

Programmable Dataloggers

OM-5200A Series
Wall Mount Units
\$3395
Basic Unit

The OM-5000 series has been discontinued. Please see the DR130 as a possible alternative or contact our Temperature Engineering department.



- ✓ Automatically Measures, Monitors and Records Temperatures and Voltages
- ✓ Wallmount and Benchtop Styles Available
- ✓ Easy 10 or 40 Channels Programming from Keyboard
- ✓ Built-in 24 Character Printer
- ✓ RS-232 Communication
- ✓ Global High and Low Alarm Relays
- ✓ External Print Trigger
- ✓ Data Cache with 14.5 KByte Buffer Memory Standard
- ✓ Comprehensive Windows-Based Software for Analyzing, Documenting, Graphing and Easy Reporting of the Results



OM-5100A Series
Benchtop Units
\$3395
Basic Unit

Molded Transition Joint Thermocouple Probes sold separately, \$20 ea., Models KTIN-14U-12, JTIN-14U-12 and TTIN-14U-12 shown. See page A-83.



Programmable Dataloggers

The OM-5000 Series are compact dataloggers that measure, display, record and print data from a variety of inputs including thermocouples and voltage sources. For applications in various operating environments, models are available for either wall mounting or benchtop use. An exceptionally bright display and high resolution printer assure easy operation of the units. Using a complete alphanumeric character set, the 16-digit vacuum fluorescent display prompts the user while programming the unit. When logging a process, the display shows time, channel number and the value of the reading with units. The display is also used to view the contents of the 14.5 kilobyte buffer data cache which is capable of holding up to 7250 data points. The data cache, buffer memory provides temporary storage to allow reviewing data before printing or downloading. The integral thermal printer provides excellent sharpness and readability and an expanded 24 character line.

Completely programmable from the keyboard, input parameters include: current data, time and print interval, the contents and format of the printout, the configuration of each channel by sensor type, the number of channels scanned and skipped, scaling of the display, high and low alarms, engineering units, default unit of temperature, and nonvolatile storage of the system in an electrically programmed RAM.

The OM-5000's will accept a wide variety of inputs: 7 different types of thermocouples as well as voltage inputs (0 to 2 V) in any channel. Temperature resolution is 0.1 degree, and voltage resolution is 100 microvolts at 2 volts. To output data, two-way RS-232 communication is standard. An optional alarm board, OM-5000-ARB, will control up to 10 channels with 1 high and 1 low relay per channel with indicator lights. The relay board, which includes power supply, can be daisy-chained to 40 channels. All accessory alarm inputs and outputs are optically isolated or employ relay contact closures.

Specifications

THERMOCOUPLE INPUTS

Types: J, K, T, E, R, S, B

Input Impedance: 10 mΩ

Lead Resistance Effect: Less than 20 μV per 400 Ω

Cold Junction Compensation: 0 to 50°C (32 to 122°F)

Thermocouple Short to AC Protection: 120 Vac

Common Mode Voltage: 1500 Vac

Common Mode Rejection Ratio: dc to 50/60 Hz: 160 db

Normal Mode Rejection Ratio: 50/60 Hz: 50 db

Cold Junction Error:

0.5°C (0.9°F) max, 10 to 40°C (50 to 104°F)

VOLTAGE INPUTS

Range: ±2 V

CMRR: >120 dB, dc to 60 Hz

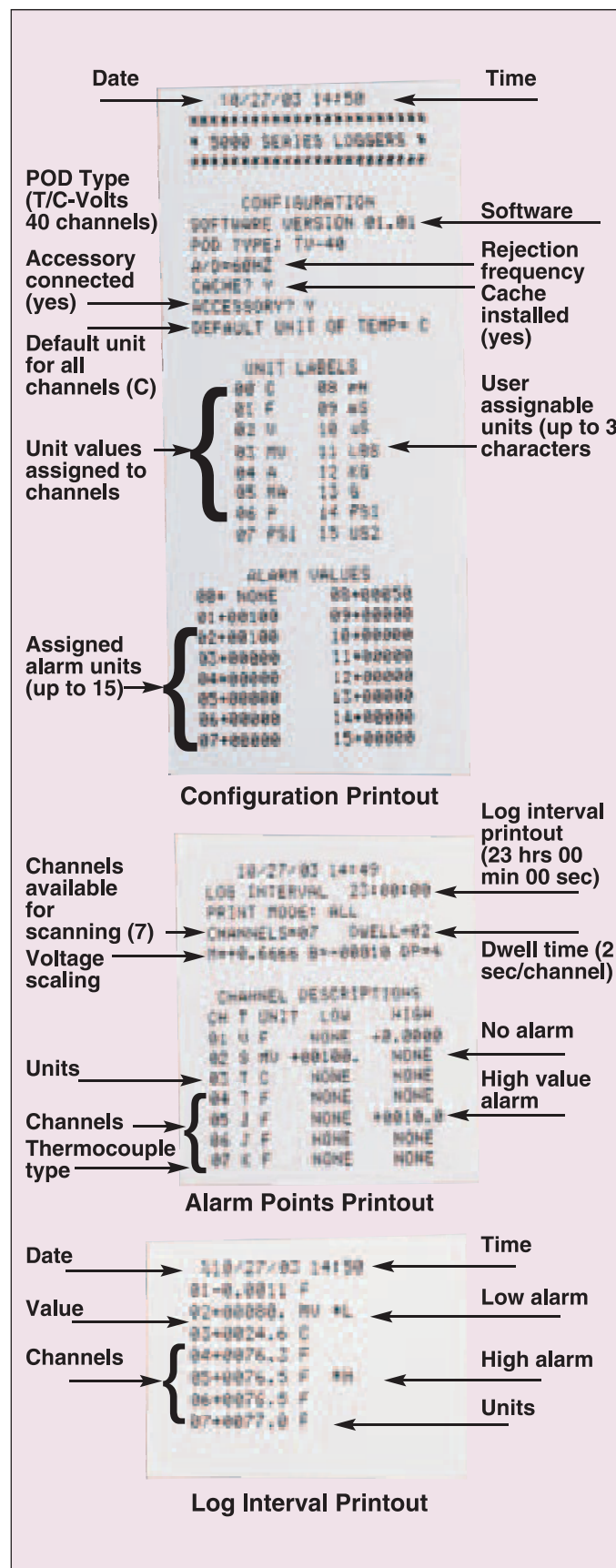
NMRR: >75 dB CMV: 1500 Vac

Input Impedance: 1 mΩ

Bias Input Current: 7 nA

Overvoltage Protection: 240 Vac, RMS

Resolution: 100 μV



Programmable Dataloggers

GENERAL

RS-232-C Interface: Programmable baud rate, 9-pin "sub-D" connector

Dwell Time:

2 to 10 seconds/channel

Display:

16-digit vacuum fluorescent

Operating Temperature

Range: 0 to 50°C (32 to 122°F)

Storage Temperature Range:

-25 to 75°C (-13 to 167°F)

Power Requirements, 120 Vac

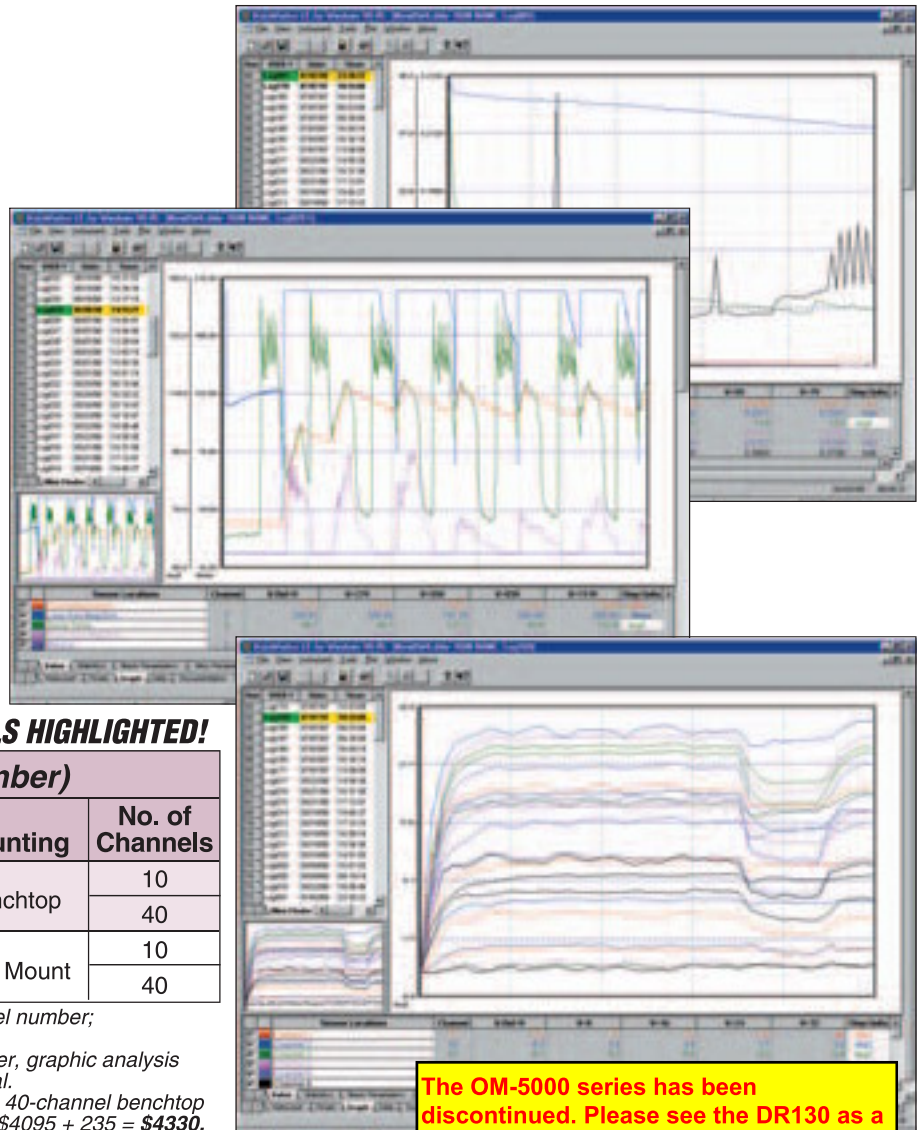
or 230 Vac: 700 mA peak, 50 mA non-printing, 100 mA printing

Dimensions:

28 H x 25 W x 10 cm D
(11 x 10 x 4")

Weight: 4 kg (9 lb)

Paper: 25 m (82') roll;
approx. 6,560 lines/roll



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)				
Model Number	Price	Inputs Type	Mounting	No. of Channels
OM-5110A	\$3395	TC/Voltage	Benchtop	10
OM-5140A	4095	TC/Voltage		40
OM-5210A	3395	TC/Voltage	Wall Mount	10
OM-5240A	4095	TC/Voltage		40

For 230 Vac power, add suffix "-230V" to model number; no additional charge.

Each datalogger comes with roll of printer paper, graphic analysis software, RS-232 cable, and operator's manual.

Ordering Example: OM-5140A, T/C, Voltage, 40-channel benchtop datalogger, plus OM-5000-CC, carrying case, \$4095 + 235 = \$4330. OCW-3 OMEGACARESM extends standard 1-year warranty to a total of 4 years (\$350), \$4095 + 350 = \$4445.

Accessories

Model No.	Price	Description
OCAT-F-10	\$69	Spare RS-232 cable for PC, 3 m (10')
OM-5000-P2	37	12 Vdc cable with lighter plug
OM-5000-ARB	895	20 alarm output relay board
OM-5000-PPC	385	12 Vdc battery pack and charger
OM-5000-CC	235	Carrying case for OM-5100 loggers
OM-5000-RP	37	5 rolls printer paper (80'/roll)

Operating Range

Type	Range °F	Range °C	Resolution	Conformity Error (°C)
J	-265 to 1400	-165 to 760	0.1°F	0.08
K	-150 to 2282	-101 to 1250	0.1°F	0.10
T	-158 to 752	-105 to 400	0.1°F	0.10
E	-220 to 1225	-140 to 660	0.1°F	0.09
B	600 to 3272	315 to 1800	1.0°F	1.00
S	-58 to 3029	-50 to 1665	1.0°F	0.9
R	-58 to 3029	-50 to 1665	1.0°F	0.9

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OM-5000 Series Accessories

OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners





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• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters