LSD)
Power	Working (W), Reactive (VAR) and Apparent (VA) +/- (1.0% Rdg + 2 LSD)
Selectable Fundamental Frequencies	50/60 Hz
Safety	CATIII, 600V Phase to phase, CATIII, 300V Phase to ground, EN 61010-1+A2(1996)

Mfg. Part No.	Description	Stock No.	Price Each
DM-III MULTITEST	PQ Recorder with Standard Current Clamps	66K6290	3495.00
DM-III MULTITEST F	PQ Recorder with Flexible Current Clamps	66K6291	3495.00

(147137)

POWER QUALITY RECORDER

NEW TECHNOLOGY



- AC current up to 1000A, AC voltage, active, reactive, apparent power, energy, peak demand and power factor
- All readings are True RMS
- 5 built-in selectable languages: English, French, Italian, German and Spanish
- Works with single and three phase systems (Y & delta)
- Capable of recording all parameters (single or three phase) simultaneously

Mfg. part no. DM-II PLUS is a full-featured three phase power quality recorder to maintain, diagnose and troubleshoot electrical systems. User selectable rates allow recording from one hour to several months. Readings and charts can be viewed on the DM-II LCD screen or downloaded to a PC. Optional transducers available for 100A and 3000A (flexible) current capability.

Mfg. Part No.	Description	Stock No.	Price Each
DM-II PLUS	Power Quality Recorder	05N1460	3195.00

(147134)



ADVANCED WIRE TRACER KITS

NEW TECHNOLOGY



AT1000



AT2005

Mfg. part no. AT1000 advanced wire tracer traces energized lines up to 300VAC/DC, unenergized and open conductors. Identifies breakers and fuses without powering down. Locates shorts, identifies wires in bundles and identifies control, alarm and telephone system wiring. Receiver range 1 to 3 ft. from cable being traced. Kit includes: receiver, transmitter, 110V pigtail cordset, 2-pc. alligator clip cordset, adapter, manual and softside carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
AT1000	Advanced Wire Tracer Kit	16F9054	349.95

AT-2000 series advanced wire tracing kits trace live wires buried or hidden behind walls up to 13-ft. deep. Perform tests without having to interrupt power. Locate breakers, neutral and ground lines. Locate and trace wires in walls, floors, conduit, computer cable, etc. Pinpoint shorts, ground faults and broken wires. Choose from four upgradeable wire tracing systems.

Mfg. part no. AT-2001 advanced wire tracer kit includes receiver, 9-300V load signal generator (transmitter), cordset 110V plug-to-banana plugs, one fuse, manual and carrying case.

AT2001	Advanced Wire Tracer Kit	96F5469	614.86
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Mfg. part no. AT-2002 advanced wire tracer kit includes: receiver, 9-600V load signal generator (transmitter), cordset 110V plug-to-banana plugs, adapter, one fuse, manual and carrying case.

AT2002	Advanced Wire Tracer Kit	96F5470	749.95
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Mfg. part no. AT-2004 advanced wire tracer kit includes: receiver, 9-600V load signal generator (transmitter), transmitter for open tracing, clamp-on attachment, cordset 110V plug-to-banana plugs, cordset alligator clips-to-banana plugs, adapter, two fuses, manual and carrying case.

AT2004	Advanced Wire Tracer Kit	96F5472	999.95
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Mfg. part no. AT2005 advanced wire tracer kit includes: receiver, 9-600V load signal generator (transmitter), transmitter for open tracing, clamp-on attachment, battery booster, charger for battery booster, cordset 110V plug-to-banana plugs, cordset alligator clips-to-banana plugs, adapter, two fuses, manual and carrying case.

AT2005	Advanced Wire Tracer Kit	16F334	1099.95
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AT-4000 CON series advanced wire tracer kits include: receiver, transmitter, 110V pigtail cordset, alligator clip cordset 2pcs., grounding test lead 25ft. with alligator clip, fast acting fuse, manual and carrying case. Additionally, AT4004CON and AT4005CON kits include a clamp-on attachment and AT4005CON also includes a battery booster and charger.

AT-4001CON	Advanced Wire Tracer Kit	12M9309	499.95
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AT-4003CON	Advanced Wire Tracer Kit	12M9310	649.95
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AT-4004CON	Advanced Wire Tracer Kit	87K2031	749.95
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AT-4005CON	Advanced Wire Tracer Kit	12M9311	899.95
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Mfg. part no. CT-326B current tracer traces energized wires and locates breakers without power interruption: 9-300V AC/DC 300-600VAC. Features 12 sensitivity settings. Locates and traces live wires in walls, floors, conduit, computer cable buried or hidden behind walls up to 13-ft. deep. Kit includes power cord, adapter, pigtail connectors, earphone, voltage converter, one fuse, manual and carrying case.

CT326B	Current Tracer Kit	89F1200	979.95
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(5347)

POWERVISA 3-PHASE POWER QUALITY ANALYZER



- 8 independent channels collecting data at 256 samples/cycle/channel
- Meets the most advanced power quality instruments standards, worldwide
- Icon-based, color touch screen
- Selectable data collection mode
- Selectable data collection length
- Low and medium frequency transient capture
- RS-232, Ethernet, and USB options
- Triggers on voltage and current
- Lightweight and portable
- Comes with industry-leading Dran-View® power quality analysis software



Applications:

- Troubleshooting power disturbances
- Compliance monitoring (IEEE 1159, IEC 61000-4-30 Class A, and EN50160)
- Energy surveys (energy consumption, peak demand evaluation, etc.)
- Equipment performance testing (evaluating facility power prior to installing new equipment; checking whether UPS's are operating properly.)
- Harmonics, interharmonics, and subharmonics capture and analysis

Designed for the busy electrician, the PowerVisa® 4400 delivers an easy to setup, easy to navigate color graphical touch screen interface with the advanced horsepower you expect from a Dranetz-BMI power monitor. The PowerVisa® provides the user with unique tools, such as the Dranetz-BMI annunciator "report card" panel to help users that are new to power quality monitoring successfully collect meaningful data each time they use the instrument. The annunciator collects, analyzes and tabulates data on screen in color-coded categories to immediately identify areas of concern (which are identified in red). The user can drill down for more detailed information by simply touching the intuitive touch screen to troubleshoot problems and locate the source. Automated setup, pre-programmed application modes, real-time scope and meter data, detailed event characterization of RMS variations and transients, and waveform capture are viewed on screen in real time, while being saved to a removable memory card. Mfg. part nos. PV101, PV102 and PV103 all contain flash memory card, soft carrying case, battery charger, voltage cable set with pouch, and user guide.

Mfg. Part No.	Description	Stock No.	Price Each
PV10	PowerVisa 4400 mainframe, DRAN-VIEW (USB hasp version/ DVPXHASP version), 3 each TR 2510A probes	59K9504	5550.00
PV500	PowerVisa 4400 mainframe, DRAN-VIEW (USB hasp version/ DVPXHASP version), 3 each TR 2500A probes	59K9505	5550.00
PV FLEX	PowerVisa 4400 mainframe, DRAN-VIEW (USB hasp version/ DVPXHASP version), 3 each RR3035A/24 probes, CA4300 Adapter, RR/PS/4P	59K9506	6575.00

(85557)

POWERGUIDE 3-PHASE, 8-CHANNEL POWER MONITOR



- 8 independent channels collecting data at 256 samples/cycle/channel
- Meets the most advanced power quality instrument standards, worldwide
- Icon-based, color touch screen
- Selectable data collection mode
- Selectable data collection length
- Low and medium frequency transient capture
- RS-232, Ethernet, and USB options
- Triggers on voltage and current
- Lightweight and portable
- Comes with industry-leading Dran-View® power quality analysis software



Applications:

- Fault recording of electrical malfunctions and identification of faults within a facility's infrastructure
- Inrush evaluation (motors, transformers, breaker trips, etc.)
- Long-term monitoring w/min/max/avg and continuous data logging
- Compliance monitoring (IEEE 1159, IEC 61000-4-30 Class A, and EN50160)
- Power quality surveys, studies and forensic analyses
- Energy surveys (energy consumption, peak demand evaluation, etc.)
- Equipment optimization (provides RMS triggers and peak threshold crossings to optimize the performance and longevity of essential equipment)

The workhorse, the PowerGuide 4400 lets the user select the length and mode of data collection, simultaneously testing for power quality, data logging, energy, fault recording, motor health and compliance projects. The PowerGuide 4400 has all the features and capabilities of the PowerVisa, plus several unique attributes such as the Dranetz-BMI patented AnswerModules™. These are exclusive algorithms that tell users the source, severity and cause (direction) of power problems. The 4400 includes Sag Directivity, Power Factor Capacitor Switching and Motor Health Annunciator, which analyzes a range of motor health parameters to provide advanced warning of factors that could impact motor performance.

Mfg. Part No.	Description	Stock No.	Price Each
PG106	PowerGuide 4400 Package	59K9503	7750.00
CT109	Set of three 2510A CT probes	59K9486	771.00
CT101	Set of three RR3035A/24 Flex CT probes, CA4300LEM Adapter, RR/PS/4P	59K9484	2440.00

(85558)



Current Order Status & History

Check the status of your current order or access past orders from our website under MY ACCOUNT eSuite. Log in or register today.

(148881)

POWER QUALITY ANALYZERS • INSULATION & GROUND RESISTANCE TESTERS

PX5 POWER QUALITY ANALYZER



- 8 independent channels collecting data at 256 samples/cycle/channel
- Meets or exceeds worldwide power quality instruments standards
- Simple to use, icon-based color touch screen
- 1 microsecond per channel sampling (voltage and current triggers)
- Ability to create individual annunciator "report card" panels in addition to standard PQ and motor health options
- Lightweight and portable
- RS-232, Ethernet, and USB options
- Comes with industry-leading Dran-View® power quality analysis software

Applications:

- Power quality surveys and diagnostics, including full event capture, characterization and directionality via unique AnswerModules.
- Scope-like capture and display of fast transients (as short as 1 microsecond) for capacitor switching, load shifting, medical diagnostic equipment, et al.)
- Identification of load distortion and imbalance caused by non-linear loads
- Flicker capture (IEC 61000-4-15) and evaluation
- Compliance monitoring (IEEE 1159, IEC 61000-4-30 Class A, and EN50160)
- Complete harmonics studies, including measurement of current harmonics

For the power expert, the PowerXplorer delivers the most advanced feature set available in a power monitoring instrument, including high-speed sampling and data capture (1 microsecond/channel and the unique ability to clearly characterize non-sinusoidal and unbalanced systems, in a user-friendly package).

The PX5 contains all features and capabilities of the PowerGuide 4400, adding the ability to capture transients generated by fast-switching electronics, medical diagnostic equipment, capacitor switching, lightning, transformer energization and load shifting. Dranetz-BMI's patented transient capability captures and characterizes the complete power quality spectrum, providing scope-like display of the entire transient. The PX5 also measures the full range of arithmetic, vector and sequencing parameters contained in IEEE 1459, to evaluate distortion created by non-linear electric loads. This distortion can have a significant derating effect, cause overheating of motors and other equipment, and shorten equipment life.

Mfg. Part No.	Description	Stock No.	Price Each
PX108	PowerXplorer PX5 Package	59K9507	10620.00
CT109	Set of three 2510A CT probes	59K9486	771.00
CT101	Set of three RR3035A/24 Flex CT probes, CA4300LEM Adapter, RR/PS/4P	59K9484	2440.00

(85559)

1503 AND 1507 INSULATION TESTERS



- Automatic calculation of Polarization Index and Dielectric Absorption Ratio saves both time and money (mfg. part no. 1507 only)
- Compare (Pass/Fail) function makes repetitive tests simple and easy (mfg. part no. 1507 only)
- Remote test probe makes repetitive or hard-to-reach testing easier
- Live circuit detection prevents insulation test if voltage >30V is detected for added user protection
- Auto-discharge of capacitive voltage for added user protection
- AC/DC voltage: 0.1V to 600V
- 200mA continuity
- Resistance: 0.010hm to 20.00KOhms
- Large, backlit digital display for easy readability
- CAT III - 1000V, CAT IV - 600V overvoltage category rating for added user protection
- One-year manufacturer's warranty
- Recommended accessories - TL225 Test Leads, C25 Case, TPAK Meter Hanger



1503 and 1507

Mfg. part nos. 1503 and 1507 insulation testers are compact, rugged, reliable, and easy to use. Multiple test voltages make them ideal for troubleshooting, commissioning, and preventative maintenance. Additional features save both time and money. Included accessories: remote probe, test leads and probes, alligator clips. Four AA alkaline batteries (NEDA 15A or IEC LR6) for at least 1000 insulation tests. These insulation testers accept mfg. part no. TPAK ToolPak magnetic tool hanger to free your hands for other work. Order magnetic tool hanger and carrying cases separately below.

INSULATION TESTERS

Mfg. Part No.	Insulation Test Range	Insulation Test Voltages	Stock No.	Price Each
1503	0.1Ω-2000MΩ	500V, 1000V	57K0680	342.95
1507	0.01MΩ-10GΩ	50V, 100V, 250V, 500V, 1000V	57K0681	453.95

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
TPAK	ToolPak Magnetic and Velcro Strap Tool Hanger	97B3576	33.15
FLUKE-C101	Hardside Carrying Case	26K2562	47.65
C25	Softside Vinyl Meter Case	44F7741	31.00

(85521)

TechCast® Product Training

Use the library of online training modules located on our homepage under Useful Tools, with specific guidance for complex solutions.

(148857)

1550B MEGOHMMETER

Features:

- Standard test voltages of 250V, 500V, 1000V, 2500V, 5000V
- Programmable test voltages available in 50 volt steps from 250 to 1000 volts and 100 volt steps from 1000 to 5000 volts
- Automatic calculation of Dielectric Absorption and Polarization Index with no additional setup
- Improved ramp function (0 to 5000 VDC) for breakdown testing
- Measures resistances up to 1 Tera-Ohm
- Measures cable or insulation capacitance and leakage current
- Warning voltage function alerts the user that voltage is present and gives the voltage reading up to 600 V AC or DC
- Guard system eliminates the effect of surface leakage current on high-resistance measurements
- Measurements can now be stored in up to 99 memory locations, with each location assigned a unique, user defined, four character (alpha-numeric) label for easy recall
- Includes improved Quicklink 1550B Software and Optical Interface cable for easier downloading to a Windows® PC
- Runs off of high-capacity rechargeable batteries
- 2-year warranty

Mfg. part no. Fluke-1550B 5kV megohmmeter tests the insulation resistance of switchgears, motors, generators and cable. Megohmmeter includes heavy-duty leads, probes, and alligator clips, Quicklink 1550B PC software with interface adapter and cable, line cord, soft carrying case with waterproof base, user's manual and "getting-started" guide.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1550B	5kV Megohmmeter	89H3660	3432.95

(72287)



FLUKE 1577 AND 1587 INSULATION MULTIMETERS



All models:

- A multimeter and insulation resistance tester all in one meter!
- Large backlit display
- Auto-discharge of capacitive voltage
- Auto power off
- Live circuit detection to prevent insulation test when voltage is >30V
- CAT III-1000V, CAT IV-600V measurement category
- 3-year warranty
- Recommended accessories: C25 Case, TLK-225 Accessory Set, i1010 Current Clamp

FLUKE 1587 Only:

- Filter for motor drive measurements
- Capacitance, Diode Test, Temperature, Min/Max, Frequency (Hz)
- Also includes K-type thermocouple



FLUKE 1587

FLUKE 1577 and 1587 insulation multimeters combine a digital insulation tester with a full-featured digital multimeter in a single, compact handheld unit. Provides maximum versatility for both troubleshooting and preventative maintenance. Rugged, reliable and easy to use. Ideal for work on motors, cables and switch gear. Included accessories: Remote probe, test leads and probes, alligator clips, and rugged utility hard case.

Mfg. Part No.	FLUKE 1577	FLUKE 1587
DMM functions:	AC/DC voltage, DC mV, AC/DC mA, Resistance (0.1Ω-50MΩ), Continuity	
Insulation test:	0.1MΩ to 600MΩ	0.01MΩ to 2GΩ
Insulation test voltages:	500V, 1000V	50V, 100V, 250V, 500V, 1000V

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1577	500-1000V Insulation Multimeter	30K6970	502.95
FLUKE-1587	50 -1000V Insulation Multimeter	30K6971	621.95

(84802)

FLUKE-1587ET ADVANCED ELECTRICAL TROUBLESHOOTING DMM KIT



Kit includes:

- Fluke-1587 insulation digital multimeter
- Fluke-1400 AC current clamp
- Fluke-62 mini infrared thermometer
- Test probes, test leads and alligator test clips
- Durable hardside carrying case
- Documentation and users manuals



Mfg. part no. Fluke-1587ET advanced electrical troubleshooting DMM kit contains everything needed for preventative maintenance and troubleshooting electrical system problems. With mfg. part no. Fluke-1587 digital multimeter, perform insulation tests plus a wide-range of DMM tasks, including resistance, capacitance, temperature, continuity, and frequency measuring, with confidence and ease. Use mfg. part no. Fluke 1400 current clamp with mfg. part no. Fluke-1587 DMM to accurately measure AC current without breaking the circuit. Check for hot spots and measure temperature with mfg. part no. Fluke-62 mini noncontact IR thermometer.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1587 ET	Advanced Electrical Troubleshooting DMM Kit	55K4999	794.95

(85509)

INSULATION & GROUND RESISTANCE TESTERS

**FLUKE-1587MDT ADVANCED MOTOR AND DRIVE TROUBLESHOOTING DMM KIT**



**Kit includes:**

- Fluke-1587 insulation digital multimeter
- Fluke-1400 AC current clamp
- Fluke-9040 phase rotation indicator
- Test probes, test leads and alligator test clips
- Durable hardside carrying case
- Documentation and users manuals



Mfg. part no. **Fluke-1587MDT** advanced motor and drive troubleshooting DMM kit contains everything needed for preventative maintenance and troubleshooting motor and variable frequency drive electrical problems. With mfg. part no. **Fluke-1587** digital multimeter, perform insulation tests plus a wide-range of DMM tasks, including resistance, capacitance, temperature, continuity, and frequency measuring, with confidence and ease. Use mfg. part no. **Fluke 1400** current clamp with mfg. part no. **Fluke-1587 MDT** to accurately measure AC current without breaking the circuit. Check the rotation of three-phase motors easily and safely with mfg. part no. **Fluke-9040** phase rotation indicator.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1587 MDT	Advanced Motor and Drive Troubleshooting DMM Kit	55K5000	887.95

**FLUKE-162X SERIES GEO EARTH GROUND TESTERS**



FLUKE-1625 Kit



FLUKE-1621



FLUKE-1623

For each test, mfg. part nos. **Fluke 1623** and **1625** earth ground testers inform the user which stakes or clamps need to be connected. Both models also have an IP56 rating, suitable for outdoor use.

Mfg. part no. **Fluke-1621** basic tester comes with test leads, one 9V battery, manual and protective holster best used with ES-162P3 accessory. Sold separately in table below.

Mfg. part no. **Fluke-1623** offers an innovative solution, called Stakeless testing, along with additional advanced features to make your earth ground loop resistance testing quicker and easier. Kit comes with mfg. part no. **1623** basic GEO earth ground tester, test leads, four earth ground stakes, three cable reels with wire, two clamps, batteries, manual and hard carrying case.

Mfg. part no. **Fluke-1625** offers three unique features: Automatic Frequency Control (AFC) to identify existing interference and choose a measurement frequency to minimize its effect, R<sup>2</sup> measurement, earthing impedance with 55Hz for short circuit current in power distribution systems, and Adjustable Limits for quicker testing. Mfg. part no. **Fluke-1625** kit comes with mfg. part no. **1625** advanced GEO ground earth tester, test leads, 4 earth ground stakes, 3 cable reels with wire, 2 clamps, batteries, manual and hard carrying case.

**FEATURES AT A GLANCE**

Mfg. Part Nos.	FLUKE-1621	FLUKE-1623	FLUKE-1625
Fall of Potential Tests	3 Pole	3 and 4 Pole Using Stakes	4 Pole Using Stakes
Soil Resistivity Tests	2 Pole	4 Pole Using Stakes	
Selective Tests		Use 1 Clamp and Stakes	
Stakeless Tests		Use 2 Clamps Only	
Automatic Frequency Control			●
R <sup>2</sup> Measurement, Earthing Impedance with 55Hz			●
Adjustable Limits	●		●
Field Service and Industrial Maintenance	●	●	●
Utilities and Telecom			●

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1625 KIT	Advanced GEO Earth Ground Tester Kit	83K1726	3279.95
FLUKE-1623 KIT	Basic GEO Earth Ground Tester Kit	83K1724	2289.95
FLUKE-1625	Advanced GEO Earth Ground Tester	83K1725	2369.95
FLUKE-1623	Basic GEO Earth Ground Tester	83K1723	1369.95
FLUKE-1621	Basic Earth Ground Tester	50M1641	849.95

**ACCESSORIES**

Mfg. part nos. **EI-1623** and **EI-1625** clamp sets include one inducing clamp, one measuring clamp and necessary cable and adapters. Mfg. part no. **EI-162BN** clamps around power pylon legs to perform selective tests. Mfg. part nos. **ES-162P3** and **ES-162P4** earth stake sets work with both mfg. part nos. **Fluke-1623** and **Fluke-1625** GEO testers also works with mfg. part no. **Fluke-1621**. Mfg. part no. **ES162P3** set includes three earth stakes, one 25m reel and one 50m reel of wire. Mfg. part no. **ES162P4** set includes four earth stakes, two 25m reels and one 50m reel of wire. **NOTE:** the GEO Cable-Reels of wire are terminated on both ends; one end to plug into tester and the other to clip to the stakes.

Mfg. Part No.	Description	Stock No.	Price Each
EI-1623	Selective/Stakeless Clamp Set for FLUKE-1623	83K1713	585.95
EI-1625	Selective/Stakeless Clamp Set for FLUKE-1625	83K1714	736.95
ES-162P3	Earth Stake Set for 3 Pole Measurement	83K1715	221.95
ES-162P4	Earth Stake Set for 4 Pole Measurement	83K1716	312.95
GEO EARTH STAKE	Ground/Earth Stake	66K7436	53.00
GEO CABLE-REEL 25M	Ground/Earth Cable Reel of Wire, 25M	66K7434	50.00

▶ CONTINUED ▶

**FLUKE-162X SERIES GEO EARTH GROUND TESTERS (CONT.)**

Mfg. Part No.	Description	Stock No.	Price Each
GEO CABLE-REEL 50M	Ground/Earth Cable Reel of Wire, 50M	66K7435	65.00
EI-162BN	Split Core Transformer, 12.7"	83K1712	1825.00

**DIGITAL MEGOHMMETER INSULATION RESISTANCE TESTERS**



- Tests Insulation of Wire, Cables, Transformers and Electrical Motors
- Fast and Easy to Use, Rugged Durable Design
- Programmable Timer to Perform Dielectric Absorption Ratio Test
- Selectable Test Voltages Up to 1000V
- Sensitive Ohmmeter for Checking Resistance of Motor Windings
- Automatic Voltmeter Warns Against Hazardous Energized Systems (AMB-6D)
- Built-In Voltmeter (AMB-45)
- Internal Memory (AMB-45)
- Includes Test Leads and PC Software
- Safety CAT III 250V (AMB-6D), CAT III 600V (AMB-45)



AMB-6D Specifications	Range & Resolution
Insulation Resistance with 50VDC Test Voltage	0.01-19.99 49.9, 99.9MΩ
Insulation Resistance with 100VDC Test Voltage	0.01-19.99 99.9, 1.99.9MΩ
Insulation Resistance with 250VDC Test Voltage	0.01-19.99 199.9, 249, 499.9MΩ
Insulation Resistance with 500VDC Test Voltage	0.01-19.99 199.9, 449, 999.9MΩ
Insulation Resistance with 1000VDC Test Voltage	0.01-19.99 199.9, 999, 1999.9MΩ
AMB-45 Specifications	Range & Resolution
Insulation Resistance with 250, 500, 1000VDC Test Voltage	0 - 4.000 40.00, 400.0 4000MΩ
Low Resistance	0 - 400.0, 4000MΩ
AC/DC Voltage	0.1 - 600.0V

Mfg. Part No.	Description	Stock No.	Price Each
AMB-6D	Digital Insulation Resistance Tester	73C2311	849.95
AMB-45	Digital Insulation Resistance Tester	50H8694	474.95

(72283)

**DIGITAL MEGOHMMETER INSULATION RESISTANCE TESTER**



- Tests insulation of wires, cables, transformers and electrical motors
- Comes as a complete kit including test leads
- Selectable test voltages up to 1000V
- Programmable timer to perform the Dielectric Absorption Ratio Test
- Sensitive Ohmmeter for checking resistance of motor windings
- Internal memory (stores 9 reading)
- Fast and easy to use rugged durable design



Includes carry case, Test leads complete set and instruction

Features	AMB-25	Accuracy
Insulation resistance with 250, 500, 1000V VDC test voltage	0 - 4.000/40.00/400.0/4000 MΩ	±3% Rdg ± 5 LSD <1GΩ
Resistance	0 - 9999Ω	1% Rdg +2 LSD
Low Resistance	---	2% Rdg +2 LSD
AC/DC Voltage	---	±2.0% Rdg ± 1 LSD

Mfg. Part No.	Description	Stock No.	Price Each
AMB-25	Digital Megohmmeter 250, 500, 1000 VDC	02J0398	299.95

(79235)

**AMB-5KVD DIGITAL MEGATEST 5000**



- 5000V Digital Insulation Resistance Tester
- Tests Insulation of Wire, Cables, Transformers and Electrical Motors and Generators
- Programmable Set-Up of Test Voltages and Timers
- Rugged Durable Design
- Performs Dielectric Absorption Ratio Test
- Built-In Automatic Voltmeter Up To 5000V Warns Against Hazardous Energized Systems
- Includes Test Leads and PC Software
- One Testing Instrument For Low and High Voltage Systems



Specification	Range and Resolution
Testing Voltage	100V to 5000V with 25V Increments
Resistance	100K - 500G Ohms
Automatic Voltmeter	0-5000V
Configuration Memory	20 Programmable Set-Up Configurations
Internal Memory	200 Measurements

▶ CONTINUED ▶

## INSULATION & GROUND RESISTANCE TESTERS

### AMB-5KVD DIGITAL MEGATEST 5000 (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
AMB-5KVD	5000V Digital Insulation Resistance Tester	73C6168	2495.00

(72284)

### DIGITAL EARTH/GROUND RESISTANCE METER



309

- Measures Earth resistance in 20/200/2000 ohm ranges
- Measures Earth ACV to 2000VAC (40 to 500Hz)
- 2mA measuring current measures resistance without tripping circuit breakers
- Data hold
- Auto power off

Mfg. part no. 309 digital earth resistance meter is a compact, battery-powered portable meter. Includes test leads, auxiliary earth spikes, carrying case and batteries.

Mfg. Part No.	Description	Stock No.	Price Each
309	Digital Earth Resistance Meter	54M5382	189.00

(101646)

### 5kV AND 10kV INSULATION RESISTANCE TESTERS



- Line supply or battery operated
- Digital/Analog backlit display
- Automatic insulation resistance tests
- 3 mA short circuit current
- Rated IP65
- Meets EN-61010 for arc-flash protection
- Calibration certificate included

Designed for testing and maintenance of high voltage equipment. All have large, easy to read backlit LCD displays that show resistance, voltage, leakage current, capacitance, battery status, and time constant. Elapsed time is displayed constantly, automatically starting at the beginning of a test. No external timer is needed. The MIT1020/2 allows up to 3 timed measurement positions to be set to simplify DAR testing and includes a breakdown and alarm mode where an alarm sounds if the resistance is under a preset selectable level. If the instrument is accidentally connected to a live voltage, the voltage will be displayed and testing will be inhibited if the voltage exceeds 50V for MIT510/2 and MIT520/2 or 80V for MIT1020/2. At the end of the test, any stored voltage is discharged and monitored on the display. All models include a guard terminal and a guard test lead, a 3-meter test lead set, and a user guide on CD.

#### SPECIFICATIONS

		MIT510/2	MIT520/2	MIT1020/2
Test Voltages	10 kV			X
	5 kV	X	X	X
	2.5 kV	X	X	X
	1 kV	X	X	X
	500 V	X	X	X
	250 V	X	X	X
	10V Steps 50V-1kV, 25V Steps 1kV to 5kV		X	
Measurements	Max resistance	15 TOhms	15 TOhms	35 TOhms
	Min resistance	10 kOhms	10 kOhms	10 kOhms
	Voltage	X	X	X
	Capacitance and time constant	X	X	X
	Leakage current	X	X	X
Tests	Auto IR	X	X	X
	Polarization index		X	X
	Step voltage		X	X
	Dielectric discharge		X	X
	Dielectric absorption ratio		X	X
Timer	Timer control		X	X
	Timer display	X	X	X
Output	USB		X	X
	RS232		X	X

Mfg. Part No.	Description	Stock No.	Price Each
MIT510/2	5kV Insulation Resistance Tester	98M0028	3265.00
MIT520/2	5kV Insulation Resistance Tester	98M0031	4250.00
MIT1020/2	10kV Insulation Resistance Tester	98M0003	5135.00

(89376)

### ANALOG 5kV INSULATION TESTER



- Four test voltages to 5 kV
- Hand crank or 8AA batteries
- Shock mounted analog scale
- Voltage range to 600V indicates auto discharge
- Pass/fail overlays for rapid testing

Mfg. part no. MJ15 is compact, simple to use, quick and accurate. It measures to 20 Gohms, with test voltages 500 V, 1 kV, 2.5 kV, or 5 kV. Comes complete with soft carrying case, test lead set, test record cards, and 8AA batteries.

Mfg. Part No.	Description	Stock No.	Price Each
MJ15	Analog 5 kV Insulation Tester	70K3429	2360.00

(89377)

### MIT400 SERIES INDUSTRIAL INSULATION AND CONTINUITY TESTERS



MIT430-EN

- Insulation testing to 1000V and to 200Gohms
- Continuity testing at 200mA down to 0.01ohms
- Analog and dual digital display with backlight
- Insulation and continuity limit alarms
- PIV/DAR timer function (except mfg. part nos. MIT400 and MIT480)
- AC/DC Voltage measurement
- CATIII 600V or CATIV 600V
- Calibration certificate

MIT400 series industrial insulation and continuity testers are designed to meet IEC1010-2 and EN61557, and sealed to IP54. Mfg. part nos. MIT420-EN and MIT481-EN are capable of saving test results for recall to the screen. A simple storage structure allows for a test number and screen results to be recalled individually. Mfg. part nos. MIT430-EN and MIT485-EN support both test result storage and downloading. Rubber boot combines tough, shock-absorbing outer protection with an excellent grip, on a strong modified ABS housing. All models are supplied with: test leads — 2 wire lead set to CAT IV 600V, consisting of red and black leads 1.25m complete with probe, red and black crocodile clips, instrument rubber boot, calibration certificate and user manual. Requires six AA batteries (either alkaline or NiMH) rechargeable type, ordered separately; go online or call.

#### SPECIFICATIONS

Mfg. Part No.	Industrial Applications				Service and Telco Applications			Special Applications
MIT xxx-EN	400	410	420	430	480	481	485	40X

#### INSULATION VOLTAGE RANGE

10-100V Variable (2GΩ - 20GΩ)								
50V		X	X	X	X	X	X	X
100V		X	X	X	X	X	X	X
250V	X	X	X	X			X	X
500V	X	X	X	X			X	X
1000V	X	X	X	X			X	X

#### PI/DAR TESTING

Timed Testing (30/60 Seconds, 1 min./10 min.)								
		X	X	X		X	X	X

#### UPPER INSULATION RESISTANCE

Insulation Range GΩ	20	100	200	200	100	200	200	2 - 20
Leakage Current Display		X	X	X			X	X
INS Test Voltage Display	X	X	X	X	X	X	X	X

#### CONTINUITY

200mA (0.01 to 200Ω)	X	X	X	X	X	X	X	X
Variable Current Limit 200mA/20mA	X	X	X	X	X	X	X	X
Fast Buzzer — Selectable Threshold	X	X	X	X	X	X	X	X
K Ohm Range to 999KΩ	X	X	X	X			X	X

#### VOLTAGE

Live Circuit Warning @ 50V	X	X	X	X				X
Live Circuit Warning @ 75V					X	X	X	X
Default Voltmeter	X	X	X	X	X	X	X	X
TRMS Measurement to 600V	X	X	X	X	X	X	X	X

#### MEASUREMENT RANGES

Frequency 40Hz to 400Hz		X	X	X		X	X	X
Capacitance (0.1nF to 10µF)				X	X		X	X
Distance by Capacitance						X	X	X
MV/Transducer (0.1V to 19.99V)	X	X	X	X	X	X	X	X

#### STORAGE

Bluetooth Downloading				X				X
Storage Only			X				X	

#### INDUSTRIAL APPLICATIONS — LIVE CIRCUIT WARNING @ 50V

Mfg. Part No.	Description	Stock No.	Price Each
MIT400-EN	Insulation and Continuity Tester, 20GΩ	84K9406	555.00
MIT410-EN	Insulation and Continuity Tester, 100GΩ, PIV/DAR Testing	84K9407	635.00
MIT420-EN	Insulation and Continuity Tester, 200GΩ, PIV/DAR Testing, Data Storage	84K9408	685.00
MIT430-EN	Insulation and Continuity Tester, 200GΩ, PIV/DAR Testing, Data Storage, Bluetooth Wireless Data Storage and Downloading	84K9409	780.00

#### SERVICE AND TELECOM APPLICATIONS — LIVE CIRCUIT WARNING @ 75V

MIT480-EN	Insulation and Continuity Tester, 100GΩ	84K9410	610.00
MIT481-EN	Insulation and Continuity Tester, 200GΩ, PIV/DAR Testing, Data Storage, Distance by Capacitance	84K9411	830.00
MIT485-EN	Insulation and Continuity Tester, 200GΩ, PIV/DAR Testing, Data Storage, Bluetooth Wireless Data Storage and Downloading, Distance by Capacitance	84K9412	930.00

#### SPECIAL APPLICATIONS — LIVE CIRCUIT WARNING @ 50V

MIT40X-EN	Insulation and Continuity Tester, 2 to 20GΩ, Variable 10 to 10V Test Voltage	84K9405	655.00
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INSULATION & GROUND RESISTANCE TESTERS • TELEPHONE LINE TEST

**DIGITAL INSULATION TESTER**

- Easy-to-Read Display
- Wide Measuring Range
- Built-In Over-Input and Low-Battery Indication
- Overload Protection on All Ranges
- Sensitive Ohm Meter Scale: 0-200kΩ for Measuring Low-Resistance Circuits
- Automatic Zero Adjust and Circuit Discharge
- CE Compliant



Compact, easy-to-read, battery-powered digital insulation tester. Includes instruction manual and alligator clips. Batteries not included.

**SPECIFICATIONS**

Range	Accuracy	Resolution
200MΩ (500V)	±(3% +1d)	0.1MΩ
1000MΩ (1000V)	±(3% +1d)	1MΩ
2000Ω	±(3% +1d)	0.1Ω
Power	DC 12V (8 x 1.5V AA batteries)	

Mfg. Part No.	Description	Stock No.	Price 1-4
72-6782	Digital Insulation Tester	17C6506	148.48

(69132)

**307A ANALOG INSULATION TESTER**



Mfg. part no. 307A provides selectable voltage testing with 250V/50MΩ, 500V/100MΩ, or 1000V/200MΩ ranges. Analog display. Battery operated. Low resistance test. Includes batteries, integral carrying case w/strap, test leads, and instruction manual.



Mfg. Part No.	Description	Stock No.	Price Each
307A	Analog Insulation Tester	52M2681	222.88

(6573)

**308A DIGITAL INSULATION TESTER**



Mfg. part no. 308A provides selectable voltage testing of 250V, 500V or 1000V with resistance to 2000MΩ. 3½-digit LCD. Battery operated. Low resistance test. Includes batteries, integral carrying case w/strap, test leads, and instruction manual.



Mfg. Part No.	Description	Stock No.	Price Each
308A	Digital Insulation Tester	54M5381	308.00

(6572)

**INSULATION TESTER**

Mfg. part no. 501 insulation tester measures insulation resistance with 5 test voltages up to 1000V. Voltmeter to 1000V AC/DC. Test probe signal lamp illuminates work area and indicates pass/fail of insulation resistance. Includes carrying case, 2 test probes, 2 alligator clips and 6 D size batteries. CE compliant.



Mfg. Part No.	Description	Stock No.	Price Each
501	5 Test Voltage Insulation Tester	95B9088	1036.58

(51479)

**SURFACE RESISTANCE METER**

- Designed to measure both surface resistance and resistance to ground
- The meter will test conductive, static dissipative and insulative surfaces
- Decade changeover ± 1/2 decade on a logarithmic scale
- Resolution 1 decade
- Accuracy ± 1/2 decade
- Temperature 4°C to 55°C
- Powered by 9V PP3 alkaline battery
- Test voltage nominal 9V
- Weight 182 grams
- Dimensions 128 x 63 x 25mm



Mfg. Part No.	Stock No.	Price Each
093-0005	74M5623	329.58

(116629)

**TS®22 SERIES TELECOM TEST SET**



22800-001



TS®22 series telecom test set offers an unbeatable combination of reliability, durability and expanded utility. Multiple memories enable storage of nine 18-digit telephone numbers in repertory dialer (speed dialing) for easy access to the test boards, the CO and other frequently called numbers. The last-number redial feature eliminates the need to re-key your last entry. TS®22A series telecom test set's unique built-in amplified speaker provides 3 audio levels for hands free listening and use with automated voice response systems.

Mfg. Part No.	Description	Stock No.	Price Each
22800-001	TS22 Telecom Test Set Standard Cord	48F4944	260.27
22801-001	TS22A Telecom Test Set with Piercing Pin Cord	48F4945	301.37
22801-009	TS22A Telecom Test Set with Speaker Phone	48F4946	298.46

(39375)

**TS®19 SERIES TELECOM TEST SET**



TS®19 series telecom test set combines all of the basic test set features at an incredible price. Its high-impedance monitor prevents accidental disruption of service from clipping onto a data line while in monitor mode, thus providing the integrity of critical data lines. Features such as tone (DTMF) or pulse operation, talk/monitor capabilities, polarity test button and last number redial make this test set the perfect combination of features and price.

Mfg. Part No.	Description	Stock No.	Price Each
19800003	TS19 Telecom Test Set	48F4962	102.40
19800009	TS19 Telecom Test Set with Angled Bed-of-Nails	48F4943	102.40

(39374)

**CLASSIC TONE GENERATOR AND PROBE KIT**



Used to identify single conductors or cable within a bundle, at a cross-connect point or at remote ends. Mfg. part no. 701K classic tone and probe kit includes: mfg. part no. 77HP high-power tone generator and mfg. part no. 200EP inductive amplifier packaged in a rugged woven polyester carrying case. Order kit replacement components separately below.

Mfg. Part No.	Description	Stock No.	Price Each
701K	Classic Tone Generator and Probe Kit	06C9930	133.16
77HP	High-Power Tone Generator	07C0056	43.66
200EP	Standard Inductive Amplifier	06C5591	83.57

(62183)

**Designing a signal acquisition system?**  
See our huge selection of analog & mixed signal semiconductors in this catalog and online.

(148858)

TEST LEADS & ACCESSORIES

SUREGRIP™ ACCESSORIES



SureGrip™ accessories were designed to provide a reliable grip in slippery hands. Rubber-overmolded surfaces and finger-hugging curves give the user a comfortable steady hold. For industrial, electrical and electronic environments. Designed for comfort, ergonomic support and durability. Can be used safely in both CAT III and CAT IV settings (1000V CAT III, 600V CAT V).



AC220 SUREGRIP™ ALLIGATOR CLIPS

- One Pair (Red, Black) of Small, Insulated, Nickel-Plated Jaws
- Blunt Tip Grabs Round Screw Heads Up to 9.5mm

Mfg. Part No.	Description	Stock No.	Price Each
AC220	SureGrip Alligator Clips	81C7979	30.10

AC285 SUREGRIP™ LARGE ALLIGATOR CLIPS

- One Pair (Red, Black) of Large Alligator Clips with Nickel-Plated Steel Jaws
- Multipurpose Tooth Pattern Grips Anything from Fine Gauge Wire to a 20mm Bolt

Mfg. Part No.	Description	Stock No.	Price Each
AC285	SureGrip Large Alligator Clips	81C7982	18.05

AC280 SUREGRIP™ HOOK CLIPS

- One Pair (Red, Black) of Nickel-Plated Clips
- Profile Narrows to 5.6mm at Tip, Hook Opening 6.4mm at Front, 2mm at Base

Mfg. Part No.	Description	Stock No.	Price Each
AC280	SureGrip Hook Test Clips	81C7980	26.45

AC283 SUREGRIP™ PINCER CLIPS

- One Pair (Red, Black) of Nickel-Plated Pincers Open to 5mm
- 11.4 cm Flexible Insulated Shaft

Mfg. Part No.	Description	Stock No.	Price Each
AC283	SureGrip Pincer Test Clips	81C7981	30.10

TP220 SUREGRIP™ INDUSTRIAL TEST PROBES

- One Pair (Red, Black) of Industrial Probes
- 12mm Stainless Steel Tip Provides Reliable Contact

Mfg. Part No.	Description	Stock No.	Price Each
TP220	SureGrip Industrial Test Probes	81C8008	14.45

TL222 SUREGRIP™ SILICONE-INSULATED INDUSTRIAL TEST LEADS

- DMM Test Leads (Red, Black) with Safety Shrouded, Standard Diameter Banana Plugs
- Right Angle Connector on Both Ends, Reinforced Strain Relief

Mfg. Part No.	Description	Stock No.	Price Each
TL222	SureGrip Silicone-Insulated Industrial Test Leads	30H0450	22.85

TL224 SUREGRIP™ SILICONE-INSULATED INDUSTRIAL TEST LEADS

- DMM Test Leads (Red, Black) with Safety Shrouded, Standard Diameter Banana Plugs
- Right Angle Connector on One End and Straight Connector on the Other
- Reinforced Strain Relief 1.5m Silicone-Insulated Wire Resists Heat and Cold

Mfg. Part No.	Description	Stock No.	Price Each
TL224	SureGrip Silicone-Insulated Industrial Test Leads	81C8007	22.85

TL220 SUREGRIP™ INDUSTRIAL TEST LEAD SET

- Mfg. part no. AC220 SureGrip™ Alligator Clip Set
- Mfg. part no. TP220 SureGrip™ Test Probe Set
- Mfg. part no. TL222 SureGrip™ Silicone Test Lead Set (Right-to-Right)

Mfg. Part No.	Description	Stock No.	Price Each
TL220	SureGrip Industrial Test Lead Set	30H0448	59.10

TL221 SUREGRIP™ SILICONE-INSULATED TEST LEAD EXTENSION SET

- One Pair (Red, Black) of Silicone-Insulated Leads with Straight Connectors on Both Ends
- Reinforced Strain Relief
- Includes One Pair (Red, Black) of Female Couplers
- Extends Test Leads by 1.5m

Mfg. Part No.	Description	Stock No.	Price Each
TL221	SureGrip Silicone-Insulated Test Lead Extension Kit	30H0449	22.85

TL223 SUREGRIP™ ELECTRICAL TEST LEAD SET

- Mfg. part no. AC220 SureGrip™ Alligator Clip Set
- Mfg. part no. TP1 Slim-Reach™ Test Probes (Flat Bladed)

Mfg. Part No.	Description	Stock No.	Price Each
TL223	SureGrip Electrical Test Lead Set	26H1655	59.10

TL238 SUREGRIP™ HIGH-ENERGY TEST LEAD SET

- Pair Insulated Tip Probes Lessen the Risk of Arc Flash Explosion
- Pair 8" Probe Extenders Keep Hands Away from Live Circuits
- Mfg. part no. TL224 SureGrip™ Silicone Test Lead Set (Right-to-Straight)

Mfg. Part No.	Description	Stock No.	Price Each
TL238	SureGrip High-Energy Test Lead Set	10J8436	58.45

TL225 SUREGRIP™ STRAY VOLTAGE ELIMINATOR ADAPTER TEST LEAD SET

- Mfg. part no. SV225 SureGrip™ Stray Voltage Eliminator
- Mfg. part no. TL224 SureGrip™ Silicone Test Lead Set (Right-to-Straight)
- Mfg. part no. TP220 SureGrip™ Test Probe Set
- Mfg. part no. C75 Accessory Case

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-TL225	SureGrip Stray Voltage Eliminator Adapter Test Lead Set	26K2570	86.10

(74806)

FTP AND FTPL SUREGRIP FUSED TEST PROBES AND KIT



- Built-in fuses for additional measurement protection
- Probes allow indication of live voltage even with blown fuse
- 2 mm threaded probe tips include removable 4 mm lantern-style spring contacts and removable GS38 insulated IC caps
- Operating temperature: -20°C to 50°C (-5°F to 120°F)
- Rated to CAT III 1000 V, CAT IV 600 V, 10A



Modular FTP probes can mount onto any Fluke modular lead format. FTPL set includes Fluke TL224 modular leads with the fused test probes. Also include removable sheathed tips for additional safety.

Mfg. Part No.	Description	Stock No.	Price Each
FTP	Fused Test Probe Set	09R2352	74.95
FTPL	Fused Test Probe Set with Test Leads	09R2353	84.95

(147953)

TEST LEAD SETS AND PROBE LIGHT KIT



TLK287 ELECTRONIC TEST LEAD SET

- The TLK287 is TLK287 Electronics Master Test Lead Set
- Precision electronic probes with multiple spring-loaded sharp tips to maximize contact with SMD test points
- Micro-grabbers and leads to enable fin SMD test
- Mini-alligator clips, grabbers, and probes for virtually every electronics need



TL81A

Mfg. Part No.	Description	Stock No.	Price Each
TLK287	Electronics Master Test Lead Set	70M8699	119.55

TLK 289 INDUSTRIAL MASTER TEST LEAD SET

- SureGrip™ alligator clips, grabbers, hook clips and industrial test probes for dependable contact with a variety of test points
- Magnetic hanger for convenient suspension of your DMM from a metal surface
- Temperature adapter with K-type thermocouple for direct temperature measurement with your DMM's temperature measurement functions
- Protective soft case for your DMM and all its accessories

Mfg. Part No.	Description	Stock No.	Price Each
TLK289	Industrial Master Test Lead Set	70M8700	119.55

TL75 HARD POINT™ TEST LEAD SET

- Set Includes: One Pair (Red, Black) Comfort Grip Probes with PVC Insulated, Leads with Right-Angle, Shrouded Banana Plugs
- Recommended for General-Purpose Measurements
- Rating: Dual Safety Rated CAT III 1000V and CAT IV 600V
- UL listed

Mfg. Part No.	Description	Stock No.	Price Each
TL75	Hard Point™ Test Lead Set	44F622	18.05

TL71 PREMIUM TEST LEAD SET

- Set Includes: One Pair (Red, Black) Comfort Grip Probes with Silicone Insulated, Right-Angle Test Leads
- Replacement Test Leads for Series 80 IV DMMs
- Recommended for µV Measurements
- Rating: Category III, 1000V, 10A
- UL listed

Mfg. Part No.	Description	Stock No.	Price Each
TL71	Premium Test Lead Set	94B7832	21.65

L210 PROBE LIGHT AND PROBE EXTENDER KIT

- Kit Includes Probe Light and Test Probe Extenders
- 8" Probe Keep Hands Away From Live Circuits
- Extender Fits Between Modular Test Probe and Test Lead
- 120 Hours of Battery Life, Uses 2-3 Volt Watch Batteries

Mfg. Part No.	Description	Stock No.	Price Each
L210	Probe Light and Probe Extender Kit	82H8219	30.40

(61081)

DMM TEST LEAD KITS



Mfg. Part No.	Description	Stock No.	Price Each
MTL-500	Double Insulated Silicon Test Leads, Short Prods, and Insulated Crocodile Clips, One Pair Each	66K6292	35.95
MTL-501	MTL-500 PLUS USA Mains Socket Test Adapter and Sprung Hooks, One Pair Each	66K6293	59.95

(85791)

TEST LEADS & ACCESSORIES

**BASIC TEST LEAD KIT**

**Just Added**



- Silicone lead wires, 48" long, red and black
- Standard probe tips, red and black
- Alligator clips, red and black
- Spade lugs, red and black
- Carry case with pockets and VELCRO® closure
- EN61010-2-03, CE safety approved



Mfg. Part No.	Description	Stock No.	Price Each
DL243D	Basic Test Lead Kit	71M3145	34.95

(147136)

**DMM TEST COMPANION™ KITS**



6172A



6173A



6174



6175



Cordura Carrying Case

DMM Test Companion™ kits are specifically designed to accompany Fluke 80 series DMM's and other DMM's with safety inputs. Four professional grade kits have been created to provide tools to match your needs in the field. Each kit comes with a shoulder-pack style Cordura carrying case with shoulder strap. Cases are weather resistant and are designed with extra padding to hold an protect instruments. These cases also have several compartments designed to hold accessories, tools, batteries, and documentation.

**Mfg. part no. 6172A** includes a medium alligator clip set, 2 spade lug adapters, 2 pincer tip test clips, 2 hook tip test clips, 2 banana tip modular test probes, 2 48" (1.2m) modular test leads and 2 48" (1.2m) stainless steel tip test leads. Includes Cordura Carrying Case.

**Mfg. part no. 6173A** includes a medium alligator clip set, large alligator clip set, 2 spade lug adapters, 2 jaw tip test clips, 2 pincer tip test clips, 2 hook tip test clips, 2 banana tip modular test probes, 2 48" (1.2m) modular test leads and 2 48" (1.2m) stainless steel tip test leads. Includes Cordura Carrying Case.

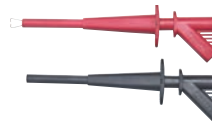
**Mfg. part no. 6174** includes a medium alligator clip set, flexible test lead set, Minigrabber® test set, extended tip, IC test tip adapter, spade lug with jack, Micrograbber® test clip-to-pop jack, SMD Grabber® test clip-to-pop jack, and SMD test tweezer-to-sheathed banana plugs. Includes Cordura Carrying Case.

**Mfg. part no. 6175** includes a medium alligator clip set, flexible test lead set, Minigrabber® test clip, extended tip, IC test tip adapter, assorted replacement tips, Minipincer® test clip set, spade lug with jack, Micrograbber® test clip-to-pop jack, SMD grabber test clip-to-pop jack, SMD test tweezer-to-sheathed banana plugs, and test probes with replacement tip. Includes Cordura Carrying Case.

Mfg. Part No.	Description	Stock No.	Price Each
			1-4
6172A	Industrial Digital Multimeter Test Kit	73K9972	135.80
6173A	Deluxe Digital Multimeter Test Kit	73K6638	186.66
6174	Electronic Digital Multimeter Test Kit	48F1174	173.45
6175	Digital Multimeter Test Kit	48F1175	203.73

(5394)

**MAXIGRABBER® TEST CLIP SETS**



5910B



5911B



5912B



5913

Rated to IEC 1010-2-031 CATIII 1000V, 10A (except mfg. part no. 5913, IEC 1010-2-031 CAT III 1000V 5A). Each set contains one black and one red clip.

**Mfg. part nos. 5910B, 5911B and 5912B** feature a long shaft that is ideal for electronic, electrical and industrial applications where access to hard to reach high voltage test points is a requirement. Safety sheathed jack mates to Pomona's 5907A, 5908A and 5909A flexible test leads for digital multi-meter interfacing. **Mfg. part no. 5910B** pincer can securely grab a 0.16" (4mm) max. O.D. terminal post. **Mfg. part no. 5912B** clip jaws securely grip wires and test points for solid contact with conductors.

**Mfg. part no. 5913** pierces wire up to 0.14" diameter and is for use with 23-16 AWG wire. Compatible with all Pomona banana plug leads. Sheathed 4mm receptacle accepts shrouded and unshrouded banana plugs.

Mfg. Part No.	Description	Stock No.	Price Each
			1-9
5910B	Test Clip Set with Pincer	73K9952	30.67
5911B	Test Clip Set with Hook	73K9953	23.42
5912B	Test Clip Set with Jaws	73K9954	32.81
5913	Insulation Piercing Test Clip Set	95F1295	53.66

(42174)

**DELUXE DMM TEST MAXI KIT**



**Mfg. part no. 5677** is ideal for Test and Measurement Scenarios using DMM's. Includes silicone insulated 4ft (1.2m) leads with right angle plug, modular probe set with replaceable tips, replacement tips set, Retractable tip probe set, test lead coupler set, medium alligator clip set, large alligator clip set, spade lugs, IC probe tip adapter, Minigrabber® test clip leads, Minipincer® test clip leads, and Nylon storage pouch.

Mfg. Part No.	Description	Stock No.	Price Each
			1-4
5677B	Deluxe DMM Kit	30C4814	149.71

(5328)

**TERMINAL JACK-TO-BANANA JACK ADAPTERS**

**Just Added**



Fig. 1



Fig. 2

- Provides banana jack connection by replacing the screw in a terminal strip or control panel
- Allows a standard sheathed or unshathed banana plug / patch cord to securely connect to a terminal strip
- Helps to avoid accidental arc-over by eliminating the usage of alligator clips, or test probe "slip offs" during measurement applications
- Perfect for use with model 73087 jumper test lead sets in peer-checking system test sequences
- Nickel-plated brass banana jacks with polypropylene V-2 insulation

Mfg. Part No.	Fig.	Convert From	Convert To	Color	Stock No.	Price Each
						Each
73084-0	1	6-32 Male Terminal Jack	Banana Jack	Black	08R6366	1.99
73084-2	1	6-32 Male Terminal Jack	Banana Jack	Red	08R6367	1.99
73084-4	1	6-32 Male Terminal Jack	Banana Jack	Yellow	08R6368	1.99
73084-6	1	6-32 Male Terminal Jack	Banana Jack	Blue	08R6369	1.99
73088-0	1	8-32 Male Terminal Jack	Banana Jack	Black	08R6378	1.99
73088-2	1	8-32 Male Terminal Jack	Banana Jack	Red	08R6379	1.99
73088-4	1	8-32 Male Terminal Jack	Banana Jack	Yellow	08R6380	1.99
73088-6	1	8-32 Male Terminal Jack	Banana Jack	Blue	08R6381	1.99
73085-0	1	10-32 Male Terminal Jack	Banana Jack	Black	08R6370	1.99
73085-2	1	10-32 Male Terminal Jack	Banana Jack	Red	08R6371	1.99
73085-4	1	10-32 Male Terminal Jack	Banana Jack	Yellow	08R6372	1.99
73085-6	1	10-32 Male Terminal Jack	Banana Jack	Blue	08R6373	1.99
73086-0	2	10-32 Female Terminal Jack	Banana Jack	Black	08R6374	1.99
73086-2	2	10-32 Female Terminal Jack	Banana Jack	Red	08R6375	1.99

➔ CONTINUED ➔

TEST LEADS & ACCESSORIES

TERMINAL JACK-TO-BANANA JACK ADAPTERS (CONT.)

Mfg. Part No.	Fig.	Convert From	Convert To	Color	Stock No.	Price Each
						Each
73086-4	2	10-32 Female Terminal Jack	Banana Jack	Yellow	08R6376	1.99
73086-6	2	10-32 Female Terminal Jack	Banana Jack	Blue	08R6377	1.99

(147910)

DELUXE ELECTRONIC DMM KIT



Designed for electronic DMM testing scenarios. Includes silicone insulated 4 ft (1.2m) leads with right angle plug, modular probe set with standard tips, extended probe tip adapters, medium alligator clips, IC probe tip adapters, Minigrabber<sup>®</sup> test clip leads, Minipincer<sup>®</sup> test clip leads, Maxigrabber<sup>®</sup> test clips with pincer tip, and nylon storage pouch. Insulated 4ft (1.2m) test leads with right-angle DMM plugs fit most meters from Fluke, HP, Wavetek (Metterm), and others.

Mfg. Part No.	Description	Stock No.	Price Each
			1-4
5674C	Electronic Digital Multimeter Kit	73K9941	171.70

(61176)

BASIC ELECTRICAL DMM KIT



Basic test lead kit contains a set of modular test probes and 4' silicone insulated test leads. The set of Maxigrabber<sup>®</sup> test clips attach to the leads in place of the probes. Supplied with a convenient carry pouch. IEC1010-2-031 CAT III 1000V. UL listed.



Mfg. Part No.	Description	Stock No.	Price Each
			1-4
5900A/POM	Basic Electrical Digital Multimeter Kit	73K9949	68.65

(61180)

REPLACEMENT TEST PROBE KITS



Mfg. part no. 5519A kit has general-purpose replacement leads with standard 0.080 tip. Fit most meters from Fluke, Wavetek (Metterm), HP (Agilent), Tektronix, Amprobe and many others. Mfg. part no. 5517A leads fit Simpson mfg. part no. 260 meters with pin-type input jacks. Mfg. part no. 5898 leads have stainless-steel tips for penetrating corroded or oxidized test points. All leads have 4' silicone insulated wires.

Mfg. Part No.	Description	Stock No.	Price Each
			1-24
5519A	CAT III 1000V, UL	90F2354	18.65
5517A	30VAC, 60VDC	90F2362	29.06
5898	CAT III 1000V, UL	95F1303	19.20
6262-02	Fine Point Extended Adapter for Pomona DMM Test Probes	30C4846	19.18

(61182)

PRECISION ELECTRONIC PROBE SETS AND KITS



- Ideal for Probing Fine Pitch IC Leads and Densely Packed PC Boards
- Slim Design Tip Enables a Firm Grip and Access Into Tight Spots
- Rating: 1000V, 3A Max.

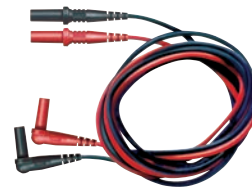
6275

Ideal for probing fine pitch IC leads and densely packed PC Boards. Slim design tip enable firm grip and access into tight spots. Rated to IEC 1010-2-031 CAT III 1000V, 3A Max. Compact and ergonomic, these high precision probes fit most DMM's. Note: Mfg. part no. 6341 includes a set of 5 0.040" dia. Stainless steel and gold-plated replacement tips.

Mfg. Part No.	Description	Stock No.	Price Each
			1-9
6341	Probe Kit with Tip Set and Case	51B961	47.28
6342	Probe Set with Gold-Plated Tips	91B0558	27.30
6275	Probe Set with Stainless Steel Tips	91B1291	23.96
6601	Probe Set with Removable 4mm Banana Plug Adapter	82H6149	23.52

(65379)

REPLACEMENT MODULAR TEST LEADS AND PROBES



5907A

5906A TEST PROBE HANDLE SET

Mfg. part no. 5906A set contains test probe handle with brass caged banana plug tip and sheathed 0.158" (4) banana jack in handle. Set contains one black, one red probe rated CAT III 1000V, 10A. Mfg. part no. 6232 similar to mfg. part no. 5906A except .080 notch tip.

Mfg. Part No.	Description	Stock No.	Price Each
			1-9
5906A	Test Probe Handle Set	95F1302	14.80

Set fit Fluke, HP, Tektronix, and Wavetek brand-multimeters. Rated CAT III 1000V. One black, one red lead. 48" long high-temperature silicone wire. Mfg. part no. 5907A right-angle sheathed banana plug to straight sheathed banana plug. Mfg. part no. 5908A straight sheathed banana plug each end. Mfg. part no. 5909A right-angle sheathed banana plug each end.

FLEXIBLE TEST LEAD SETS

Mfg. Part No.	Description	Stock No.	Price Each
			1-9
5907A	Right-Angle Sheathed Banana Plug	95F1291	18.27
5908A	Straight Sheathed Banana Plug To Straight Sheathed Banana Plug	48F1708	18.27
5909-A	Straight Sheathed Banana Plug	95F1293	17.75
6358	Straight DMM Plug To Retractable Sheath Plug	96B9220	20.77

(5399)

BASIC ELECTRONIC DMM TEST LEAD KIT



Nickel plated brass tip offers high conductivity for precision measurements. Contains 2 each test probe leads and alligator clips, one black, one red. Also includes two pieces of dogleg micro tips. Supplied in a reusable plastic pouch.

Mfg. Part No.	Description	Stock No.	Price Each
			1-9
5325A	Basic Electronic DMM Test Lead Kit	94F1526	22.97

(9154)



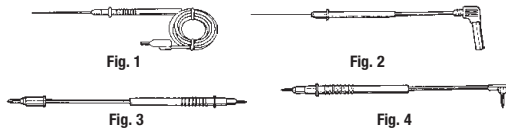
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(148831)

TEST LEADS & ACCESSORIES

TEST PROBE SETS



Mfg. part nos. 5952A and 5953A probes have tip that extends to 3.00" (76.20) for hard-to-reach points. Mfg. part nos. 5950A and 5951A probes have replaceable .080" (2.03) O.D. stainless steel tip. Probes connected by 48" (1.22M) 18 AWG, 0.144" (3.66) O.D. PVC wire. 1 black, 1 red probe.

EXTENDABLE TIP PROBES

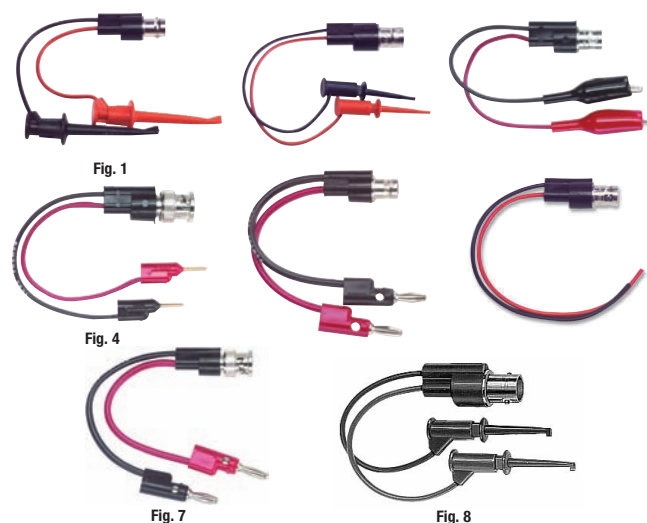
Mfg. Part No.	Fig.	Plug Type	Stock No.	Price Each			
				1-9	10-24	25-49	50+
5952A	1	Stacking Banana	35C4345	30.45	27.13	26.02	24.64
5953A	2	Multimeter	29C9527	30.45	27.13	26.02	24.64

REPLACEABLE TIP PROBES TO BANANA PLUGS

Mfg. Part No.	Fig.	In-Line Banana	Right-Angle Banana	Stock No.	1-9	10-24	25-49	50+
5950A	3	In-Line Banana		30C4823	30.45	27.13	26.02	24.64
5951A	4		Right-Angle Banana	30C4824	30.45	27.13	26.02	24.64

(8970)

MOLDED BREAKOUTS

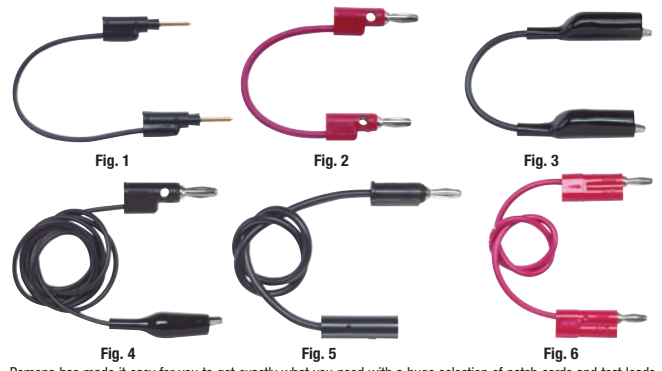


Breakouts convert coaxial cable with BNC male or female connectors to test cable with choice of one black and one red clips or plugs. Tarnish-resistant, plated-brass BNC with gold-plated copper contact. Overall length: 7.0". Mfg. part nos. 4969, 4970, 3221, 3957 and 3073 rated 500Vrms; mfg. part nos. 3788 and 3789 rated 300Vrms; mfg. part nos. 5188, 5305 and 2630 rated 150Vrms; mfg. part no. 2631 rated 45Vrms.

Mfg. Part No.	Fig.	Description	Stock No.	Price Each		
				1-24	25-49	50-99
3788	1	Female BNC to 2 Minigrabber™ Clips	35F1061	14.46	13.02	12.59
3789	...	Male BNC to 2 Minigrabber™ Clips	35F975	17.82	16.06	15.52
5305	2	Female BNC to 2 SMD Grabber Clips	46F2415	19.72	17.77	17.17
2630	3	Female BNC to 2 Alligator Clips	10M4222	14.90	13.42	12.97
2631	3	Female BNC to 2 Minigrabber Clips	10M4223	14.90	13.42	12.97
3221	...	Female BNC to Stacking Pin Tip Plugs	10M4236	17.98	16.20	15.66
3901	4	Male BNC to Stacking Pin Tip Plugs	77B2426	22.37	20.15	19.48
3073	5	Female BNC to Stacking Banana Plugs	10M4233	13.88	12.50	12.08
4969	6	Female BNC with 20 AWG leads	94F1506	9.77	8.80	8.51
4970	...	Male BNC with 20 AWG leads	94F1507	13.44	12.11	11.70
3957	7	Male BNC to Multistacking Banana Plug	94F1581	20.16	18.17	17.56
5188	8	Female BNC to Micrograbber™ Clips	90F1316	18.96	17.08	16.51

(8975)

PATCH CORDS



Pomona has made it easy for you to get exactly what you need with a huge selection of patch cords and test leads designed for reliable, convenient connections.

STACKING PIN TIP PLUG EACH END — FIG. 1

0.080" (2.03) O.D. pin tip. 20 AWG. 3000VDC, 5A, +55°C.

Mfg. Part No.	L	Color	Stock No.	Price Each			
				1-24	25-49	50-99	100-249
P-4-0	4"	Black	06M7552	7.57	7.26	7.10	6.57
P-4-2	4"	Red	06M7553	7.57	7.26	7.10	6.57
P-8-0	8"	Black	06M7554	7.74	7.42	7.26	6.71
P-8-2	8"	Red	06M7555	7.74	7.42	7.26	6.71
P-12-0	12"	Black	06M7546	7.74	7.42	7.26	6.71
P-12-2	12"	Red	06M7547	7.74	7.42	7.26	6.71
P-24-0	24"	Black	06M7548	8.05	7.72	7.55	6.98
P-24-2	24"	Red	06M7549	8.05	7.72	7.55	6.98
P-36-0	36"	Black	06M7550	8.20	7.86	7.69	7.11
P-36-2	36"	Red	06M7551	8.20	7.86	7.69	7.11

STACKING STANDARD BANANA PLUG EACH END — FIG. 2

18 AWG. 500VDC, 15A, +55°C.

Mfg. Part No.	L	Color	Stock No.	Price Each			
				1-24	25-49	50-99	100-249
B-4-0	4"	Black	06M6942	6.22	5.96	5.83	5.40
B-4-2	4"	Red	06M6943	6.22	5.96	5.83	5.40
B-8-0	8"	Black	06M6951	6.37	6.10	5.97	5.52
B-8-2	8"	Red	06M6952	6.37	6.10	5.97	5.52
B-12-0	12"	Black	34F880	6.37	6.10	5.97	5.52
B-12-2	12"	Red	34F879	6.37	6.10	5.97	5.52
B-12-6	12"	Blue	96F7092	6.37	6.10	5.97	5.52
B-12-9	12"	White	84F885	6.37	6.10	5.97	5.52
B-18-0	18"	Black	34F882	6.54	6.26	6.13	5.67
B-18-2	18"	Red	34F881	6.54	6.26	6.13	5.67
B-18-6	18"	Blue	70B7185	6.54	6.26	6.13	5.67
B-18-9	18"	White	94F284	6.54	6.26	6.13	5.67
B-24-0	24"	Black	34F849	6.68	6.40	6.26	5.79
B-24-2	24"	Red	34F848	6.68	6.40	6.26	5.79
B-24-8	24"	Gray	96B8428	6.68	6.40	6.26	5.79
B-36-0	36"	Black	34F851	6.68	6.40	6.26	5.79
B-36-2	36"	Red	34F850	6.68	6.40	6.26	5.79
B-36-8	36"	Gray	70B4665	6.68	6.40	6.26	5.79
B-48-4	48"	Yellow	91B3621	6.82	6.54	6.40	5.92
B-60-9	60"	White	92B0840	6.97	6.68	6.54	6.04
B-72-3	72"	Orange	50B6691	7.11	6.82	6.67	6.17
B-72-4	72"	Yellow	50B6692	7.11	6.82	6.67	6.17
B-72-5	72"	Green	50B6693	7.11	6.82	6.67	6.17
B-72-6	72"	Blue	50B6694	7.11	6.82	6.67	6.17
B-72-8	72"	Gray	50B6696	7.07	6.77	6.63	6.13
B-72-9	72"	White	50B6697	7.11	6.82	6.67	6.17
2948-12-0	12"	Black	90B3695	8.78	7.93	7.65	7.46
2948-36-0	36"	Black	10M4226	11.38	10.91	10.67	9.87
2948-36-2	36"	Red	10M4227	11.38	10.91	10.67	9.87

INSULATED ALLIGATOR CLIP EACH END — FIG. 3

18 AWG. 150V, 5A, +50°C.

Mfg. Part No.	L	Color	Stock No.	Price Each			
				1-24	25-49	50-99	100-249
AL-B-12-0	12"	Black	06M6923	7.11	6.82	6.67	6.17
AL-B-12-2	12"	Red	06M6924	7.11	6.82	6.67	6.17
AL-B-24-0	24"	Black	06M6925	7.43	7.12	6.96	6.44
AL-B-24-2	24"	Red	06M6926	7.43	7.12	6.96	6.44
AL-B-36-0	36"	Black	06M6927	7.57	7.26	7.10	6.57
AL-B-36-2	36"	Red	06M6928	7.57	7.26	7.10	6.57
AL-B-60-2	5ft	Red	78B1539	8.80	8.44	8.25	7.63

MINIGRABBER CLIP TO STACKING BANANA PLUG — FIG. 4

20 AWG. 45V, 5A, +50°C.

Mfg. Part No.	L	Color	Stock No.	Price Each			
				1-24	25-49	50-99	100-249
3220-36-0	36"	Black	10M4234	6.97	6.68	6.54	6.04
3220-36-2	36"	Red	10M4235	6.97	6.68	6.54	6.04

▶ CONTINUED ▶



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(148859)

TEST LEADS & ACCESSORIES

PATCH CORDS (CONT.)

Mfg. Part No.	L	Color	Stock No.	Price Each			
				1-24	25-49	50-99	100-249
18 AWG. 5000VDC, 15A, +55°C.							
● 4702-24-0	24"	Black	10M4345	8.80	8.44	8.25	7.63
● 4702-24-2	24"	Red	10M4346	8.80	8.44	8.25	7.63
● 4702-36-0	36"	Black	10M4347	8.95	8.57	8.39	7.76
● 4702-36-2	36"	Red	10M4348	8.95	8.57	8.39	7.76

EXTENSION STACKING BANANA PLUG EACH END — FIG. 6

Insulates hot leads. 0.144" (3.66) O.D. 18 AWG. 5000VDC, 15A, +55°C. Other sizes available, go online or call.

Mfg. Part No.	L	Color	Stock No.	13.50	12.94	12.66	11.71
● HB-36-0	36"	Black	06M7324	13.50	12.94	12.66	11.71
● HB-36-2	36"	Red	06M7325	13.50	12.94	12.66	11.71
● HB-60-0	60"	Black	06M7328	13.08	11.98	11.10	10.28
● HB-60-2	60"	Red	81F4626	13.31	12.75	12.48	11.54

(8971)

BANANA PLUGS/DUAL BANANA PLUGS



Rating: 300Vrms +50°C.

Mfg. Part No.	L	Stock No.	Price Each			
			1-9	10-24	25-49	50+
● 1368-A-18	18"	10M4167	36.51	32.18	31.54	30.74
● 1368-A-36	36"	10M4168	36.51	32.18	31.54	30.74
● 1368-A-48	48"	89F403	36.51	32.18	31.54	30.74
● 1368-A-60	60"	94F294	36.51	32.18	31.54	30.74

(8912)

TEST LEAD ACCESSORIES

File patch cords and cable assemblies for easy selection. Mount on any vertical surface. Cold rolled steel with baked enamel finish.



Mfg. Part No.	Color	Fits Cable	No. of Slots	Stock No.	Price Each		
					1-24	25-49	50-99
1508	Orange	0.210"	14	34F956	16.15	14.63	14.15
4408	Black	0.320"	10	34F1017	13.20	11.96	11.57
2708	Blue	0.450"	9	34F957	16.17	14.65	14.17

(8976)

TEST CLIP-TO-TEST CLIP PATCH CORD KITS



Each kit contains ten patch cords, 24" (0.610M) long, with grabber test clips on each end of patch cord. Patch cords available in ten colors: black, red, brown, orange, yellow, green, blue, violet, gray and white. Mfg. part no. 5523 rated 300V, 5A; mfg. part nos. 5525 and 5521 rated 150V, 0.5A.

Mfg. Part No.	Description	Stock No.	Price Each		
			1-4	5-9	10+
● 5523	Minigrabber® Type 3781-24	90F2175	51.91	49.04	45.21
● 5525	Micrograbber® Type 4613-24	90F2173	82.01	77.47	71.43
● 5521	SMD Grabber® Type 5301-24	90F2333	107.51	101.56	93.63

(9039)

**Designing a power supply?**  
See our huge selection of bench & module voltage regulators in this catalog and online.

(148860)

MINIGRABBER® TEST CLIPS AND KITS



Feature plunger-action clip with gold-plated contact hook that attaches to component leads, terminals. No sharp teeth to damage wires. Fingertip operation. 0.625" (15.88) diameter. +102°C.

MFG. PART NOS. 3925 AND 4555 MINIGRABBER TEST CLIPS Rated 3000WVDC, 12A, 2.54" (64.52)L, +102°C.

Mfg. Part No.	Color	Wire O.D.	Stock No.	Price Each			
				1-24	25-49	50-99	100+
● 3925-0*	Black	0.090" (2.29)	73C4848	18.84	17.84	16.84	16.04
● 3925-2*	Red	0.090" (2.29)	20H0137	18.84	17.84	16.84	16.04
● 3925-4*	Yellow	0.090" (2.29)	30F1406	18.84	17.84	16.84	16.04
● 3925-5*	Green	0.090" (2.29)	94F1578	18.84	17.84	16.84	16.04
● 3925-9*	White	0.090" (2.29)	94F1580	18.84	17.84	16.84	16.04
● 4555-0*	Black	0.144" (3.66)	48F5004	20.63	19.53	18.43	17.56
● 4555-2*	Red	0.144" (3.66)	48F5005	20.63	19.53	18.43	17.56

\*Sold in packages of 10

MFG. PART NO. 3925 MINIGRABBER TEST CLIP KITS

Mfg. Part No.	Description	Stock No.	Price Each			
			1-24	25-49	50-99	100+
● 4176-02	1 Black, 1 Red Mfg. part no. 3925 Clip	46F2201	4.40	4.17	3.94	3.75
● 5522	10 Mfg. part no. 3925 Clips, 1 each: Black, Red, Brown, Orange, Yellow, Green, Blue, Violet, Gray, White	90F2174	21.25	20.12	18.99	18.08

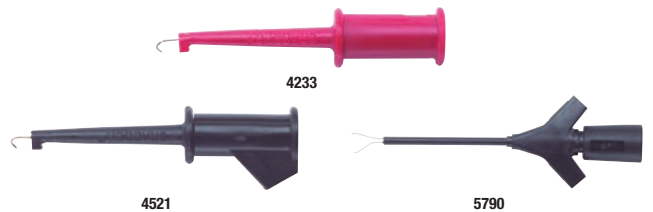
MFG. PART NO. 4723 MINIGRABBER TEST CLIPS WITH BANANA JACK

Nickel-plate brass standard banana jack in plunger directly connects test clip to banana plug patch cord. 45VAC, 5A, +102°C.

Mfg. Part No.	Color	Stock No.	Price Each			
			1-24	25-49	50-99	100+
● 4723-0	Black	46F2380	5.68	5.38	5.08	4.84
● 4723-2	Red	46F2381	5.68	5.38	5.08	4.84

(8964)

MICROGRABBER® TEST CLIPS AND KIT



MFG. PART NO. 4233 MICROGRABBER TEST CLIPS AND KIT

Rated 1000WVDC, 3A, +102°C. Accept 0.090" (2.29) maximum wire O.D. 1.71" (43.43)L.

Mfg. Part No.	Description	Stock No.	Price Each			
			1-24	25-49	50-99	100+
● 4233-0*	Black Test Clip	48F5003	22.04	20.25	18.23	17.39
● 4233-2*	Red Test Clip	13H6565	22.04	20.25	18.23	17.39

\*Sold in Package of 10; +Each.

MFG. PART NO. 4521 MICROGRABBER TEST CLIPS WITH 0.025" SQUARE PIN

Have 0.025" (0.635) square pin within 0.15" (3.81) square access hole. 1.73" (43.94) long. Rated 45VAC, 3A, +102°C.

Mfg. Part No.	Description	Stock No.	Price Each			
			1-24	25-49	50-99	100+
● 4521-0	Black Test Clip	35F1691	3.85	3.54	3.19	3.04
● 4521-2	Red Test Clip	35F1692	3.85	3.54	3.19	3.04

MFG. PART NO. 5790 ROTATING MICROGRABBER TEST CLIPS

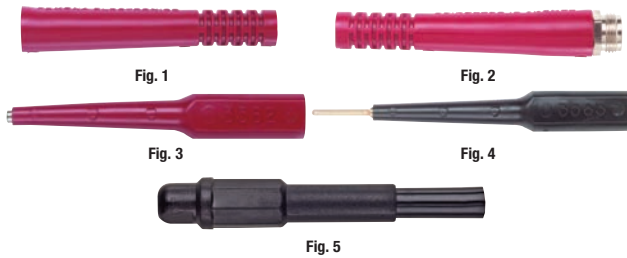
Ideal for testing surface mount devices. High-density leads have 0.050" (1.27) spacing and 0.004" (0.101) gauge wires. 2 access entries with 0.025" (0.635) square pins.

Mfg. Part No.	Description	Stock No.	Price Each			
			1-24	25-49	50-99	100+
● 5790-0	Black Test Clip	95F1351	7.92	7.28	6.55	6.25
● 5790-2	Red Test Clip	95F1352	7.92	7.28	6.55	6.25

(8966)

TEST LEADS & ACCESSORIES

TEST LEAD ACCESSORIES



**MOLDED PVC STRESS RELIEF BOOTS**  
Protects cable 0.185-0.200" (4.70-5.08) outer diameter except (\*) which fit 0.237-0.247" (6.02-6.27) outer diameter.

Mfg. Part No.	Fig.	Color	Fits Cable	Stock No.	Price Each	
					1-24	
● 5155-0+	1	Black	RG 58, 141	48F5006		8.99
● 5156-0+	1	Black	RG 59, 62, 210	20H0126		8.79
● 5076-0*	2	Black	RG 58, 141	44F5342		4.47

\* Each; +Sold in Packages of 10.

**CONNECTOR TEST ADAPTERS**

For rapid testing of hard-to-reach contacts of multi-pin and socket rack or panel connectors. 2500 WVDC, +50°C.

Mfg. Part No.	Fig.	Description	Contact Diameter	Amps	Stock No.	Price Each	
						1-24	
● 4690-0	3	Black Socket	0.030"	5.0	81F4641		4.49
● 4690-2	3	Red Socket	0.030"	5.0	81F4649		4.49
● 4691-0	4	Black Pin	0.030"	5.0	81F4642		4.49
● 4691-2	4	Red Pin	0.030"	5.0	81F4650		4.49
● 3560-0	3	Black Socket	0.040"	7.5	81F4643		4.38
● 3560-2	3	Red Socket	0.040"	7.5	81F4651		4.38
● 3561-0	4	Black Pin	0.040"	7.5	81F4644		4.38
● 3561-2	4	Red Pin	0.040"	7.5	81F4652		4.38
● 3562-0	3	Black Socket	0.063"	13.0	81F4645		4.38
● 3562-2	3	Red Socket	0.063"	13.0	81F4653		4.38
● 3563-0	4	Black Pin	0.063"	13.0	81F4646		4.38
● 3563-2	4	Red Pin	0.063"	13.0	81F4654		4.38
● 3564-0	3	Black Socket	0.093"	23.0	81F4647		6.87
● 3564-2	3	Red Socket	0.093"	23.0	81F4655		6.87
● 3565-0	4	Black Pin	0.093"	23.0	81F4648		4.49
● 3565-2	4	Red Pin	0.093"	23.0	81F4656		4.49

**RETRACTABLE SLEEVE BANANA PLUGS**

Mfg. Part No.	Fig	Description	Stock No.	Price Each	
				1-24	
● 122505A	5	4mm Banana Plug for 18AWG Wire, Black	99F7945		4.84
● 122506A	5	4mm Banana Plug for 18AWG Wire, Red	02B1440		4.84

**IN-LINE BANANA PLUG**

● 6383-0	...	User Installed In-Line Banana Plug, Black	32H5245		26.48
● 6383-2	...	User Installed In-Line Banana Plug, Red	57H6847		26.48

**IN-LINE BANANA JACK**

● 6384-0	...	User Installed In-Line Banana Jack, Black	35H7046		28.09
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(43070)

LOW EMF PATCH CORDS



All products have 12 AWG wire. Spade Lug are gold plated Electrolytic Tough Pitch (ETP) 110 Copper Alloy, 1/2 hard. Banana plug bodies are gold plated tellurium copper. Spring are gold-plated beryllium copper. Rated up to 1000V per IEC1010-2-031, 7A, +131°F (+55°C). The 1693 and 1756 series Rating: Hands free testing in controlled voltage environment: 2000 Vdc; Not intended for hand held use at voltages above 33 Vrms/70 Vdc, 20A, +131°F (+55°C) max. The 5291 series Rating: up to 1000V per IEC1010-2-031, 7A, +131°F (+55°C). The 5295 series Rating: Hands free testing in controlled voltage environment up to 1000V; Not intended for hand held use at voltages above 33 Vrms/70 Vdc, 7A, +131°F (+55°C) max.

Mfg. Part No.	Description	Lgth. (in.)	Stock No.	Price Each	
				1-24	
● 1693-36-0	Spade Lug Patch Cord, Black	3	51B931		19.20
● 1693-36-2	Spade Lug Patch Cord, Red	3	51B932		19.20
● 1693-60-0	Spade Lug Patch Cord, Black	5	98F961		18.62
● 1693-60-2	Spade Lug Patch Cord, Red	5	94F296		18.62
● 1756-48	Shielded Spade Lug Patch Cord	4	77B1776		47.11

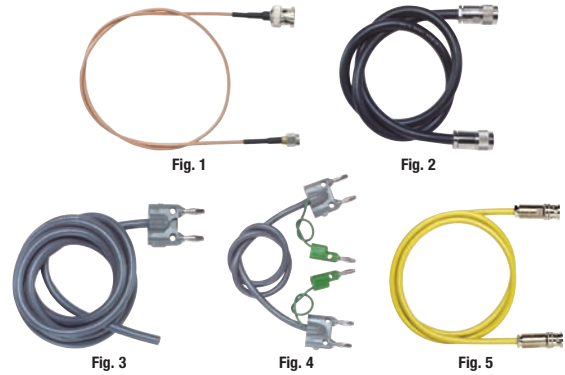
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LOW EMF PATCH CORDS (CONT.)

Mfg. Part No.	Description	Lgth. (in.)	Stock No.	Price Each	
				1-24	
● 5291A-60-0	Retractable Sheath Banana, Black	5	95B0991		19.20
● 5291A-60-2	Retractable Sheath Banana, Red	5	95B0997		19.20
● 5295-36-0	Retractable Sheath Banana Plug to Spade Lug, Black	3	94F5215		17.87
● 5295-36-2	Retractable Sheath Banana Plug to Spade Lug, Red	3	94F5216		17.87

(84757)

CABLE ASSEMBLIES



**BNC MALE TO SMA MALE INSULATED CABLE — FIG. 1**

Rating: 335Vrms. Cable Type: RG316/U. 0.98" O.D.

Mfg. Part No.	Cable Length (in.)	Stock No.	Price Each		
			1-4	5-9	10+
● 4935-BB-24	24	77B4084	59.48	55.44	51.40
● 4935-BB-48	48	10M4376	59.48	55.44	51.40
● 4935-BB-60	60	10M4377	59.48	55.44	51.40

**TYPE 'N' MALE, EACH END 50 OHM CABLE — FIG. 2**

● 1658-T-36	36	77B2158	80.23	74.79	69.34
● 1658-T-60	60	77B2160	106.09	98.89	91.69

**MULTI-STACKING DOUBLE BANANA PLUG, ONE END ONLY - FIG. 3**

● 1326-A-60	60	96F7101	20.18	18.81	17.44
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**TWO CONDUCTOR SHIELDED BALANCED LINE — FIG. 4**

● 1167-36	36	10M4160	45.18	42.11	39.04
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**TRIAXIAL 3 LUG MALE TRIAXIAL CABLE — FIG. 5**

● 5223-36	36	94F5207	123.70	115.30	106.91
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**TRIAXIAL 2 LUG MALE TRIAXIAL CABLE — FIG. 5**

● 5054-36	36	78B1833	123.70	115.30	106.91
● 5054-60	60	78B1834	131.63	122.70	113.76

(8969)

TRUE 75Ω BNC MALE CABLES



- BNC Connectors are Perfectly Matched to 75Ω Impedance for Superior VSWR and Return Loss Performance
- Ideal for Digital Video and Telecommunications Applications
- Cable Type: High-Flex, Multistrand Center Conductor, RG59 Type, Black



Rating: 500Vrms +50°C.

Mfg. Part No.	Cable Length	Stock No.	Price Each	
			1-9	
● 6510-V-12-0	12"	30C5088		24.42
● 6510-V-24-0	24"	30C5089		24.42
● 6510-V-36-0	36"	30C5090		24.42
● 6510-V-48-0	48"	30C5091		29.37
● 6510-V-60-0	60"	30C5092		29.37

(68987)

TEST LEADS & ACCESSORIES

BNC MALE EACH END CABLE ASSEMBLIES



Molded stress relief boot. **2249-C series:** ideal for most test and measurement applications, RG58C/U, 50Ω. **2249-E series:** ideal for use with TV, video and LAN signals, RG59B/U, 75Ω. **4964 series:** ideal for low power, low frequency measurements.



Mfg. Part No.	Length (in)	Stock No.	Price Each			
			1-9	10-24	25-49	50+
● 2249-C-6	6	91B6405	19.94	17.56	17.38	16.76
● 2249-C-12	12	35F1072	19.94	17.56	17.38	16.76
● 2249-C-24	24	35F1073	19.94	17.56	17.38	16.76
● 2249-C-36	36	35F1074	19.94	17.56	17.38	16.76
● 2249-C-48	48	35F1075	25.07	22.07	21.85	21.08
● 2249-C-60	60	35F1076	25.07	22.07	21.85	21.08
● 2249-C-72	72	89F333	25.07	22.07	21.85	21.08
● 2249-C-120	120	89F332	29.90	26.33	26.07	25.14
● 2249-C-180	180	89F331	36.19	31.86	31.54	30.42
● 2249-C-300	300	88F6303	49.27	43.39	42.95	41.42
● 2249-C-600	600	88F6302	72.37	63.72	63.08	60.84
● 2249-E-12	12	35F1077	21.36	18.81	18.62	17.96
● 2249-E-24	24	35F1078	21.36	18.81	18.62	17.96
● 2249-E-36	36	35F1079	21.36	18.81	18.62	17.96
● 2249-E-48	48	35F1080	25.20	22.19	21.97	21.19
● 2249-E-60	60	35F1081	25.20	22.19	21.97	21.19
● 2249-E-72	72	50F1471	25.07	22.07	21.85	21.08
● 2249-E-120	120	14C7842	30.20	26.59	26.32	25.39
● 2249-E-180	180	98F7840	36.19	31.86	31.54	30.42
● 2249-E-240	240	51B934	42.74	37.63	37.26	35.93
● 2249-E-300	300	97B2360	49.41	43.51	43.07	41.54
● 4964-SS-24	24	89F334	26.24	23.10	22.87	22.06
● 4964-SS-36	36	89F328	27.01	23.78	23.55	22.71
● 4964-SS-48	48	89F329	32.48	28.60	28.31	27.31
● 4964-SS-60	60	89F330	31.92	28.11	27.83	26.84
● 4964-SS-240	20	50B6750	48.37	42.59	42.16	40.66

BNC RIGHT ANGLE EACH END CABLE ASSEMBLIES

● 4276-C-12	1	94F5162	49.09	43.23	42.79	41.27
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BNC MALE CABLE ASSEMBLIES

BNC male/BNC male. 50Ω. 500Vrms, +80°C. (\*)Economy style.



Mfg. Part No.	L	Stock No.	Price Each			
			1-24	25-49	50-99	100+
● BNC-C-18	18"	30F1417	23.38	21.04	20.42	19.81
● BNC-C-24	24"	34F842	23.38	21.04	20.42	19.81
● BNC-C-36	36"	34F843	23.38	21.04	20.42	19.81
● BNC-C-48	48"	44F2636	26.41	23.76	23.06	22.37
● BNC-C-60	60"	44F2638	26.41	23.76	23.06	22.37
● 5697-12*	12"	50F1529	10.95	9.85	9.56	9.28
● 5697-24*	24"	50F1530	10.95	9.85	9.56	9.28
● 5697-36*	36"	50F1531	10.95	9.85	9.56	9.28
● 5697-48*	48"	50F1532	15.83	14.24	13.82	13.41
● 5697-60*	60"	50F1533	15.83	14.24	13.82	13.41
● 5697-72*	72"	50F1534	15.83	14.24	13.82	13.41
● 5697-120*	120"	50F1535	19.19	17.27	16.76	16.26

KELVIN PROBES

- Patented Design for High-Precision Rapid Testing
- Easily Move from One Test Point to Another for Rapid Readings
- Rating: 30VAC/70VDC
- For Use with 4-Wire Kelvin Meters



Designed for use with 4- and 2-wire measurements.

Mfg. Part No.	Description	Stock No.	Price Each
			1-4
6303	Kelvin Probes	03C3869	119.07

KELVIN CLIPS



Accurate four wire measurements. 24" (0.65) long cable features two gold-plated Kelvin clips for low contact resistance, and four color-coded gold-plated banana plugs. Mimirator to banana plug lead is included for grounding or guarding. Rated: 30VAC/70VDC.

Mfg. Part No.	Description	Stock No.	Price Each
● 5940	Kelvin Clips Set for 4-Wire Resistive Measurement	95F1364	217.42

SOIC TEST CLIPS

Spring-loaded clips for testing SOIC and SOJ small outline ICs.



8-, 14-, 16-, 20-, 24-, AND 28- PIN SOIC CLIPS—BODY WIDTHS 0.15" – 0.3"

Mfg. Part No.	Pins	Stock No.	Price Each	
			1-24	25-49
● 5250	8	46F2416	14.24	12.98
● 5251	14	46F2417	14.24	12.98
● 5252	16	46F2418	16.01	14.60
● 5253	20	46F2419	18.55	16.92
● 5254	24	46F2420	27.04	24.66
● 5437	28	89F422	32.85	29.96

32-, 40-, AND 44-PIN SOIC/SOJ CLIPS—BODY WIDTHS 0.30" – 0.60"

Mfg. Part No.	Pins	Dimensions		Stock No.	Price Each	
		A	B		1-24	25-49
● 6107	32	0.870"	0.870"	91F2996	45.79	41.76
● 6108	40	1.070"	1.070"	91F2997	54.30	49.52
● 6109	44	1.170"	1.170"	91F2998	57.16	52.13

SHEATHED 4mm BANANA JUMPER TEST LEAD SETS

Just Added



- Nickel-plated brass plugs
- Nickel-plated beryllium copper spring
- Polypropylene insulator
- Silicone wire insulation, O.D. 0.146" (3.7mm)
- 18 AWG wire



Each jumper test lead set includes one sheathed 4mm banana plug to sheathed 4mm banana plug test lead, and one sheathed 4mm banana plug to sheathed 4mm banana jack patch cord. Plug and housing are molded directly to the cable in an integral one piece design and wire is double crimped. Multi-leaf banana spring is beryllium copper, nickel-plated for extended insertion cycle life and low contact resistance. High strand count silicone insulated wire offers flexibility and high temperature resistance. Can be used with terminal jacks on pages 2233-2234.

Mfg. Part No.	Length (in.)	Color	Stock No.	Price Each
				Each
73087-6-0	6	Black	10R1515	17.11
73087-6-2	6	Red	10R1516	17.11
73087-6-4	6	Yellow	10R1517	17.11
73087-6-6	6	Blue	10R1518	17.11
73087-9-4	9	Yellow	10R1523	17.49
73087-12-0	12	Black	10R1500	17.83
73087-12-2	12	Red	10R1501	17.83
73087-12-4	12	Yellow	10R1502	17.83
73087-12-6	12	Blue	10R1503	17.83
73087-20-4	20	Yellow	10R1505	18.68
73087-24-0	24	Black	10R1507	19.10
73087-24-2	24	Red	10R1508	19.10
73087-24-4	24	Yellow	10R1509	19.10
73087-24-6	24	Blue	10R1510	19.10
73087-36-0	36	Black	10R1511	20.37
73087-36-2	36	Red	10R1512	20.37
73087-36-4	36	Yellow	10R1513	20.37
73087-36-6	36	Blue	10R1514	20.37
73087-72-0	72	Black	10R1519	24.19
73087-72-2	72	Red	10R1520	24.19
73087-72-4	72	Yellow	10R1521	24.19
73087-72-6	72	Blue	10R1522	24.19

CONTINUED



TEST LEADS & ACCESSORIES

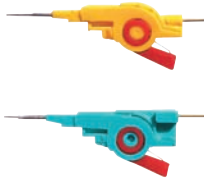
**SHEATHED 4mm BANANA JUMPER TEST LEAD SETS (CONT.)**

Mfg. Part No.	Length (in.)	Color	Stock No.	Price Each
				Each
73087-150-4	150	Yellow	10R1504	32.47
73087-210-4	210	Yellow	10R1506	38.84

(148550)

**MICRO-SMD GRABBERS**

Use with PQFP, SOIC, TSOP and SSOP packages. Thin body allows an unlimited number of clips to be stacked side by side. Maximum frequency is 100MHz. Profile Height: 14 mm (0.55"). Rated for hands free testing in controlled environment up to 45V. Supplied with female to male flying leads.



6311 and 6351

Mfg. Part No.	Description	Lead Pitch	Number of Units	Stock No.	Price Each
					1-5
● 6351	Long Tip (8mm), 2 Colors	0.85mm to 0.2mm (0.03" to 0.01")	10	91B7435	514.95
● 6352	Long Tip (13mm), 2 Colors	1.25mm to 0.3mm (0.05" to 0.01")	10	96B3362	514.95
● 6353	Short Tip (2mm), 2 Colors	1.25mm to 0.3mm (0.05" to 0.01")	10	30K7344	530.39

(84767)

**BASIC AND DELUXE TEST LEAD ACCESSORY KITS**

- 76-081
  - 60" Red and Black PVC Insulated Leads 1000V CAT III 12A
  - Probe Bodies with Replaceable Tips 1000V CAT III 36A
  - Flexible Pincer Clip 1000V CAT III 6A

Mfg. part no. 76-082 contains everything in 76-081 but also includes fully-insulated IEC alligator clips, in black and red; insulated banana plug adapters in black and red; insulated spade lug adapters, in black and red; and spring-loaded tip probes, in black and red.



76-082

Mfg. Part No.	Description	Stock No.	Price Each
			1-4
76-081	Basic Test Lead Accessory Kit	16F7740	35.31
76-082	Deluxe Test Lead Accessory Kit	16F7741	68.53

(5968)

**TEST LEAD SET**

- Low-Cost Test Lead Set for DMMs
- 2mm Tip Probe
- 4mm Sheathed Banana Plugs
- Alligator Clip Finger Guards
- 1000V CAT III, 10A

Flexible PVC jacketed wire measures 1.2M long (1-black, 1-red). Right-angle sheathed DMM banana plugs. Includes gold-plated, phosphor bronze contact alligator clips with finger guards for improved conductivity and retention. CE compliant.



Mfg. Part No.	Description	Stock No.	Price Each
			1-9
76-108A	Test Lead Set	09H0918	7.25

(32172)

**TEST CLIP LEAD KIT**



76-004A

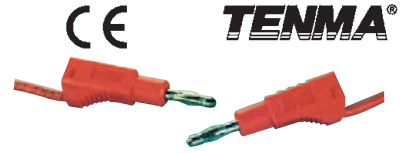
Kit comprised of 8 patch cords: 2 black, 2 red, 1 green, 1 yellow, 1 blue, and 1 white. Every patch cord has miniature hook clips on each end of 50 cm long, PVC wire, 20VAC/60VDC; 2A max. Sold in sets of 8 cords.

Mfg. Part No.	Description	Stock No.	Price Each
			1-24
76-004A	Test Clip Lead Kit	12M5887	33.40

(5955)

**SILICONE PATCH CORDS**

4mm stacking banana plugs on each end of highly flexible silicone-jacketed wire. Rated 12A/1200V. Choice of 2 colors. CE compliant.



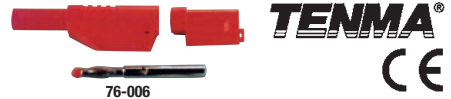
76-008

Mfg. Part No.	Length	Color	Stock No.	Price Each
				1-9
76-008	40"	Red	16F7680	6.34
76-009	40"	Black	16F7681	6.34
76-010	60"	Red	16F7682	7.53
76-011	60"	Black	16F7683	7.53

(5958)

**SHEATHED STACKING BANANA PLUGS**

Fully-insulated plug and jack. When assembled meets IEC1010 CAT III 1000V, 36A safety standards. Choice of 2 colors. Allen wrench required for assembly, ordered separately.



76-006

Mfg. Part No.	Color	Stock No.	Price Each
			1-24
76-006	Red	16F7678	2.58
76-007	Black	16F7679	2.58

(5957)

**RETRACTABLE STACKING PLUG-TO- PLUG TEST LEADS**

- Rated 12A, 750V
  - Resistance <15mohms
- 4mm stacking banana plugs with clear retractable safety sheath. Flexible PVC jacketed wire. Nickel plated contacts. Choice of 2 colors.



Mfg. Part No.	Length	Color	Stock No.	Price Each
				1-24
76-092	20"	Black	84N2134	6.06
76-093	20"	Red	84N2135	6.06
76-120	40"	Black	84N2157	8.13
76-122	40"	Red	84N2158	7.36

(19633)

**MALE BNC ADAPTER-TO-BINDING POSTS**

- Rated 3A, 500VRMS
- BNC male connector to 4mm binding posts. Black thermoplastic body. Black and red binding post insulators.



Mfg. Part No.	Description	Stock No.	Price Each
			1-9
76-005	Male BNC Adapter-To-Binding Posts	16F7677	9.15

(32171)

**UNSHIELDED JUMPERS**

Unshielded jumpers available with standard or mini alligator clip on each end. Feature cadmium-plated steel clips with vinyl plastic boots. All leads are 18 AWG, 300V insulated wire.



SPC 12049



Mfg. Part No.	Clip	Length	Color	Stock No.	Price Each
					1-9
● SPC12049	Standard	1'	Red	95C0317	6.07
● SPC12050	Standard	1'	Black	95C0318	5.99
● SPC12051	Standard	3'	Red	95C0319	6.22
● SPC12052	Standard	3'	Black	95C0320	6.22
● SPC12053	Standard	5'	Red	95C0321	7.07
● SPC12056	Standard	5'	Black	95C0324	7.07
● SPC12054	Mini	1'	Red	95C0322	4.54
● SPC12055	Mini	1'	Black	95C0323	4.69
● SPC12057	Mini	3'	Red	95C0325	6.22
● SPC12058	Mini	3'	Black	95C0326	5.61

(74266)

TEST LEADS & ACCESSORIES

INSULATED ALLIGATOR AND MINI-ALLIGATOR LEAD KITS



BU-00287



Econo-Line lead kits offer skin-tight flexible insulator. All kits have multiple colors to simplify identification. **Mfg. part nos. BU-00285 and BU-00287** include 2 each of black, red, yellow, green, and white. **Mfg. part no. BU-00286** includes 1 each of black, red, yellow, green and white. 22 AWG for all kits. Jaw openings: **mfg. part no. BU-00285:** 1/4" (6.4mm), **mfg. part no. BU-00286:** 3/16" (11.1mm) and **mfg. part no. BU-00287:** 5/16" (7.9mm) max. **Mfg. part no. BU-00285** are sold in packages of 10.

Mfg. Part No.	Description	Length	Stock No.	Price Each	
				1-24	25-49
BU-00286	Alligator	12"	83F8069	5.76	5.39
BU-00285	Mini-Alligator	18"	12P9348	6.11	5.76
BU-00287	Alligator	18"	83F8070	8.64	8.09

(39470)

FULLY INSULATED ALLIGATOR CLIPS



BU-651-0

BU-652-0

BU-654-0

Fully-insulated alligator clips that accept either unshrouded or retractable 4mm banana plugs. Available in 2 colors. **BU-651 series** is 2.24" (57mm) long. **BU-652 series** is 3.24" (82mm) long. Both are IEC 1010 compliant 300V CAT II, 150V CAT III. **BU-654 series** is 3.19" (81mm) long, IEC 1010 compliant 1000V CAT II, 600V CAT III.

Mfg. Part No.	Length	Color	Current	Jaw Opening	Stock No.	Price Each	
						1-99	100-499
BU-651-0	2.24" (57)	Black	10A	0.27"	93B1389	5.42	5.15
BU-651-2	2.24" (57)	Red	10A	0.27"	93B1392	5.42	5.15

SAFETY

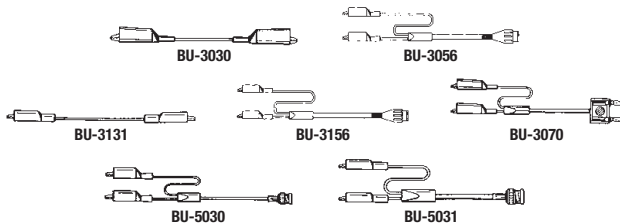
BU-652-0	3.24" (82)	Black	20A	0.27"	95B8434	13.18	12.33
BU-652-2	3.24" (82)	Red	20A	0.27"	95B8439	13.55	12.71

FLANGED

Mfg. Part No.	Length	Color	Current	Jaw Opening	Stock No.	Price Each	
						1-4	5-9
● BU-654-0	3.19" (81)	Black	20A	1.00"	50B5848	11.06	10.44
● BU-654-2	3.19" (81)	Red	20A	1.00"	50B5849	11.06	10.44

(49976)

ALLIGATOR CLIPS



BU-3030

BU-3056

BU-3131

BU-3156

BU-3070

BU-5030

BU-5031

**Mfg. part no. BU-3030** insulated alligator clip both ends.

**Mfg. part no. BU-3056** nickel-plated steel, insulated alligator clips with 2" (51mm) positive lead and 7" (178mm) negative lead. With molded Y-block to insulated BNC Male.

**Mfg. part no. BU-3070** insulated alligator clips, positive and negative with 3" (76.2mm) and 8" (203.2mm), respectively lead wires with molded Y-block to stackable double banana plug.

**Mfg. part no. BU-3131** insulated mini-alligator clip, both ends.

**Mfg. part no. BU-5030** insulated alligator clips, positive and negative with 3" (76.2mm) and 8" (203.2mm), respectively lead wires with molded Y-block to BNC Male.

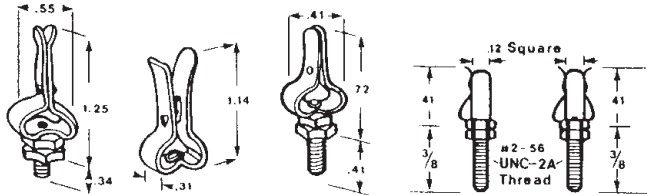
**Mfg. part no. BU-5031** insulated mini-alligator clips, positive and negative with 3" (76.2mm) and 8" (203.2mm), respectively lead wires with molded Y-block to BNC Male.

**Mfg. part nos.** ending with -0 are black, -2 are red.

Mfg. Part No.	Length	Stock No.	Price Each		
			1-24	25-49	50-99
BU-3030-A-24-0	24"	89F463	11.00	9.93	8.96
BU-3030A-24-2	24"	89F464	11.00	9.93	8.96
BU-3131-A-24-0	24"	89F467	10.60	9.56	8.63
BU-3131-A-24-2	24"	89F468	10.60	9.56	8.63
BU-3056-C-24-0	24"	16F3573	26.22	23.56	22.74
BU-3070-C-24-0	24"	90F5728	50.45	45.29	40.96
BU-5030-C-24-0	24"	90F5770	30.25	27.29	24.64
BU-5031-C-24-0	24"	90F5771	30.25	27.29	24.64

(9047)

02 SERIES TEST CLIPS



**Mfg. part no. 02-0** is standard size, #8-32 UNC-2A threaded stud clip. Fits panel up to 0.25" (6.35) thick; 0.550" (13.97) wide, 1.25" (31.75) above board. **Mfg. part no. 02-60** is standard size, studless clip with extruded hole tapped to receive #8-32 UNC-2A threaded screw (not supplied) to adjust tension; 0.576" (14.63) wide, 1.144" (29.06) above board. **Mfg. part no. 02-20** is miniature size, #6-32 UNC-2A threaded stud clip. Fits panel to 0.25" (6.35) thick; 0.406" (10.31) wide, 0.719" (18.26) above board. **Mfg. part no. 02-41** is ultraminiature size single-unit clip, 0.406" (10.31) above board; requires 0.312" (7.92) x 0.125" (3.18) panel area. **Mfg. part no. 02-42** is ultraminiature size, double-unit clip which requires 0.25" (6.35) x 0.125" (3.18) panel area.

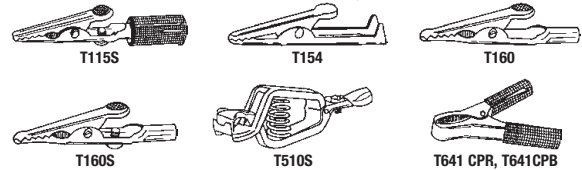
Mfg. Part No.	Mounting	Stock No.	Price Each	
			1-24	25-49
● 02-0	Standard Thread Stud	28F550	3.08	2.76
● 02-60	Studless	57F2651	3.14	2.81
● 02-20	Miniature Thread Stud	28F414	3.48	3.12
● 02-41	Ultraminiature Single	28F624	3.48	3.12
● 02-42	Ultraminiature Double	28F625	3.72	3.33

(5061)

ALLIGATOR CLIPS



HOFFMAN PRODUCTS



T115S

T154

T160

T160S

T510S

T641 CPR, T641CPB

All are steel with nickel plating. **Suffix S** in mfg. part no. indicates clip with screw.

Mfg. Part No.	Amp	Clip Length	Handle Insulat.	Max. Jaw Opening	Pkg. of	Stock No.	Price Each
							1-49
T115SR	10	2.3"	Red	0.32"	Each	90F7186	0.48
T115SB	10	2.3"	Black	0.32"	Each	90F7187	0.48
T154	5	1.2"	None	0.24"	Each	90F7188	0.17
T641CPR	50	3.0"	Red	0.87"	Each	90F7189	0.62
T641CPB	50	3.0"	Black	0.87"	Each	90F7190	0.62

Mfg. Part No.	Amp	Clip Length	Handle Insulat.	Max. Jaw Opening	Pkg. of	Stock No.	Price Each
							1-4
T160	10	2.0"	None	0.32"	500	42F2393	90.85
T160S	10	2.0"	None	0.32"	500	42F2394	70.37
T510S	10	2.0"	None	0.43"	500	42F2398	241.55

(5478)

BNC MALE BOTH ENDS



BU-5050



**BU-5050-B series** has a male BNC Connector at both ends. Gold-plated center contact and silver plated bodies. Coaxial cable is shielded RG58C/U, MIL-C17F, 50 ohm.

Mfg. Part No.	Length	Stock No.	Price Each		
			1-24	25-49	50-99
BU-5050-B-12-0	12"	89F470	12.09	11.32	9.88
BU-5050-B-24-0	24"	89F471	12.09	11.32	9.88
BU-5050-B-36-0	36"	93F9739	12.09	11.32	9.88
BU-5050-B-60-0	60"	16F3544	20.10	18.87	16.03

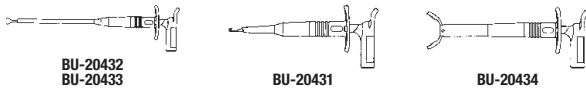
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See our huge selection of MCUs, MPUs & DSPs in this catalog and online.

(148861)

TEST LEADS & ACCESSORIES

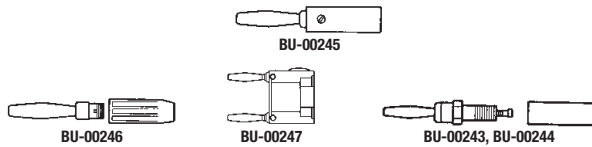
PLUNGER-TYPE TEST CLIPS



**BU-20431 series** insulated plunger hook clips with spring-loaded rigid hook for connection to terminals up to 0.059" (1.5). IEC 1010 compliant rated 1000V 3A. **BU-20432 series** insulated hook clips with 2 fine steel wire hooks for connection to small circuitry. Flexible shaft. IEC 1010 compliant rated 1000V 1A. **BU-20434 series** insulated plunger jaw clips feature steel alligator clip type jaw that opens up to 0.78" (19.91) when plunger is depressed. IEC 1010 compliant rated 1000V 15A. **BU-20431 and BU-20432 series** and **BU-20433 series** are UL listed and CE compliant. Suffix 0: black, suffix 2: red.

Length	Black Mfg. Part No.	Stock No.	Red Mfg. Part No.	Stock No.	Price Each	
					1-24	25-49
4.6" (117.5)	BU-20431-0	93F9781	BU-20431-2	93F9782	8.03	7.58
5.3" (133.4)	BU-20432-0	93F9783	BU-20432-2	93F9784	11.86	11.19
5.3" (133.4)	BU-20434-0	93F9785	BU-20434-2	93F9786	34.46	32.51
7.3" (184.1)	BU-20433-0	16F3557	BU-20433-2	16F3558	13.39	12.63

GENERAL-PURPOSE BANANA PLUGS, BANANA JACKS AND SAFETY SOCKETS



All general-purpose banana plugs and jacks are rated 15A. Size: 0.16" (4). Also available in red and other styles; go online or call Newark.

BANANA PLUGS AND JACKS

Mfg. Part No.	Description	Stock No.	Price Each	
			1-24	25-49
BU-00245-0	Banana Plug with Set Screw, Black	93F9718	2.56	
BU-00246-0	Banana Plug with Tapered Handle, Black	93F9720	1.76	
BU-00249-0	Stackable Banana Plug, Black	37B8573	3.54	
BU-00247-0	Dual Banana Plug, Black	93F9710	4.07	
BU-00243-0	Solderless Banana Plug, Black	93F9716	3.07	
BU-00244-0	Solderless Banana Plug, Hex Design, Black	93F9714	3.07	
BU-00233-0	Insulated Banana Jack, Black	93F9819	1.76	

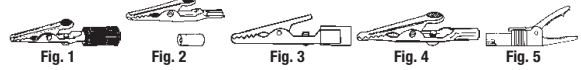
5-AMP MINIATURE ALLIGATOR CLIPS



Plated steel except "C" suffix burnished copper. Mfg. part nos. BU-30 and BU-30C for #20 wire or smaller. Mfg. part no. BU-30BL barrel tail; solder or crimp connection. Mfg. part no. BU-30TBO threaded barrel tail; connects to 6-32 threaded male test prod. Mfg. part nos. BU-34 and BU-34C for #20 wire or smaller; solder connection.

Mfg. Part No.	Fig.	Clip Length	Stock No.	Price Each			
				1-24	25-49	50-99	100-499
● BU-30	2	1 3/32"	28F528	0.49	0.44	0.40	0.36
● BU-30C	2	1 3/32"	28F529	0.74	0.67	0.61	0.55
● BU-30BL	4	1 1/4"	46F3810	0.47	0.42	0.38	0.35
● BU-30TBO	3	1 1/2"	87F3721	1.05	0.95	0.86	0.78
● BU-34	1	1 3/32"	28F496	0.88	0.79	0.72	0.65
● BU-34C	1	1 3/32"	28F497	1.17	1.05	0.95	0.87

10A ALLIGATOR CLIPS



All clips are plated-steel except for mfg. part nos. BU-60CHS, BU-63C, BU-60C, BU-60CS and BU-70CS which are burnished-copper, and mfg. part no. BU-65 which is plated-brass. Mfg. part nos. BU-60CHS and BU-60HS have insulated acetate handle and 6-40 screw. Mfg. part no. BU-60HPR has 0.080" I.D. barrel with insulated acetate handle. Mfg. part nos. BU-63 and BU-63C have 2-piece flexible vinyl insulation and barrel takes wire or banana plug. Mfg. part nos. BU-60 and BU-60C have lip for soldering. Mfg. part nos. BU-60S and BU-60CS are the same as mfg. part nos. BU-60 and BU-60C except have a 6-40 screw. Mfg. part no. BU-60X is the same as BU-60 except solid stainless steel. Mfg. part no. BU-60U has a U-shaped barrel. Mfg. part no. BU-60TBO has a threaded barrel. Mfg. part no. BU-70S is rated 5A and has a 6-40 screw. Mfg. part no. BU-65 is an insulated, plug-on clip rated 30A, UL listed with jaws that open to 3/4". NOTE: Mfg. part nos. with suffix 0 are: black, suffix 2 are: red. Other colors available; go online or call Newark.

Mfg. Part No.	Fig.	Clip Length (in.)	Stock No.	Price Each		
				1-24	25-49	50-99
BU-60CHS-0	1	2 1/32"	28F506	1.91	1.72	1.55
BU-60CHS-2	1	2 1/32"	28F505	1.91	1.72	1.55
BU-60HS-0	1	2 1/32"	28F504	1.27	1.14	1.03
BU-60HS-2	1	2 1/32"	28F503	1.27	1.14	1.03
● BU-60HPR-0	2	2 5/64"	16F6684	0.90	0.82	0.79
● BU-60HPR-2	2	2 5/64"	16F6685	0.90	0.82	0.79
● BU-60PR-2	2	1 3/32"	28F464	1.01	0.91	0.83
● BU-70CS	2	1 1/16"	28F532	1.21	1.09	0.98
● BU-70S	2	1 1/16"	28F531	0.97	0.88	0.79
BU-63-0	3	2 1/4"	28F533	1.85	1.67	1.51
BU-63-2	3	2 1/4"	28F534	1.85	1.67	1.51
BU-63C-0	3	2 1/4"	28F535	2.49	2.24	2.03
BU-63C-2	3	2 1/4"	28F536	2.49	2.24	2.03
● BU-60	4	1 3/32"	28F500	0.59	0.53	0.44
● BU-60C	4	1 3/32"	16F3572	0.90	0.82	0.80
● BU-60CS	4	1 3/32"	28F502	1.46	1.32	1.19
● BU-60S	4	1 3/32"	28F501	0.80	0.72	0.65
● BU-60U	4	1 3/32"	46F3809	0.59	0.53	0.48
● BU-60X	4	1 3/32"	83F8060	1.17	1.09	0.96
● BU-60TBO	4	1 3/32"	82C0881	1.19	1.07	0.97
● BU-65-0	5	3/4"	93F9833	8.29	7.48	6.75
● BU-65-2	5	3/4"	93F9831	8.29	7.48	6.75

GENERAL-PURPOSE "PEE-WEE" CLIPS



Mfg. part no. BU-45 plated steel finish; rated 5A. Mfg. part no. BU-45C burnished copper finish; rated 10A. Clip length: 1 1/32".

Mfg. Part No.	Jaws Open (in.)	Stock No.	Price Each			
			1-24	25-49	50-99	100-499
BU-45	5/16"	28F513	0.97	0.88	0.79	0.72
BU-45C	5/16"	28F514	1.61	1.46	1.32	1.20

CROCODILE SOLID COPPER CLIPS

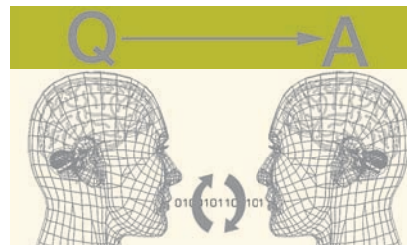
Mfg. part no. BU-50C has beryllium copper piercing needle in top jaw; 6-32 brass screw, rated 20A. Mfg. part no. BU-51C same as mfg. part no. BU-50C, but no needle; clip length: 2 3/32", 6-32 steel screw. Mfg. part nos. BU-85 and BU-85C are 10A clips; clip length 2 1/8"

BU-50C	0.500	28F510	3.88	3.50	3.16	2.88
BU-51C	0.500	28F511	2.78	2.51	2.26	2.06
● BU-85	0.313	28F507	1.09	0.98	0.89	0.81
● BU-85C	0.313	28F508	2.10	1.89	1.71	1.56

ALLIGATOR TEST CLIPS

Mfg. part no. BU-27 solid copper, crimp or screw connection; jaw opening 5/8", rated 40A. Mfg. part no. BU-55 is an economy steel clip with screw connections; jaw opening 1/16", rated 10A.

● BU-27CG	1/4"(6.3) L-Copper	16F3583	2.41	2.17	1.96	1.79
● BU-27CGW	1/8"(12.7) L-Copper	16F3584	2.41	2.17	1.96	1.79
BU-55	Economy Steel Clip	16F3582	0.78	0.71	0.70	0.65



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TEST LEADS & ACCESSORIES

KELVIN CLIPS (10-AMP)

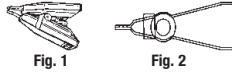


Fig. 1

Fig. 2

Used for 4-wire resistance measurement systems. Jaws are electrically isolated when open, shorted when closed. Mfg. part no. BU-75K silver/gold tip contacts, 18 AWG wire. Mfg. part no. BU-78K features a current path for the source and a circuit path for the sense gold contacts, 20 AWG wire.

Mfg. Part No.	Fig.	Clip Length	Jaws Open	Stock No.	Price Each			
					1-24	25-49	50-99	100-499
BU-75K	1	1 1/8"	3/16"	90F1604	20.90	18.85	17.02	15.51
● BU-78K	2	2.28"	1/2"	84F764	88.66	79.98	72.21	65.81

(9583)

HEAVY-DUTY TEST AND BATTERY CLIPS

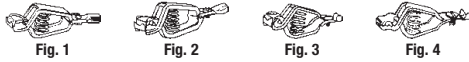


Fig. 1

Fig. 2

Fig. 3

Fig. 4

A range of versatile heavy-duty clips designed for battery operated equipment and automotive use etc. Mfg. part nos. with suffix "A" are steel; suffix "C" are burnished copper; suffix "PN" are unmarked; suffix "PS" marked positive.

HEAVY-DUTY CLIPS

Mfg. Part No.	Fig.	Amps	Clip Length	Jaws Open	Stock No.	Price Each			
						1-24	25-49	50-99	100-499
BU-11APN	1	100	6"	1 3/8"	16F6674	7.44	6.80	6.63	6.16
BU-11APS	1	100	6"	1 3/8"	16F6675	7.62	6.98	6.69	6.34
BU-11CPN	1	200	6"	1 3/8"	16F6676	15.20	13.89	13.30	12.59
BU-11CPS	1	200	6"	1 3/8"	16F6677	15.20	13.89	13.30	12.59
● BU-33C	1	300	7 3/4"	1 3/16"	28F522	45.40	40.95	36.98	33.70
BU-21APN	2	50	4 7/8"	1 1/8"	16F6678	2.85	2.60	2.53	2.36
BU-21APS	2	50	4 7/8"	1 1/8"	16F6679	2.85	2.60	2.53	2.36
BU-21CPN	2	100	4 7/8"	1 1/8"	16F6680	7.86	7.19	7.00	6.51
BU-21CPS	2	100	4 7/8"	1 1/8"	16F6681	7.86	7.19	7.00	6.51
BU-24APN	3	25	2 7/32"	3/4"	16F6682	1.46	1.34	1.30	1.21
BU-24APS	3	25	2 7/32"	3/4"	16F6683	1.46	1.34	1.30	1.24
● BU-25	4	40	3"	3/4"	90F2011	1.96	1.77	1.60	1.46
● BU-25C	4	75	3"	3/4"	28F519	4.87	4.40	3.97	3.62

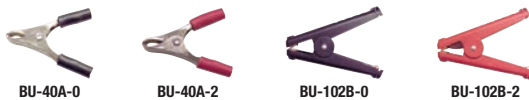
GENERAL-PURPOSE CLIPS

Mfg. part nos. BU-27, BU-48B are steel; mfg. part nos. BU-27C, BU-48C are burnished copper.

BU-27	4	20	2 1/16"	5/8"	28F523	1.40	1.26	1.14	1.04
BU-27C	4	40	2 1/16"	5/8"	28F524	2.31	2.09	1.88	1.72
● BU-48B	4	10	2"	1/2"	28F515	1.28	1.16	1.05	0.96
● BU-48C	4	20	2"	1/2"	28F538	1.81	1.63	1.47	1.34

(9067)

PLIER-TYPE BATTERY CLIPS



BU-40A-0

BU-40A-2

BU-102B-0

BU-102B-2

BU-41 series clips lock on both side and top terminal batteries, 9/16" ID lug for #2 AWG wire. Jaws open: 1 1/8". Clip length: 6". BU-40 and BU-46 series clips are ideal for trickle chargers and timing lights. Jaws open: 1 1/4". Clip length: 3 7/8". BU-102B series clips are similar to BU-41 series clips except they are fully insulated. BU-102BK series are fully-insulated Kelvin clips. BU-102W series are fully-insulated clips ideal for welding applications. BU-X15400 series epoxy coated steel clips with copper-plated jaws that open 1 1/2". Clip length: 6 3/4". All clips have vinyl insulating sleeves except those that are fully-insulated or epoxy-coated. NOTE: "A" in mfg. part no. indicates copper-plated steel; "C" indicates burnished solid copper. Suffix 0 in type number indicates black; suffix 2 indicates red. Other colors are available; go online or call Newark.

Mfg. Part No.	Current (A)	Color	Stock No.	Price Each
				1-99
BU-40A-0	15	Black	20J3360	0.78
BU-40A-2	15	Red	20J3361	0.78
BU-40C-0	20	Black	20J3362	1.27
BU-40C-2	20	Red	20J3363	1.27
BU-46A-2	50	Red	28F468	1.85
BU-46A-0	50	Black	28F467	1.85
BU-46C-2	75	Red	46F3812	3.28
BU-46C-0	75	Black	46F3811	3.28
BU-41A-2	200	Red	28F465	6.64
BU-41A-0	200	Black	28F466	6.64
BU-41C-2	400	Red	90F1267	19.50
BU-41C-0	400	Black	87F3651	19.50
● BU-102B-0	300	Black	20J3344	20.87
● BU-102B-2	300	Red	20J3345	20.87
● BU-102BK-0	300	Black	20J3346	26.68
● BU-102BK-2	300	Red	20J3347	26.68

CONTINUED

PLIER-TYPE BATTERY CLIPS (CONT.)

Mfg. Part No.	Current (A)	Color	Stock No.	Price Each
				1-99
● BU-102W-0	500	Black	20J3348	18.01
● BU-102W-2	500	Red	20J3349	18.01
BU-X15400-0	400	Black	51B571	10.10
BU-X15400-2	400	Red	51B572	10.39

(9068)

FLEXIBLE VINYL INSULATORS FOR CLIPS



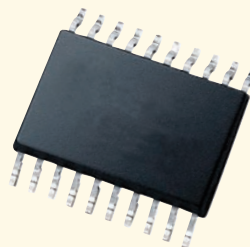
BU-13-2

Protective flexible vinyl insulators. Mfg. part nos. with suffix 0 = black; suffix 2 = red. Other colors available; go online or call.

Mfg. Part No.	For Clips	Stock No.	Price Each			
			1-24	25-49	50-99	100-499
BU-13-2	BU-11-A, BU-11-C	28F488	5.05	4.55	4.11	3.75
BU-13-0	BU-11-A, BU-11-C	28F489	5.05	4.55	4.11	3.75
BU-23-2	BU-21-A, BU-21-C	28F484	2.37	2.14	1.93	1.76
BU-23-0	BU-21-A, BU-21-C	28F485	2.37	2.14	1.93	1.76
BU-26-2	BU-24-A, BU-25, BU-25-C	28F482	1.75	1.58	1.43	1.30
BU-26-0	BU-24-A, BU-25, BU-25-C	28F483	1.75	1.58	1.43	1.30
BU-29-2	BU-27, BU-27-C	28F486	1.17	1.05	0.95	0.87
BU-29-0	BU-27, BU-27-C	28F487	1.17	1.05	0.95	0.87
BU-31-2	BU-30-BL, BU-30-TBO	87F3718	0.41	0.37	0.34	0.31
BU-31-0	BU-30-BL, BU-30-TBO	87F3719	0.41	0.37	0.34	0.31
BU-32-2	BU-30, BU-30-C	28F472	0.37	0.34	0.31	0.28
BU-32-0	BU-30, BU-30-C	28F473	0.37	0.34	0.31	0.28
BU-35-2	BU-33-C	28F480	12.78	11.48	10.38	9.48
BU-35-0	BU-33-C	28F481	12.78	11.48	10.38	9.48
BU-36-2	BU-34, BU-34-C	28F499	0.37	0.34	0.31	0.28
BU-36-0	BU-34, BU-34-C	28F498	0.37	0.34	0.31	0.28
BU-47-2	BU-45, BU-45-C	28F476	0.45	0.41	0.37	0.34
BU-47-0	BU-45, BU-45-C	28F477	0.45	0.41	0.37	0.34
BU-49-2	BU-48-B, BU-48-C	28F478	1.05	0.95	0.86	0.78
BU-49-0	BU-48-B, BU-48-C	28F479	1.05	0.95	0.86	0.78
BU-62-2	All BU-60 Series	28F492	0.41	0.37	0.34	0.31
BU-62-0	All BU-60 Series	28F493	0.41	0.37	0.34	0.31
BU-87-2	BU-85, BU-85-C	28F490	0.68	0.62	0.56	0.51
BU-87-0	BU-85, BU-85-C	28F491	0.68	0.62	0.56	0.51

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