OpenHMI™ WW Operator Interface Products

OpenHMI™
POWERED BY
Wonderware®

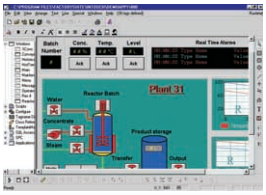
FEATURES

- Microsoft® Windows®-based development and runtime software
- 7.7″ to 15″ color flat panel display
- Operator input through a combination of integrated touchscreen, keypad, and/or mouse
- Built-in (3400 series) or optional (3500 series) 10Base-T/100Base-TX Ethernet
- A wide range of drivers and I/O servers for the most popular control devices
- Optional industrial communication network interface
- AMD® AM5X86™ CPU (3400 series only); Intel® Celeron™ or Pentium® III CPU up to 700 Mhz (3500 series)
- PC/104 expansion (3400 series); ISA and PCI expansion (3500 series)
- Graphic operator instruments
- Alarming
- Real-Time Trending
- Recipes
- OPC client support (optional)
- NEMA 4/4X/12 front panel
- UL listed for hazardous locations: Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F and G

OVERVIEW

Xycom Automation revolutionizes the operator interface market by offering out-of-the-box, preconfigured, pretested solutions. OpenHMI™ WW operator interface products combine the best industrial PCs with a full-featured Human-Machine Interface (HMI) software package that can be used for applications ranging from simple operator input device replacement to supervisory control and data acquisition (SCADA) applications. Now OEMs, systems integrators, and end-users can reduce the development time and costs of high-end operator interface solutions with an integrated solution.

OpenHMI WW software is powered by Wonderware® and consists of two components: the OpenHMI WW development software (OpenHMI WW Configurator) and the OpenHMI WW runtime workstation. The user develops the HMI application on a desktop, laptop, or industrial PC with the OpenHMI WW Configurator, and then transfers the completed application to the OpenHMI WW runtime workstation. The OpenHMI WW runtime software is preloaded on the OpenHMI WW runtime workstation. Xycom Automation offers four runtime workstation variations. There are two OS options, Windows® 95 and Windows NT® 4.0, and two different tag limits: 500 tags and 1000 tags. OpenHMI WW workstations are available with 7.7″, 10.4″, 12.1″, and 15″ LCD displays. NEMA sealed front panel options include keypad, touchscreen, integrated industrial mouse, and combinations of these features.



Development Software

Runtime Workstation

XYCOM AUTOMATION
a subsidiary of Pro-face America

OPENHMI WW HMI BENEFITS

Get Exactly What You Need

OpenHMI WW industrial PCs offer a scalable hardware and software solution. From the operating system to the display size and expansion options, you can select a cost-effective industrial PC scaled to application specific requirements.

Get Started Quickly

Configuration wizards, convenient tools, and preloaded software make OpenHMI applications easy to build and the industrial PC is practically ready to run right out of the box.

Reuse Your Application

Graphic panels and scripting developed for an application for one plant floor network will run on industrial PCs connected to many different networks. You aren't limited to a single proprietary network.

Depend on It

Xycom Automation leads the industry in reliability, service, and support with an optional five year warranty unmatched in the industry.

MORE WITH OPENHMI WW

OpenHMI WW industrial PC runtime workstations include all the features of a basic operator interface, plus more advanced functionality not found in competitive products.

Most Other Operator Interfaces

- Create panels with proprietary software
- Connect to a single PLC network and one serial printer
- Character-based graphic and text displays
- Limited hardware options

Our OpenHMI WW Runtime Interface

- Powered by industrial HMI software
- Connect to different PLCs and industrial networks
- Communicate with Ethernet-connected databases, networks, and devices
- Fully animated, high-resolution graphics
- Full range of display, expansion, and operator input options

Talk to Anything, Anywhere

The broadest support for industrial networks allows simultaneous connections to nearly any set of devices. Through Microsoft and other enabling technologies, you can communicate with Ethernet connected products and databases. Exchange plant floor data with office applications and see what's happening from the plant floor to corporate headquarters.

Leave Your Options Open

You can add functionality to your HMI application through standard PC technologies. OpenHMI industrial PCs make it easy for end users and vendors to use off-the-shelf hardware and software, including programming tools, for application specific requirements.

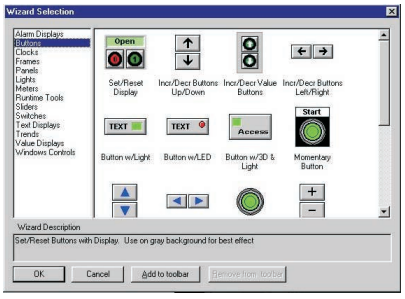
Outstanding Value

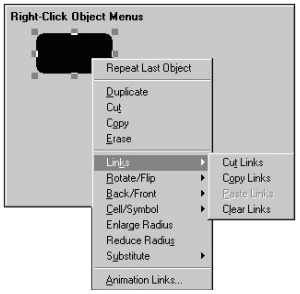
Wonderware HMI software is one of the most widely used open architecture HM/SCADA software packages, with a proven track record worldwide. OpenHMI WW brings most of that functionality to you at an incredible price. The features it cannot support include Quick Functions, Historical Trending and Logging, Indirect Addressing, Alarm Logging, Remote Referencing, Supertags, SQL, SPC, and Local Variables in Scripts.

OPENHMI WW HMI CAPABILITIES AND FEATURES

Graphic Interface and Object Oriented Database

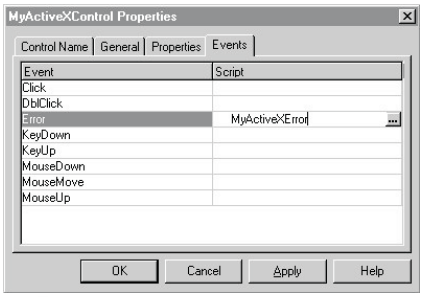
- Windows interface, including toolbars, fill-in-the-blank dialogs, pull-down menus
- Wizards to add predefined instruments, symbols, and other graphics
- Graphic operator instruments, including pushbuttons, meters, sliders, switches, text and numeric displays, LED-style indicators
- Fully animated, high-resolution graphics
- Multiple displays on one workstation
- Applications developed in one screen resolution can be converted to another
- Application Exporer





Open Architecture and Industry Standards

- Microsoft DDE communication to any Windows application that also supports DDE
- Can add third-party ActiveX controls
- Can import graphics in PC file formats
- Connect to other applications and networks



Trending

- Real-time trending

Alarms

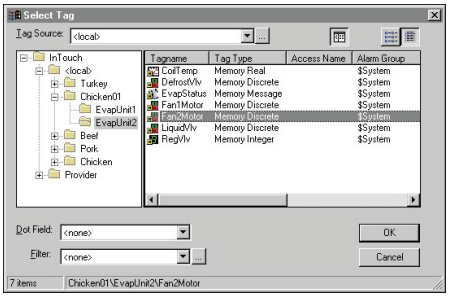
- Alarm monitoring and reporting

Recipes

- Recipe management to establish setpoints

Scripting

- Over 100 different functions
- Application, Window, Key, Condition, Data Change, Action Pushbutton, and ActiveX Event Scripts
- Event-driven triggering of actions in response to data changes, conditions, and user input



Security

- Password-protected runtime security

COMMUNICATIONS

OpenHMI WW supports communication with a variety of PLCs, networks, and other I/O devices. A partial list is given below; for a complete and up-to-date list, see **www.xycom.com**. OpenHMI WW also supports data transfer through NETDDE and OPC.

Device Drivers

- **Allen-Bradley 1784-KT†, Ethernet Direct, Serial**
- **Allen-Bradley Data Highway Plus‡**
- **DeviceNet#**
- **GE Fanuc CCM2, GE Fanuc Genius†(Windows 95 only), Host Communications (HCS)†, Series 90 SNP**
- **Interbus S#**
- **JBUS**
- **Mitsubishi A-Series**
- **Modicon Ethernet, MODBUS**
- **Modicon MODBUS Plus‡ (Windows NT only)**
- **OMRON Host Link, SYSMAC NET†**
- **OPCLink Server§**
- **Profibus DP#**
- **Reliance AutoMate Serial, AutoMax PC Link†, R-Net Direct Link†**
- **Siemens/Texas Instruments 305/405 CCM, 405 MODBUS, 3964R, SIMATIC NET S7†, SIMATIC TI CVU TIWAY†, SIMATIC TI Direct, SIMATIC TI TIWAY†, SINEC H1†(Windows 95 only), SINEC H1 CP 1413†, SINEC L2 FDL†, SINEC L2 FDL A2†**
- **Square D SY/ENET(Windows NT® only), SY/LINK†, SY/MAX Point-to-Point**
- **S-S Technologies 5136-SD†**
- **Telemecanique Xway†**
- **Wonderware WWRSLinx(Windows NT® only)**

†Requires additional hardware not available from Xycom Automation.
‡Requires additional hardware.
§Requires additional communication support software or a software license.
#Requires additional hardware and communication support software or a software license.

HARDWARE CONFIGURATIONS

	3408KP, 3408T	3410KP(T), 3410T	3412KP(T), 3412T
Display	7.7" color flat panel, 640 x 480 (VGA)	10.4" color flat panel, 640 x 480 (VGA)	12.1" color flat panel, 800 x 600 (SVGA)
Operator Input	51-position keypad (KP) or touchscreen (T)	63-position keypad (KP) and/or touchscreen (T)	63-position keypad (KP) and/or touchscreen (T)
Processor	AMD AM5x86	AMD AM5x86	AMD AM5x86
Runtime OS	Windows 95, Windows NT	Windows 95, Windows NT	Windows 95, Windows NT
Ethernet	Built-in 10Base-T/100Base-TX	Built-in 10Base-T/100Base-TX	Built-in 10Base-T/100Base-TX
Expansion	Two PC/104 cards	Two PC/104 cards	Two PC/104 cards

	3510KP(T), 3510T	3512KP(T), 3512T	3535T, 3535KPM(T)
Display	10.4" color flat panel, 640 x 480 (VGA)	12.1" color flat panel, 800 x 600 (SVGA)	15" color flat panel, 1024 x 768 (XGA)
Operator Input	63-position keypad (KP) and/or touchscreen (T)	63-position keypad (KP) and/or touchscreen (T)	71-position keypad and mouse (KPM), and/or touchscreen (T)
Processor	Intel Celeron or Pentium III	Intel Celeron or Pentium III	Intel Celeron or Pentium III
Runtime OS	Windows 95, Windows NT	Windows 95, Windows NT	Windows 95, Windows NT
Ethernet	Optional 10Base-T/100Base-TX	Optional 10Base-T/100Base-TX	Optional 10Base-T/100Base-TX
Expansion	One ISA, one PCI, one ISA/PCI	One ISA, one PCI, one ISA/PCI	One ISA, one PCI, one ISA/PCI

	3512KPM(T)	3515T, 3515KPM(T)
Display	12.1" color flat panel, 800 x 600 (SVGA)	15" color flat panel, 1024 x 768 (XGA)
Operator Input	71-position keypad and mouse (KPM), and/or touchscreen (T)	71-position keypad and mouse (KPM), and/or touchscreen (T)
Processor	Intel Celeron or Pentium III	Intel Celeron or Pentium III
Runtime OS	Windows 95, Windows NT	Windows 95, Windows NT
Ethernet	Optional 10Base-T/100Base-TX	Optional 10Base-T/100Base-TX
Expansion	Three ISA, two PCI, one ISA/PCI	Three ISA, two PCI, one ISA/PCI

PRODUCT SPECIFICATIONS AND RATINGS

Environmental

	Operating	Nonoperating
Thermal	0°C to 50°C	-20°C to 60°C
Humidity	20% to 80% RH, noncondensing	20% to 80% RH, noncondensing
Shock[a]	15 g peak acceleration, 11 msec duration	30 g peak acceleration, 11 msec duration
Vibration 5-2000 Hz[a]	0.006" peak to peak displacement 1.0 g maximum acceleration	0.015" peak to peak displacement 2.5 g maximum acceleration
Altitude	Sea level to 10,000 ft.	Sea level to 40,000 ft.

[a]These values are for solid state hard drives, not for rotating media drives.

Electrical

	3400	3500, 3-slot backplane	3500, 6-slot backplane
Power supply	40 Watt	80 Watt	200 Watt
AC power	90 to 250 VAC, autoranging, 50-60 Hz, 1 A (maximum)	115 to 230 VAC, autoranging, 50-60 Hz, 3.0 A (maximum)	115 to 230 VAC, autoranging, 50-60 Hz, 6.3 A (maximum)
DC power (option)	18 to 36 VDC, 24 V nominal, 2.5 A (maximum)	20 to 36 VDC, 24 V nominal, 10 A (maximum)	19 to 30 VDC, 24 V nominal, 16.0 A (maximum)
Available power[bcd]	+5 V @ 0.8 A +12 V @ 0.25 A -12 V @ 0.25 A	+5 V @ 1.54 A +12 V @ 1.82 A -12 V @ 0.72 A	+5 V @ 10.6 A +12 V @ 4.88 A -5 V @ 0.76 A -12 V @ 0.46 A

[b]Total not to exceed 6 watts for 3400 series units
[c]Total not to exceed 36 watts for 3-slot 3500 series units
[d]Total not to exceed 100 watts for 6-slot 3500 series units

Front Panel

- NEMA 4/4X/12 IP65

Regulatory Compliance[e]

CE

- EN 55022: 1994, Class A
- EN 50082-2: 1995
- EN 60950

FCC

- 47 CFR, Part 15, Class A

Safety Agency Approvals

UL

- UL 1950 ITE
- UL 1604

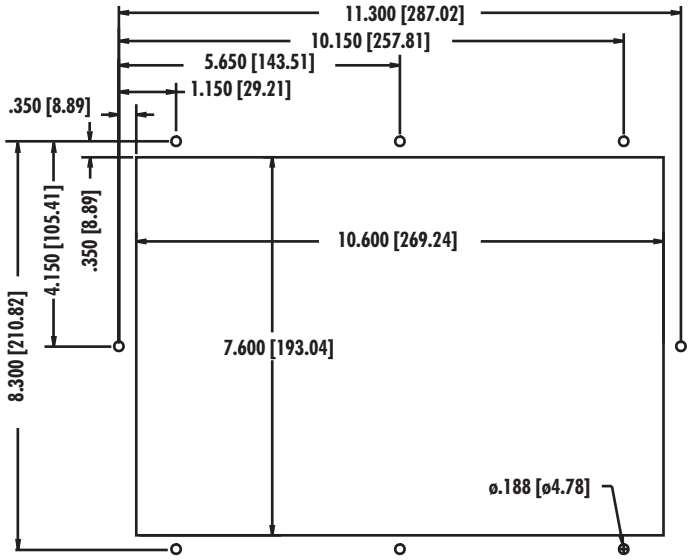
CUL

- CSA-C22.2, #950 ITE
- CSA-C22.2, #213

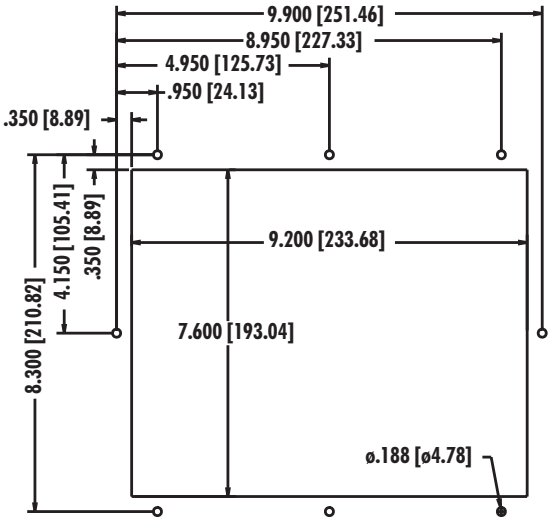
[e]Not for systems with preinstalled industrial network cards.

PRODUCT AND MOUNTING DIMENSIONS

3408KP Mounting



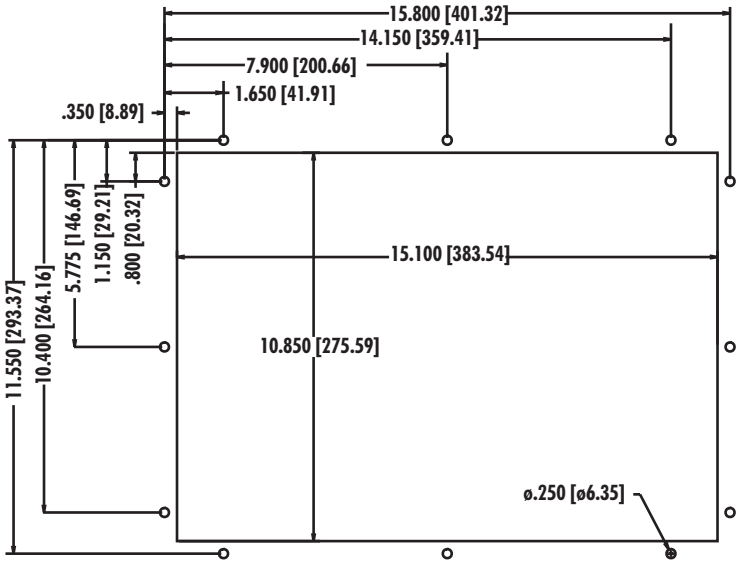
3408T Mounting



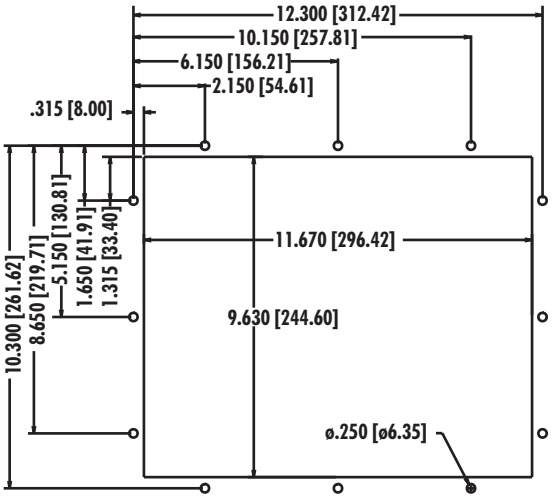
3408 Unit Dimensions

Model	3408KP	3408T
Height	9.00" (228.6 mm)	9.00" (228.6 mm)
Width	12.00" (304.8 mm)	10.60" (269.2 mm)
Depth	4.30" (109.2 mm)	4.20" (106.7 mm)
Mounting Depth	3.30" (83.8 mm)	3.20" (81.3 mm)
Weight	9 lbs (4.1 kg)	9 lbs (4.1 kg)

3410/12KP(T), 3510/12KP(T) Mounting



3410/12T, 3510/12T Mounting



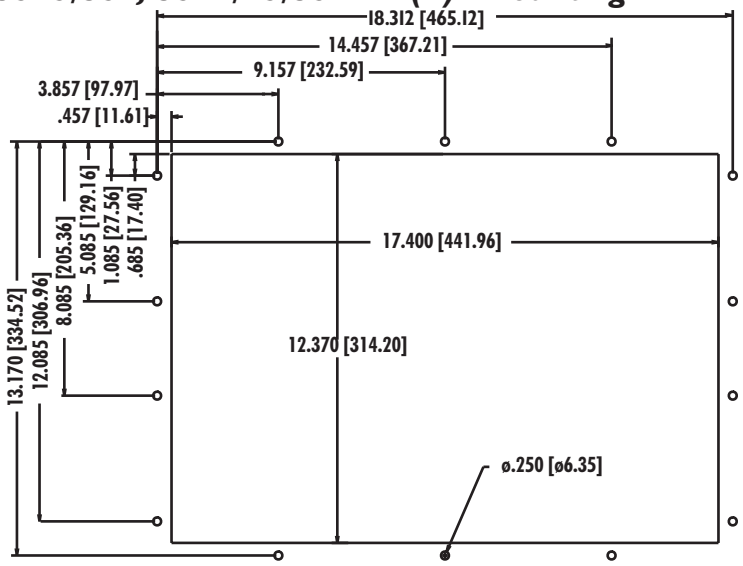
3410, 3510 Unit Dimensions

Model	3410T	3410KP(T)	3510T	3510KP(T)
Height	11.00" (279.4 mm)	12.25" (311.5 mm)	11.00" (279.4 mm)	12.25" (311.5 mm)
Width	13.00" (330.2 mm)	16.50" (419.1 mm)	13.00" (330.2 mm)	16.50" (419.1 mm)
Depth	4.50" (114.3 mm)	4.50" (114.3 mm)	6.50" (165.1 mm)	6.65" (168.9 mm)
Mounting Depth	3.50" (88.9 mm)	3.50" (88.9 mm)	5.75" (146.0 mm)	5.65" (143.5 mm)
Weight	11 lbs (5.0 kg)	12 lbs (5.5 kg)	16 lbs (7.2 kg)	16 lbs (7.2 kg)

3412, 3512 Unit Dimensions

Model	3412KP(T)	3512KP(T)	3412T	3512T
Height	12.25" (311.5 mm)	12.25" (311.5 mm)	11.00" (279.4 mm)	11.00" (279.4 mm)
Width	16.50" (419.1 mm)	16.50" (419.1 mm)	13.00" (330.2 mm)	13.00" (330.2 mm)
Depth	4.50" (114.3 mm)	6.65" (168.9 mm)	4.50" (114.3 mm)	6.50" (165.1 mm)
Mounting Depth	3.50" (88.9 mm)	5.65" (143.5 mm)	3.50" (88.9 mm)	5.75" (146.0 mm)
Weight	12 lbs (5.5 kg)	16 lbs (7.2 kg)	11 lbs (5.0 kg)	16 lbs (7.2 kg)

*3515/35T, 3512/15/35KPM(T) Mounting**



3512KPM(T) Unit Dimensions

	3512KPM(T)
Height	14.20" (360.7 mm)
Width	19.00" (482.6 mm)
Depth	10.00" (254 mm)
Mounting Depth	9.00" (228.6 mm)
Weight	42 lbs (18.9 kg)

***These 3500 units can also be mounted in an EIA standard 19" rack.**

3515, 3535 Unit Dimensions

Model	3515KPM(T)	3535KPM(T)	3515T	3535T
Height	14.20" (360.7 mm)	14.20" (360.7 mm)	14.20" (360.7 mm)	14.20" (360.7 mm)
Width	19.00" (482.6 mm)	19.00" (482.6 mm)	19.00" (482.6 mm)	19.00" (482.6 mm)
Depth	10.00" (254 mm)	6.64" (168.6 mm)	9.75" (247.7 mm)	6.64" (168.6 mm)
Mounting Depth	9.00" (228.6 mm)	5.89" (149.6 mm)	9.00" (228.6 mm)	5.89" (149.6 mm)
Weight	42 lbs (18.9 kg)	25 lbs (11.3 kg)	42 lbs (18.9 kg)	25 lbs (11.3 kg)

ORDERING INFORMATION

Development Software and Other Software

At least one OpenHMI WW Configurator development software package is required to create applications for OpenHMI WW workstations (hardware).

Order Number	Description
CONFIG-7.0	Configurator software for OpenHMI WW Windows NT and Windows 95 workstations, Version 7.0 one-year license and support.[1]
CONFIG-7.1	Configurator software for OpenHMI WW Windows NT and Windows 95 workstations, Version 7.1 one-year license and support
AB-ENET-OPC2	Runtime license to use OPC server for Allen-Bradley Ethernet with OpenHMI WW workstation.
WW-OPCLINK	License to use OPC client interface for Interbus S, OPCLink server, or Windows OPC communication with OpenHMI WW runtime workstations.
SYCON2	Industrial network configuration software required when DeviceNet or Profibus fieldbus options are installed in an OpenHMI unit, site license.

[1] Version 7.0 of the software is sold only for compatibility with version 7.0 software on previously sold OpenHMI WW runtime workstations. All new OpenHMI WW runtime workstations have version 7.1 of the OpenHMI WW runtime software.

Runtime Hardware

To create an order number, follow the conventions defined by the example order numbers and product configurations. All OpenHMI WW runtime workstations ship with version 7.1 of the OpenHMI WW runtime software.

Example Order Numbers

Order Number	Description
3410KP-HMI-513364-WW7	OpenHMI WW 3410 workstation with 10.4" 640x480 (VGA) color display, reprogrammable keypad, AMD AM5x86 processor, 64 MB DRAM, AC power supply, no floppy drive, standard hard drive (6 GB minimum size), and OpenHMI WW 7.1 500 tag/50 window runtime software with Windows 95 operating system preloaded.
3512T-HMI-843364-2P-WW7	OpenHMI WW 3512 workstation with 12.1" 800x600 (SVGA) color display, analog resistive touchscreen, Socket 370 433 MHz Intel Celeron processor, 64 MB DRAM, AC power supply, no floppy drive, no Ethernet, standard hard drive (10 GB minimum size), and OpenHMI WW 500 tag/50 window runtime software with Windows 95 operating system preloaded.
3535KPM-HMI-843364-2P-WW7	OpenHMI WW 3535 workstation with 15" 1024x768 (XGA) color display, reprogrammable keypad, built-in mouse, Socket 370 433 MHz Intel Celeron processor, 64 MB DRAM, AC power supply, no floppy drive, no Ethernet, standard hard drive (10 GB minimum size), and OpenHMI WW 500 tag/50 window runtime software with Windows 95 operating system preloaded.
3515KPM-HMI-843364-3P-WW7	OpenHMI IWSNT 3515 workstation with 15" 1024x768 (XGA) color display, reprogrammable keypad, built-in mouse, Socket 370 433 MHz Intel Celeron processor, 64 MB DRAM, AC power supply, no floppy drive, no Ethernet, standard hard drive (10 GB minimum size), and OpenHMI WW 500 tag/50 window runtime software with Windows 95 operating system preloaded.

OpenHMI WW 3400 Industrial Workstations

OpenHMI WW industrial workstations have a standard hard drive (6 GB minimum size).

Standard Configurations

3408(T or KP)-HMI-513364-WW7

3410(T or KP)-HMI-513364-WW7

3412(T or KP)-HMI-513364-WW7

34 ___ -HMI-513364- ___ ___ ___ ___

Color Flat Panel Display and Operator Input

08T	7.7" VGA display with touchscreen
08KP	7.7" VGA display with keypad
10T	10.4" VGA display with touchscreen
10KP	10.4" VGA display with keypad
10KPT	10.4" VGA display with keypad and touchscreen
12T	12.1" SVGA display with touchscreen
12KP	12.1" SVGA display with keypad
12KPT	12.1" SVGA display with keypad and touchscreen

Power Supply

blank	AC power supply
-24V	24- volt DC power supply

Floppy Drive

blank	No floppy
-F	External floppy drive installed

OpenHMI Runtime Software

-WW7	500 tag, 50 window Version 7.1, Windows 95
-WW8	1000 tag, 100 window Version 7.1, Windows 95
-WW9	500 tag, 50 window Version 7.1, Windows NT
-WW10	1000 tag, 100 window Version 7.1, Windows NT

Industrial Network Communications

-PBS	Profibus DP slave
-DNS	DeviceNet slave
-MBP	MODBUS Plus

ORDERING INFORMATION (CONTINUED)

OpenHMI WW 3510, 3512, 3535 Industrial Workstations (3 ISA/PCI Slots)

OpenHMI WW industrial workstations have a standard hard drive (10 GB minimum size).

Standard Configurations

3510 (T or KP)-HMI-843364-2P-WW7

3512 (T or KP)-HMI-843364-2P-WW7

3535(T or KPM)-HMI-843364-2P-WW7

35 -HMI -2P

Operator Input

10T	10″ Display with touchscreen
10KP	10″ Display with keypad
10KPT	10″ Display with keypad and touchscreen
12T	12″ Display with touchscreen
12KP	12″ Display with keypad and touchscreen
12KPT	12″ Display with keypad and touchscreen
35T	15″ Display with touchscreen
35KP	15″ Display with keypad and touchscreen
35KPT	15″ Display with keypad and touchscreen

CPU

-8433	Socket 370 Celeron 433 MHz CPU
-8600	Socket 370 Pentium III 600 MHz CPU
-8700	Socket 370 Pentium III 700 MHz CPU

DRAM

64	64 MB DRAM
128	128 MB DRAM
256	256 MB DRAM
512	512 MB DRAM

Power Supply

blank	AC power supply
-24V	24- volt DC power supply

Floppy Drive

blank	No floppy (Note: Removable floppy drive, not compatible with -F or -CDF options, can be ordered separately.)
-F	Nonremovable floppy drive installed
-CDF	Nonremovable external CD/floppy

Ethernet Connection

blank	No Ethernet
-N1	10Base-T/100Base-TX Ethernet

OpenHMI Runtime Software

-WW7	500 tag, 50 window Ver. 7.1, Windows 95
-WW8	1000 tag, 100 window Ver. 7.1, Windows 95
-WW9	500 tag, 50 window Ver. 7.1, Windows NT
-WW10	1000 tag, 100 window Ver. 7.1, Windows NT

OpenHMI WW 3512KPM(T), 3515 Industrial Workstations (6 ISA/PCI Slots)

OpenHMI WW industrial workstations have a standard hard drive (10 GB minimum size).

Standard Configurations

3512KPM(T)-HMI-843364-3P-WW7

3515(T or KPM)-HMI-843364-3P-WW7

35___ -HMI ___ ___ -3P___ ___ ___ ___

Operator Input

12KPM	12″ Display with keypad and mouse
12KPMT	12″ Display with keypad, mouse, and touchscreen
15T	15″ Display with touchscreen
15KPM	15″ Display with keypad and mouse
15KPMT	15″ Display with keypad, mouse, touchscreen

CPU

-8433	Socket 370 Celeron 433 MHz CPU
-8600	Socket 370 Pentium III 600 MHz CPU
-8700	Socket 370 Pentium III 700 MHz CPU

DRAM

64	64 MB DRAM
128	128 MB DRAM
256	256 MB DRAM
512	512 MB DRAM

Power Supply

blank	AC power supply
-24V	24- volt DC power supply

CD-ROM Drive

blank	No CD-ROM
-CD	CD-ROM drive installed

Ethernet Connection

blank	No Ethernet
-N1	10Base-T/100Base-TX Ethernet

OpenHMI Runtime Software

-WW7	500 tag, 50 window, Windows 95 Ver. 7.1
-WW8	1000 tag, 100 window, Windows 95 Ver. 7.1
-WW9	500 tag, 50 window, Windows NT Ver. 7.1
-WW10	1000 tag, 100 window, Windows NT Ver. 7.1

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