

Interact 7.0

HMI Software



Interact Version 7.0:

The level 1 HMI software with no limits.

No tag limits.

No alarm limits.

And now, no extra charge for optional modules.

Interact is a feature-rich software package that can be tailored to meet the needs of any HMI project. It offers the ease-of-use of Windows® for development, with the speed and reliability of an embedded runtime environment. Interact's modular configuration allows you to scale up from simple pushbutton panel replacement to full-function operator interface applications using the same software platform. Interact lets you build an application with 3-D panel tools, trending, networking, machine configuration and more.

Contact Information:

Parker Hannifin Corporation
Electromechanical Automation Division
5500 Business Park Drive
Rohnert Park, CA 94928
phone 800 358-9068
www.parkermotion.com



Product Features:

• Development

- Easy-to-use Windows development environment
- Intuitive menuing and on-line help simplify application development
- Easily load your applications via CompactFlash and serial or Ethernet download
- Easily import 256 color bit-map images into applications
- Features like Interact's tag editor make it easy to design a standard application and adapt it to meet new machine requirements. Tags can easily be switched from one controller manufacturer to another.

• Runtime

- Comes bundled on CTC's full line of PA2 PowerStations
- Operator-friendly monitoring and alarming features create an intuitive HMI for operators, maintenance and support personnel
- High performance, reliable run-time environment
- Device drivers for most controllers and many other industrial devices are part of the standard Interact package



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Interact 7.0 —

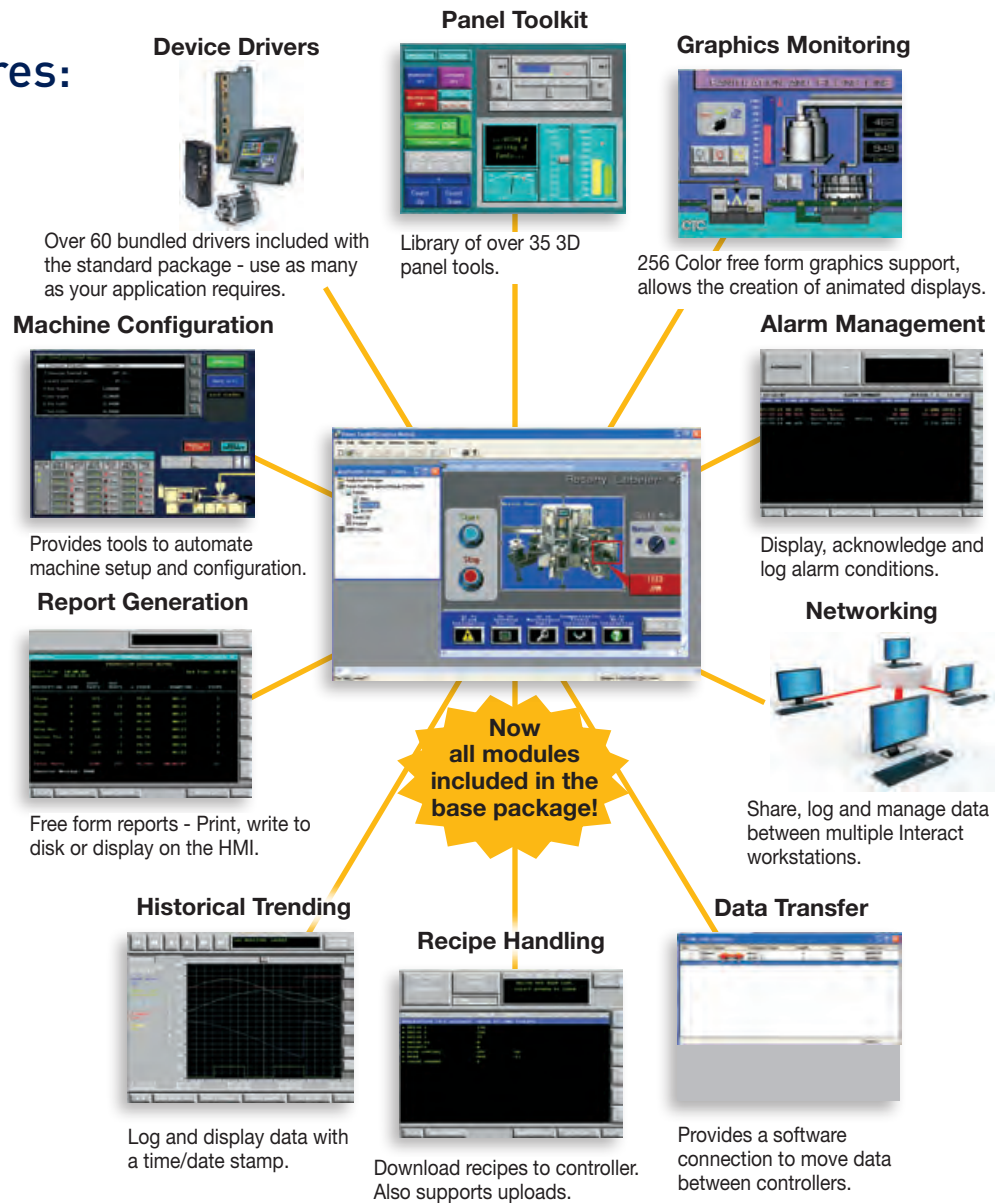
Modular Architecture that Grows with Your Application Needs.

Networking Features:

- **Transfer Interact applications throughout your manufacturing facility - or to remote locations using off the shelf VNC/VPN tools.**
- **Share real-time data between factory floor workstations**
- **“Network aware” software architecture simplifies “centralization” of applications and/or program files on a network server**
- **Sends real-time data directly from the plant floor to MIS or supervisory stations**

Connectivity

With Interact HMI, you get the connectivity you want without the complexity and cost you don't want. Interact includes 60+ device drivers, as well as Ethernet drivers for common controllers including Parker's ACR-9000 and 6K motion controllers.



See for yourself why Interact 7.0 is the top pick for machine level HMI software. To download your FREE evaluation software package, log on to parkermotion.com

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InteractX 3.0

Windows Supervisory HMI Software



The Shortest Distance Between Machine-Level and Supervisory HMI ...

InteractX™ has always led the industry with breakthrough HMI graphics and built-in connectivity. Now with version 3.0, InteractX leads the way into Supervisory HMI by dramatically reducing application development time and integration cost for your manufacturing operations.

InteractX now provides powerful Trending and Analysis Tools that aggregate data from multiple machines or workcells. InteractX also makes it easy to push Interact Xpress™ machine-level HMI screens and data directly into its interface - without having to recreate applications or input tags!



Contact Information:

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Product Features:

- Full featured Historical Trending Software
- Supervisory-Level HMI aggregates data from multiple sources, including 3rd-party PLCs and HMI panels
- Time-saving "Distributed HMI" integration with Interact Xpress
- Scalable, lifelike graphics
- No preset limits on Pens or logs
- Unlimited Tags - no hidden costs
- Over 60 standard communication drivers included
- Sophisticated Recipe Management tools included
- Preconfigured and custom Panel Tool library for quick screen development
- Supports ActiveX controls for easy integration of 3rd-party tools
- Includes VB for Applications (VBA) for easy customization
- Vast 3rd-party OPC client/server support
- Easy Multi-language support
- Includes Easy E-Sigs tools to simplify 21CFR11 compliance



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Reduce Supervisory Application Development Time By Up To 80%

Working with Xpress™ HMI, InteractX™ significantly lowers the cost of integrating Supervisory HMI

By far, the largest cost associated with moving your operation from standalone operation to Supervisory HMI has typically come from the time it takes to develop special applications for the Supervisory software. When supervising machines running Interact Xpress, InteractX eliminates most of that time and cost. That's because InteractX can import screens and data directly from Xpress applications. And InteractX's new Historical Trending Tool provides powerful monitoring and analysis of all machines being supervised.

InteractX also takes full advantage of Xpress' "Distributed HMI" architecture to remotely run, monitor and publish multi-machine HMI applications with reduced complexity and

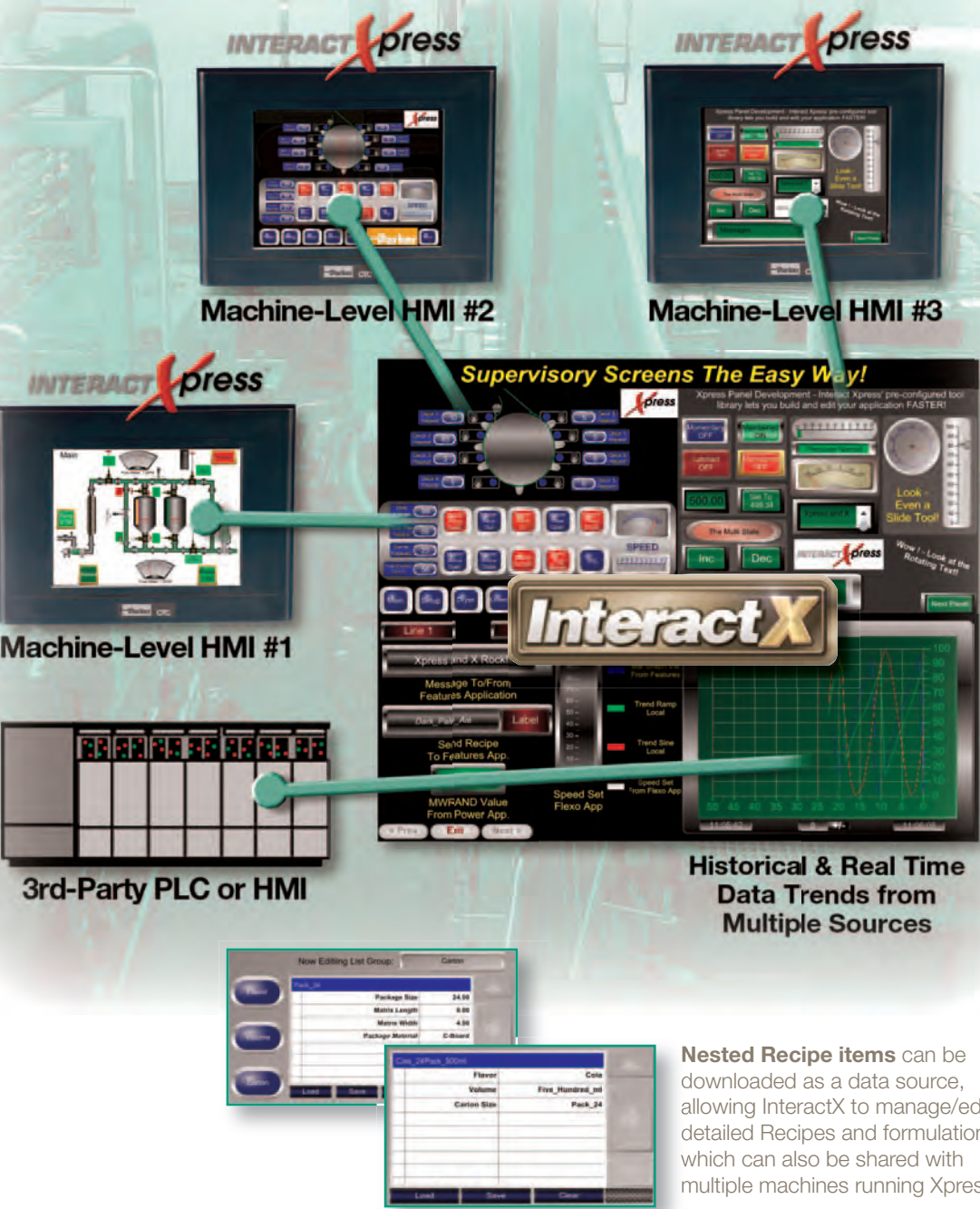
integration cost.

- **Leverage your existing Interact Xpress™ screens and data by bringing them directly into InteractX 3.0**
- **Full-featured Historical Trending software combines data from multiple machines and sources, including 3rd-party PLCs and HMI panels**
- **Take full advantage of Interact Xpress' Distributed HMI architecture to publish, monitor and trend machine operations**
- **Easily upgrade from standalone machine HMI to Supervisory HMI without complex systems integration**

Advanced Connectivity Features

- **Bundled Communications Drivers:** InteractX's COMMServer includes 60+ bundled communications drivers, with serial and Ethernet drivers for major PLC and motion controller brands.
- **OPC Client Interface:** Provides connectivity to any 3rd-Party OPC Server; allowing InteractX to communicate with any of the hundreds of OPC Servers.
- **OPC Tag Server:** Any InteractX tag can be accessed by OPC Client applications such as SCADA systems, DCS, MIS applications, etc.
- **Networking:** Share real-time data via Ethernet between InteractX or other SCADA systems, Xpress HMI, Interact HMI and back office applications.

InteractX Supervisory HMI with Interact Xpress



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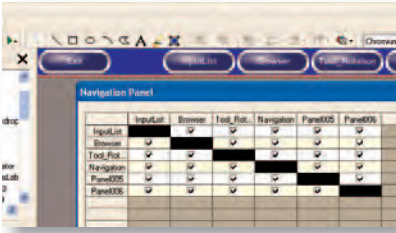
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Enhanced Interface Design Reduces Development Time

CTC's InteractX™ offers the most advanced development interface and graphics of any Windows HMI, with the lowest installed cost and development complexity.

You'll be able to use InteractX right out of the box, without special IT skills or assistance. It's user-friendly, visual design interface includes styles and templates that enable multiple users to quickly build applications

with a consistent "look and feel." InteractX's toolbar allows custom tools or entire screens to be saved for drag and drop into other applications and easy sharing between designers.



With the **Navigation Panel Wizard**, you can quickly create menus for navigating through your entire HMI application.

Name	Data Source	Group
Sugar	<Local>	Recipe
Caramel	<Local>	Recipe
phosphoric_acid	<Local>	Recipe
Cola	<Local>	Recipe
caffeine	<Local>	Recipe
Volume	<Local>	Recipe
Seal_Method	<Local>	Recipe
Lemon_Lime	<Local>	Global
Citric_Acid	<Local>	Recipe
sodium_citrate	<Local>	Recipe
Sodium_Benzoate	<Local>	Recipe

The **Integrated Tag Editor** includes time-saving Tag Group and Import Tag features for quickly creating, searching and editing tags. You can even import AB tags directly!



The enhanced **Browser Display Tool** dynamically browses web content and Help files via runtime screens.



Easily configure InteractX for **Multi-language Support**. All text, alarms, screens, and history/log data can be translated into a single CSV file.



InteractX simplifies 21CFR11 Compliance by tracking operator input and providing Electronic Signatures that are easily configured with no special scripting or programming required!

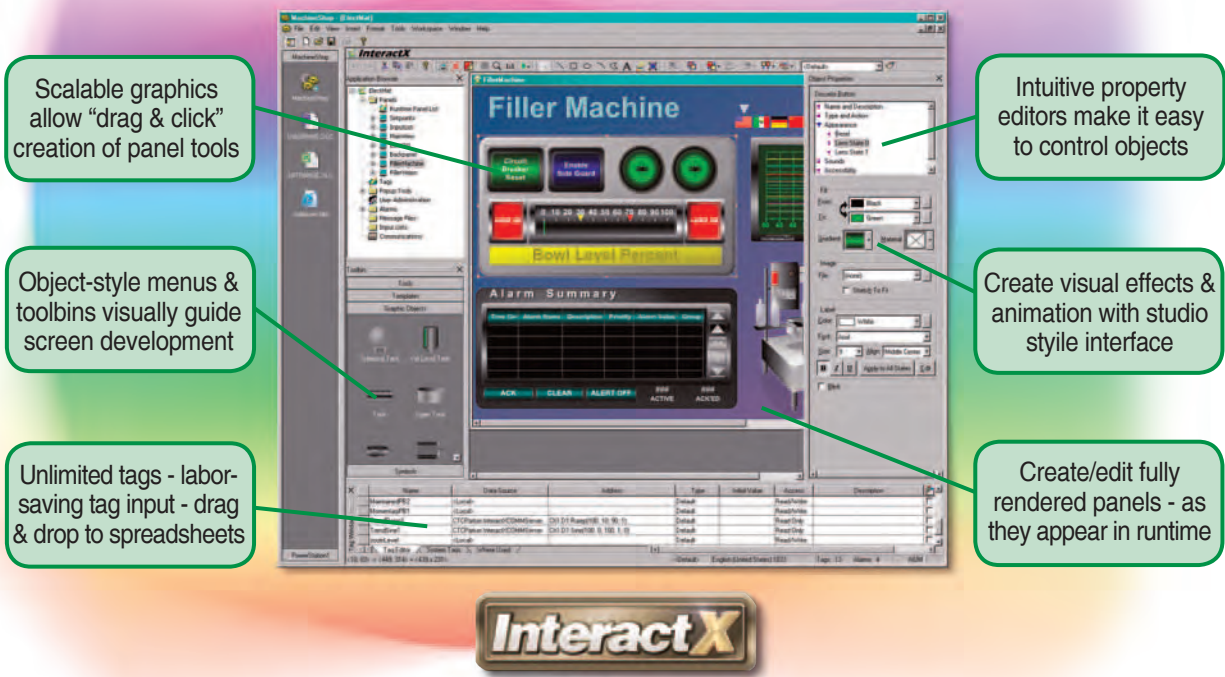
InteractX System Requirements

Development Supported:

Windows 2000/XP Pro

Runtime Systems Supported:

Windows 2000/XP Pro



- **Panel Tools:** Over 20 pre-configured panel tools for buttons, panel lamps, gauges, readouts and more.
- **Graphics:** Eye-catching, vector-based graphic elements; free-form animation; high-quality graphics import, unlimited colors, roundness, gradients, materials and transparency.
- **Alarms:** Monitor and acknowledge real-time and historical alarms with advanced features for user access, filtering, grouping, logging and printing.
- **User Security Levels:** 21CFR11 compliant, multi-user access levels with unlimited number of users.
- **ActiveX Support and Automation:** Host standard, off-the-shelf, 3rd-party tools like Media Player, vision tools, trending, etc. Or customize application with Excel, Access, VB or C++ programs.



- **Visual Basic for Applications (VBA):** Fully integrated VBA with access to tools, graphics, alarms, application properties and tags.
- **Integrated Tag Editor:** Drag-and-drop tag editing with easy import/export, including PLC address and "Where Used" information. Support of full math capabilities for tag scaling and creation of complex expressions.
- **Multi-Language Support:** Translate all text, alarms, screens, and history/log data in a single CSV file - including Asian character set.
- **"Pack & Load" Project Management Tools:** Simplify application management, copying, transferring and installation in multiple locations.
- **Bundled Communications Drivers:** Includes 60+ bundled communications



drivers, including serial and Ethernet drivers for major PLC and motion controller brands.

- **OPC Connectivity by Kepware:** Connectivity to any 3rd-party OPC Server; allowing communication with any of the hundreds of OPC Servers.



- **OPC Tag Server:** Tags can be accessed by OPC Client applications such as SCADA systems, DCS, MIS applications, etc.
- **Networking:** Real-time data sharing via Ethernet with AB, Siemens, Modbus and more.
- **Trending:** Historical trend logging and replay in both Graphical and Log form views. No limits on the number of items logged or displayed in the Trend viewers.



See for yourself why InteractX is the top pick for Supervisory HMI software. For your FREE Software Evaluation CD, log on to parkermotion.com/HMI or call us at **800-233-3329**.

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Interact Xpress

Distributed HMI



Take Full Advantage of the Web for HMI Design, Publishing, Runtime and Support.

This new, affordable Human-Machine Interface (HMI) solution fully leverages the wide availability of web browsing software to enable distributed HMI software, remote support and application sharing on the Internet and IP Networks. Interact Xpress HMI applications are developed, edited, published and run in an HMI that is a Web Server, allowing users and OEMs to easily publish upgrades and applications to any global location with an Internet connection and a web browser. Interact Xpress combines a rich, graphical runtime interface with HMI development tools that can be accessed from either the HMI panel or any PC running Internet Explorer®.

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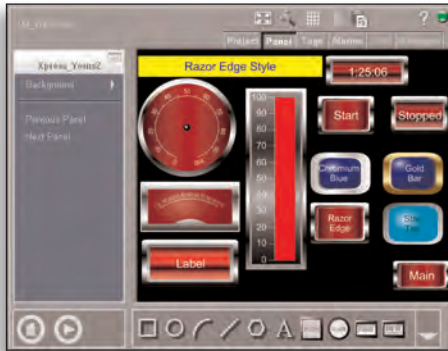


Product Features:

- Real time trend display **NEW**
- New improved security **NEW**
- Sophisticated graphics look and feel with ease of development
- Integrated Web Publishing capability for distributed applications
- No version control issues with Web published development.
- Applications can be served, created and edited online from any PC with Internet Explorer.
- Available offline, development software allows work on applications when a live Internet connection is not available.
- Advanced security for single or multi-user applications
- Tools for historical alarm data
- Capacity for complex graphics and animations
- Standard Ethernet port for both networking and controller communications
- More than 35 device communication drivers
- Unlimited tags
- Color depth to 262,144 colors
- XPR PowerStation industrially-hardened hardware with steel backshell construction
- Industry-leading 2-year warranty

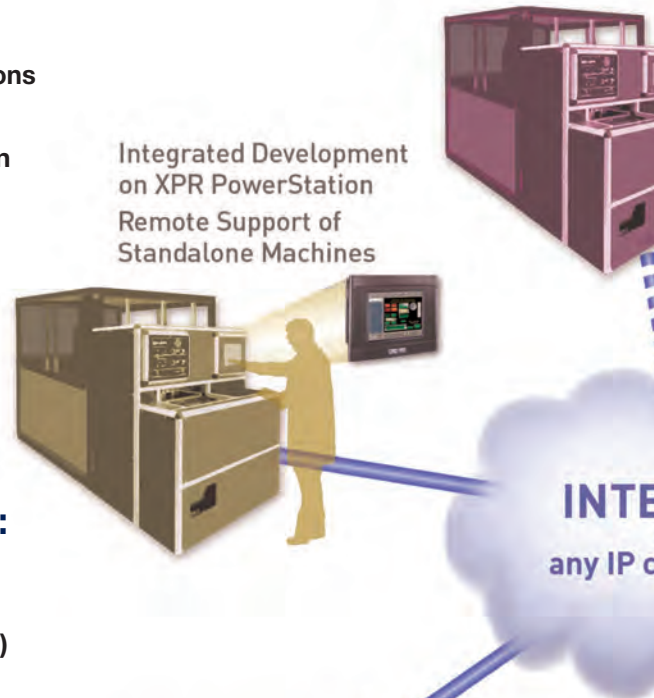
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Interact Xpress™ software is a revolutionary product that takes full advantage of the Internet and the wide availability of web browsers to design, publish, run and support your Human-Machine Interface



- **Optimized runtime client performance using Adobe Flash technology**
- **Bundled with CTC's new, CE-based XPR PowerStations**
- **Unlimited tags included**
- **35+ device communication drivers included**
- **Affordable HMI for multi-site, multi-station and standalone machines, particularly when remote control, monitoring and support are desirable**

- **Supervisory stations created by simply publishing the local HMI screens to supervisory software or a simple Web browser**



- Integrated development environment where applications can be designed and edited on the runtime system
- HMI designer/editor supports multiple runtime versions, easing version control management headaches
- Easy, object-based screen development using a “Tool Bin” of preconfigured panels tools and “drag and drop” editing
- Panel Tools include: pushbuttons, numeric entry, selection entry, numeric displays, bar graphs, meters, gauges, sliders, message displays, time/date display and more
- 3-D, shaded panel tool graphic are available in multiple styles with no additional work.

- Includes an Integrated Graphics Library
- Jpeg (.jpg) and Flash (.swf) image support
- Complex animation capabilities and video support
- Web link support
- Preconfigured Alarm tool with automatic collection of Historical Alarm data
- Integrated Tag Editor with “drag and drop” tools and import/export to Excel and other software packages
- Development software for offline design/editing supports Windows®2000 and Windows® XP operating systems



Printing & Converting Machinery

Large Machines with Multiple HMI Stations

Beer	
Barley	50.00
Yeast	20.00
Hops	20.00
Water	100.00

Load Send

Interact Xpress
Recipes/Input
List Tool

See
back page for
New Features in
Version 2.0

HMI Applications

Feature-Rich Runtime Operation:

- Runs on CTC's XPR PowerStations (see back page) – available with 6", 8" 10" and 15" touchscreen displays and CompactFlash non-rotating storage media
- Hardware/software integration optimizes performance, storage and connectivity
- Rich, graphical runtime interface that is scalable to various screen sizes
- Runs sophisticated graphics, animations and video to enhance the operator experience
- Built-in networking, publishing and web browsing from any operator station
- Advanced security tools support single and multi-user applications, as well as integrated development from operator interface

Modem or Wireless
Connection

INTERNET
or
connection

VERSION
CONTROL
ISSUES

Develop/Edit Online in Internet Explorer
Develop/Edit Offline with PC software
Remote Monitoring
Remote Control



User Levels					Log Out
Level	Name	SA	UA	EP	
0	Admin	X	X	X	
1	Engineer	X	X	X	Edit...
2	Supervisor	X	X		Edit...
3	Technician	X			Edit...
4	Operator				Edit...
5	Guest				Edit...

Permissions:
SA = Shell Access
UA = User Administration
EP = Edit Project

Advanced Networking and Web Publishing:

Interact Xpress provides industry-leading Web publishing and multiple client support in a very affordable Distributed HMI package . . .

- Supports local or remote development - no version control issues or online development costs
- OEMs can easily publish upgrades and applications, using a client/server approach, to any global location with an Internet of IP connection.
- Publishes station-level runtime screens in supervisory level software via Internet browser tools – with no preset limit on connections!

Remote Stations for
Oil & Gas Pipeline
Power Transmission
Water/Waste Water



Ready for Global Remote Support:

By far, the most cost-effective way to support machinery installations or remote stations across geographical distances is via the Internet or other IP connections. Xpress makes it easier than ever to develop, edit, monitor, diagnose, share and

control machine applications online, whether working in real time or downloading/uploading files for local installation . . .

- Remote Maintenance and sharing of applications available over the Web – reduces support costs
- Local or Remote Monitoring can be accomplished via the same process.
- Web-enabled architecture eases implementation of remote diagnostics and support on a global scale.

INTERACT **xpress**™

NEW New Features in Interact Xpress 2.0

- Real time trend display capability
- Up to 1000 point historical buffer
- User configurable appearance properties
- Any tag or expression can be used for values
- Supports time interval and external triggers
- No pre-set limit on trend objects in an application
- PDF Viewing integrated in the Web browsing tool
- Screen templating capabilities:
 - Store and retrieve your own screen templates, speeding development
 - Common screen templates come pre-installed
- Multi Language support:
 - Ready for the world!
 - Support export applications
 - No pre-planning required
 - Easily export an application and translate all text, using standard tools
 - Translated text is available for seamless transition in runtime



HMI Power and Connectivity In a Durable, Affordable Package

Interact Xpress software is pre-installed and bundled with CTC's new XPR PowerStation hardware, which is designed to optimize the performance, storage and connectivity features of Xpress HMI. This NEMA4/4X-rated family of CE-based workstations is available in either an embedded no display unit or with a 6", 8", 10" and 15" TFT touchscreen display models. All models feature embedded fanless CPU technology, 256MB DRAM and a full range of standard features such as CompactFlash storage, 2 USB ports, 2 RS-232 and RS-



232/422/485 ports and a 100BaseT Ethernet port.

With 512 MB of Compact Flash storage, XPR models use non-rotating storage media for high system reliability. And like all CTC Powerstations, these units are quality tested to endure more harsh conditions

in a day than most operator stations see in a lifetime. That's why we're able to offer an industry-leading, 2-year limited warranty with free phone-based technical support for all of our products.

XPR PowerStations offer durability and no moving parts, to complement Xpress software in providing a high-value, Distributed HMI solution.

**To see Interact Xpress Distributed HMI for yourself,
visit us at parkermotion.com/Xpress
or call us at 1-800-358-9068**



PA2 PowerStation Family

The Power of Interact HMI
In an Affordable Package

**New
No-Display
System**

The new PA2 family of PowerStations is CTC-designed and manufactured to be an economical push button panel replacement solution with the option to include advanced software features.

Including no-display option, 6", 8", 10.4" and 15" color touchscreen displays, all units combine the connectivity, functionality and expandability of Interact HMI software with standard hardware features such as TFT displays, CompactFlash storage, RS-232, RS-422/485 and 100BaseT Ethernet ports. The PA2 family has been designed as a direct drop in replacement for our popular PA family of PowerStations. The PA2 offers new higher performance processors and TFT displays in all sizes.



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PA2 Functionality

- **CTC-designed and manufactured for reliability with consistent hardware features for all units**
- **Feature-rich with Interact Panel Tools, Graphics, Alarming and Networking software features**
- **Expandable with optional Interact software modules such as Historical Trending and advanced recipe management**
- **Flexible connectivity including 60+ communication drivers - including Ethernet drivers**
- **Designed for easy "drop-in" replacement of our PA family PowerStations and many other popular operator panels**

PA2 Features

- **No-Display, 6", 8", 10.4" and 15" Touchscreen Displays**
- **CompactFlash and 100-Base-T Ethernet**
- **Interact HMI Software with advanced module support**
- **Multiple control device connectivity**
- **Slim profile with consistent features**
- **Quick and easy clip mounting**
- **Type 4/4X rating**

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PA2 Specifications

PA2 Model Number Configurations

Model	Description
PA200V-133	PA2 system with no display
PA206Q-133	PA2 with 6" TFT display, 320 x 240 Resolution
PA206V-133	PA2 with 6" TFT display, 640 x 480 Resolution
PA208T-133	PA2 with 8" TFT display, 640 x 480 Resolution
PA210T-133	PA2 with 10.4" TFT display, 640 x 480 Resolution
PA215T-133	PA2 with 15" TFT display, 1024 x 768 Native Resolution

All PA2 models include an AMD LX700 CPU (433 MHz), 512MB (Min.) Compact Flash card, UL/CUL and CE Agency approvals.

Class 1 Division 2 Agency approvals are available at extra cost, The last digit of the model number changes from 3 to 5 on Class 1 Division 2 approved products.



Specifications

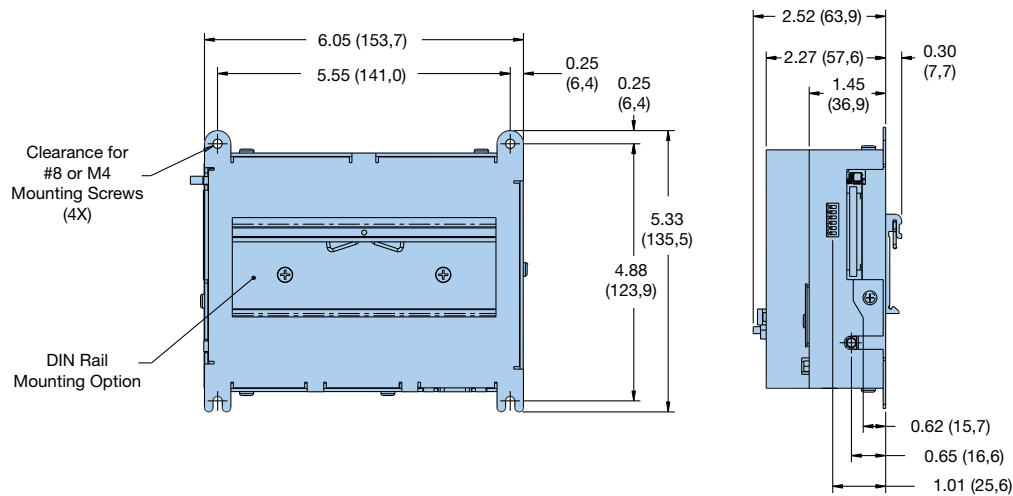
Features		PA200	PA206Q/PA206V	PA208	PA210	PA215
Display	Size	PA200 has no display, but is pre-configured with a standard VGA output. Can be used with our PHM Family monitors to create a “split” system	6” Color TFT 5.7” Diagonal	8” Color TFT 7.5” Diagonal	10” Color TFT 10.4” Diagonal	15” Color TFT 15” Diagonal
	Resolution		1/4 VGA (320 X 240), Optional VGA (640x480)	VGA (640 X480)	VGA (640 x 480)	XGA (1024 x 768)
	Viewing Angle		±70° L/R 70° U, 50° D ±80° L/R 80° U, 70° D	±70° L/R 60° U, 65° D	±70° L/R 50° U, 60° D	±80° L/R 80° U, 60° D
	Brightness		QVGA - 470 NIT VGA – 350 NIT	400 NIT	200 NIT	250 NIT
	Bulb Life (hrs)	75,000	50,000	50,000	40,000	
	Weight (lbs)	2.0	2.56	4.1	8.4	13.8
	Dimensions Inches (HxWxD)	6.05 x 4.12 x 2.52	6.00 x 7.40 x 2.99	7.60 x 10.20 x 3.06	11.00 x 13.78 x 4.01	13.30 x 16.80 x 5.19
	Interface	Analog Resistive Touchscreen				
	Power Requirement	12/24VDC @ 18W (Range: min 11 VDC, 28 VDC Max)		24 VDC @ 22W (Range: min 18 VDC, 28 VDC max)		
HMI Software		Interact Runtime included (PTM, GMM, AMM and NET)				
Processor		AMD LX700 [433 MHz]				
CompactFlash Storage		Minimum 512MB Compact Flash External				
Ports	Keyboard	USB 2.0				
	Mouse	USB 2.0				
	USB*	(2) USB 2.0, Type A*				
	Serial	(1) RS-232, (1) RS-232/422/485				
	Ethernet	(1) 10/100Base-T w/ RJ45				
Environment	Temperature	0 – 50°C				
	Rel. Humidity	5-95% (non-condensing)				
	Vibration	10-500 Hz 2grms (Random)				
	Shock	10G, 11 msec (operating); 30G, 11 msec (non-operating)				
Agency Approval		CE; UL/CUL, NEMA 4/4X; Class 1 Div. 2 (Available as an option)				

*Note: (USB Ports are not accessible from Interact)

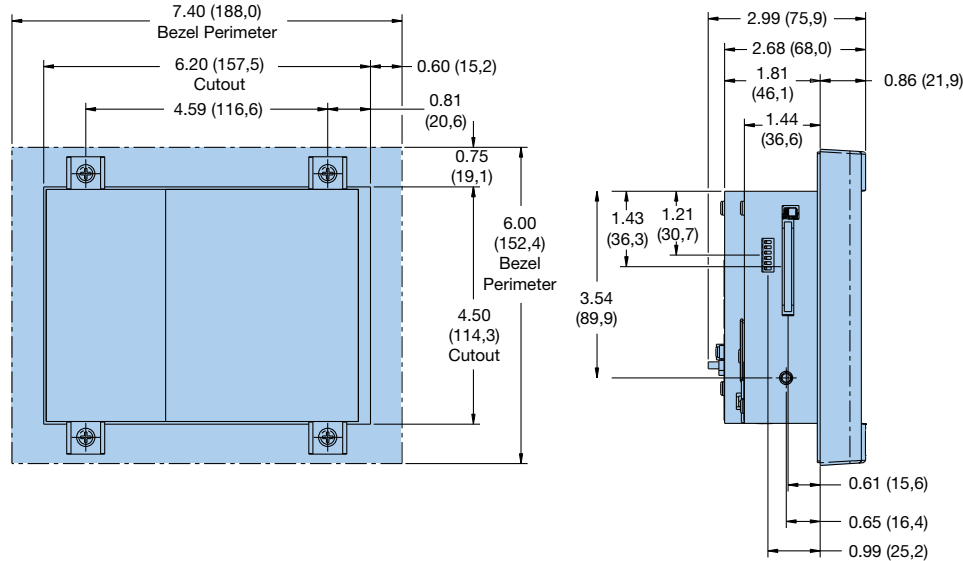
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Cutout Dimensions

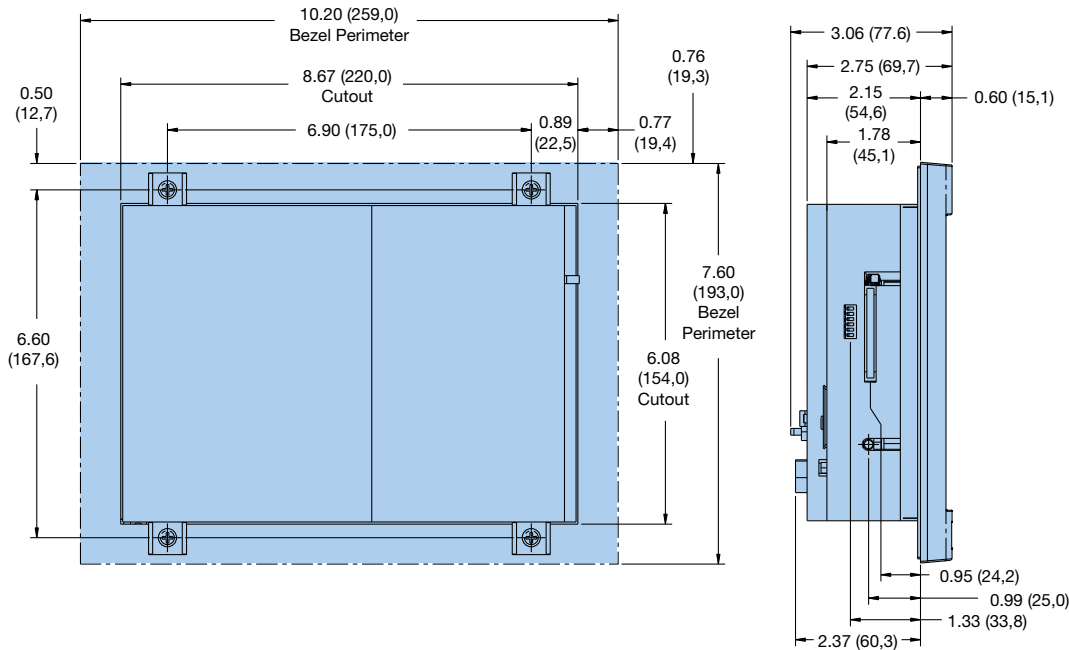
PA200



PA206

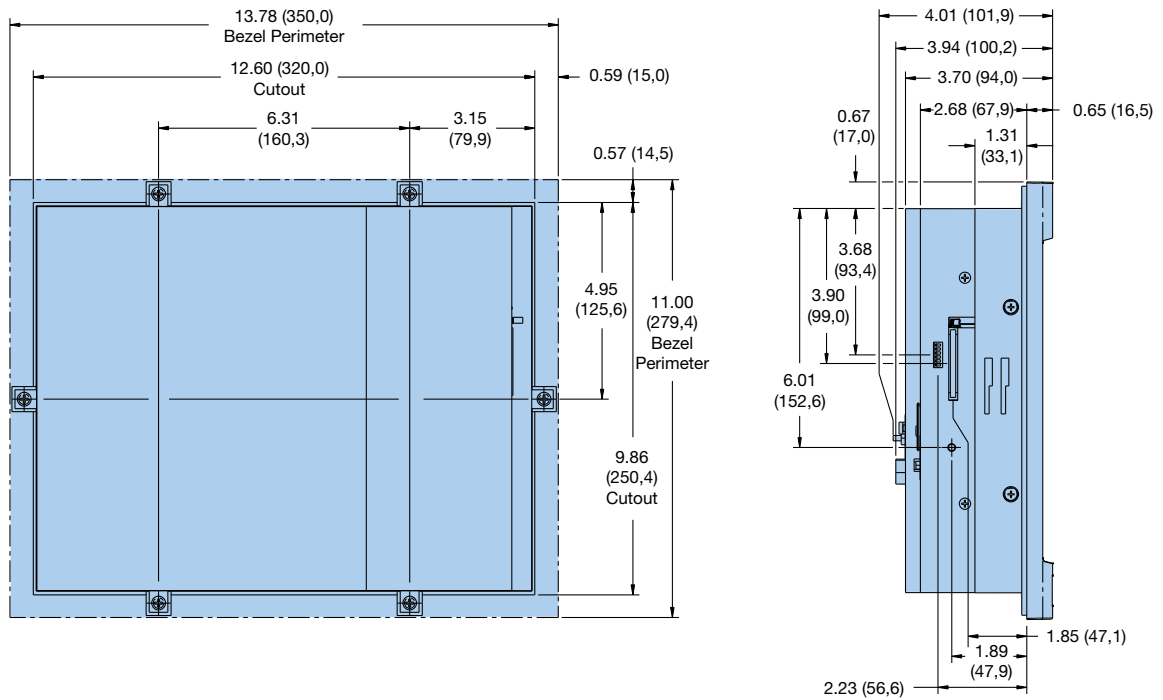


PA208

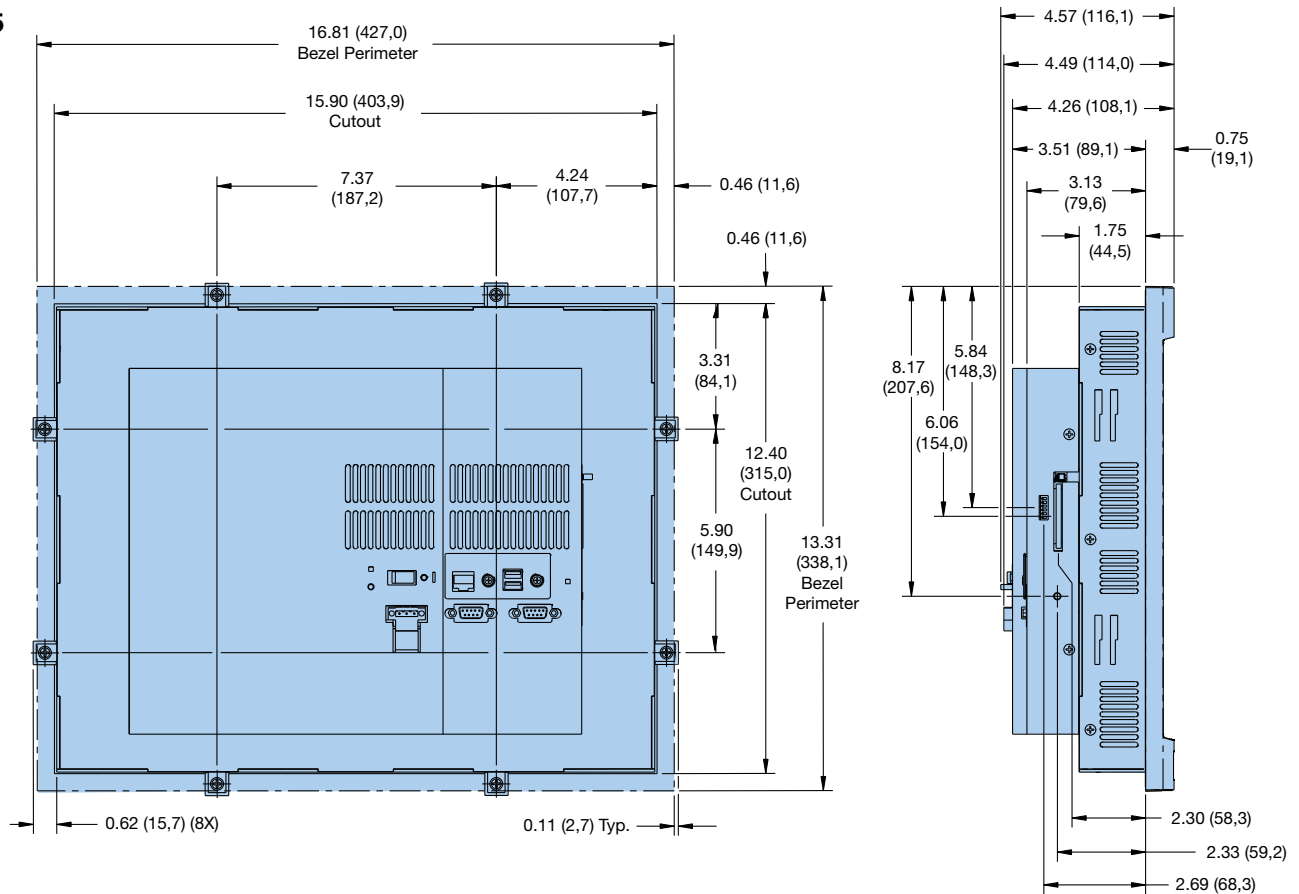


Cutout Dimensions

PA210



PA215



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XPR PowerStations

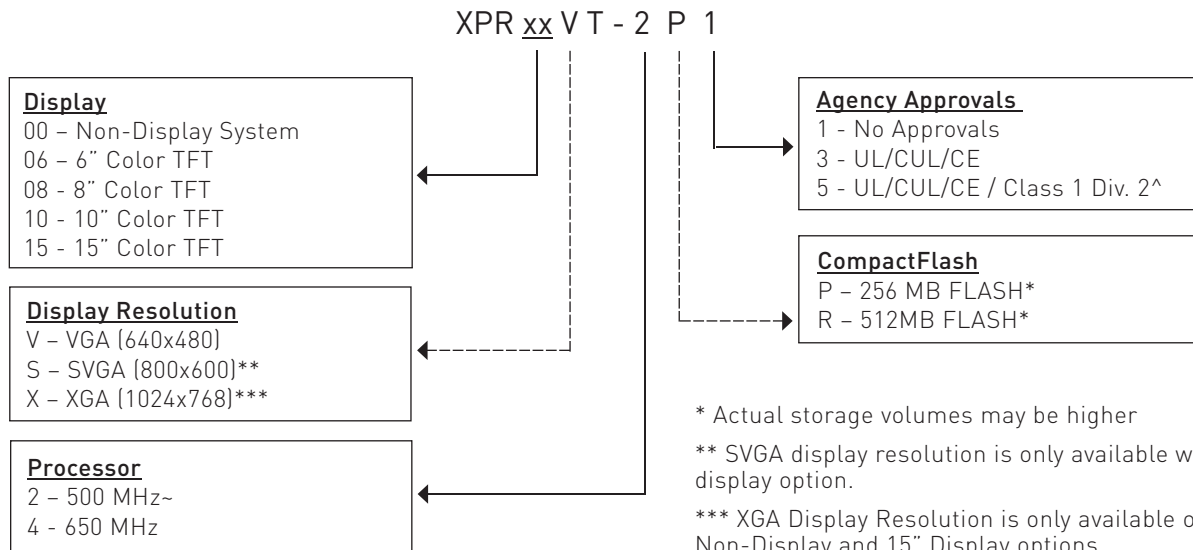


Distributed HMI in a Durable and Affordable Package

This CTC-designed and manufactured XPR PowerStation line offers a hardware/software solution that simplifies and cost-reduces Distributed HMI applications. Available with a 6", 8", 10", 15" TFT panel mount touchscreen or new non-display system, XPR models are designed to optimize the performance, storage and connectivity features of Interact Xpress™ HMI software.

This NEMA4/4X-rated family of CE-based workstations features the latest embedded processor technology supporting fanless operation, CompactFlash® storage, USB, serial and 100BaseT Ethernet connectivity, as well as an industry-leading 24 month warranty and free phone-based technical support

Model Number Configurations



* Actual storage volumes may be higher

** SVGA display resolution is only available with 10" display option.

*** XGA Display Resolution is only available on the Non-Display and 15" Display options.

~ 500 MHz Processor option is only available with Non-Display and 6" models. 650 MHz Processor is only available with 8.0", 10.4" and 15" Display models.

^ Class 1 Division 2 is an extra cost option.

Units are 24VDC. Use P1X-PWRAC power supply for AC power. Power supply cannot be mounted on back of unit.

PA/EPX/XPR/XPC AC Power Supply

P1X-PWRAC

Note:

All systems include 0-50 °C operation, 24VDC power and agency approvals for CE, UL & CUL. Display based systems include an analog resistive touchscreen, NEMA 4/4X rated package.

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parkermotion.com/xpress

Parker Hannifin Corporation
Electromechanical Automation Division



Categories	Features	Non-Display (XPR00)	6" Display (XPR06)	8" Display (XPR08)	10" Display (XPR10)	15" Display (XPR15)
Display	Specification	Remote Unit No Display	6" Color TFT 5.7" (145mm) Diagonal VGA (640x480) Resolution 350 NIT, 262,144 Color TFT Viewing Angle: +/- 80° L/R, 80° U, 70° D 75,000 hour backlight (to half brightness)	8" Color TFT 8.0" (203mm) Diagonal VGA (640x480) Resolution 380 NIT, 262,144 Color TFT Viewing Angle: +/-65° L/R, 65° U, 55° D 20,000 hr. backlight (to half brightness)	10" Color TFT 10.4" (264mm) Diagonal VGA (600x480) Resolution SVGA (800x600) Resolution 350 NIT, 262,144 Color TFT Viewing Angle: +/-70° L/R, 40°U, 70°D 50,000 hour backlight (to half brightness)	15" Color TFT 15.0" (380mm) Diagonal XGA (1024x768) Resolution 260 NIT, 262,144 Color TFT Viewing Angle: +/-80° L/R, 55°U, 65°D 50,000 hour backlight (to half brightness)
	Interface	Analog Resistive Touchscreen				
Operating System		Windows CE version 5.0				
Processor Support	Processor Cache	CPU 500MHz LX800 processor (XPR00/06) 256KB (L1/L2)		CPU 650MHz Celeron ULV Processor (XPR08/10/15) 256KB (L2)		
Memory	System Video	256MB Shared DDR Memory (1) 200-pin SODIMM socket, 256MB (std.) 24MB Shared System Memory		256 MB Shared Memory (1) 144-pin SODIMM socket, 256MB (std.) 8MB Shared System Memory		
Storage Options	CompactFlash Floppy/CD ROM	128MB* CompactFlash External Type II slot (IDE Bootable) External connection via USB				
Ports	Keyboard Mouse USB Serial Ethernet Audio	USB 2.0 USB 2.0 (2) USB 2.0 ports Type-A, CD/Floppy/USB Drive bootable with over current protection (1) RS232 9-Pin D-sub (1) RS232/422/485 9-Pin D-sub (1) 10/100Base-T w/ RJ45 Stereo output, 1/8" mini plug		PS/2 PS/2 (2) USB 1.1 ports Type-A, CD/Floppy/USB Drive bootable with over current protection (1) RS232 9-Pin D-sub (1) RS232/422/485 9-Pin D-sub (1) 10/100Base-T w/ RJ45 No Audio		
Expansion Slots		N/A				
BIOS Options		Plug-n-Play Configurable Boot Devices: • CompactFlash • USB (CD/ROM, Floppy, Thumb Drive)				
Package	Temperature Range Rel. Humidity Vibration Shock	0-50°C 5-95% (non-cond.) 10-500 Hz .5grms (random-operational-HD) 10-500 Hz 1grms (random-operational-CompactFlash) 10G, 11 msec (operating) 30G, 11 msec (non-operating)				
Power Requirement		24 VDC, 2A maximum, Optional AC Adaptor				
Agency Approval		CE; UL/CUL; Class 1 Div. 2				





* Actual storage volumes may be higher

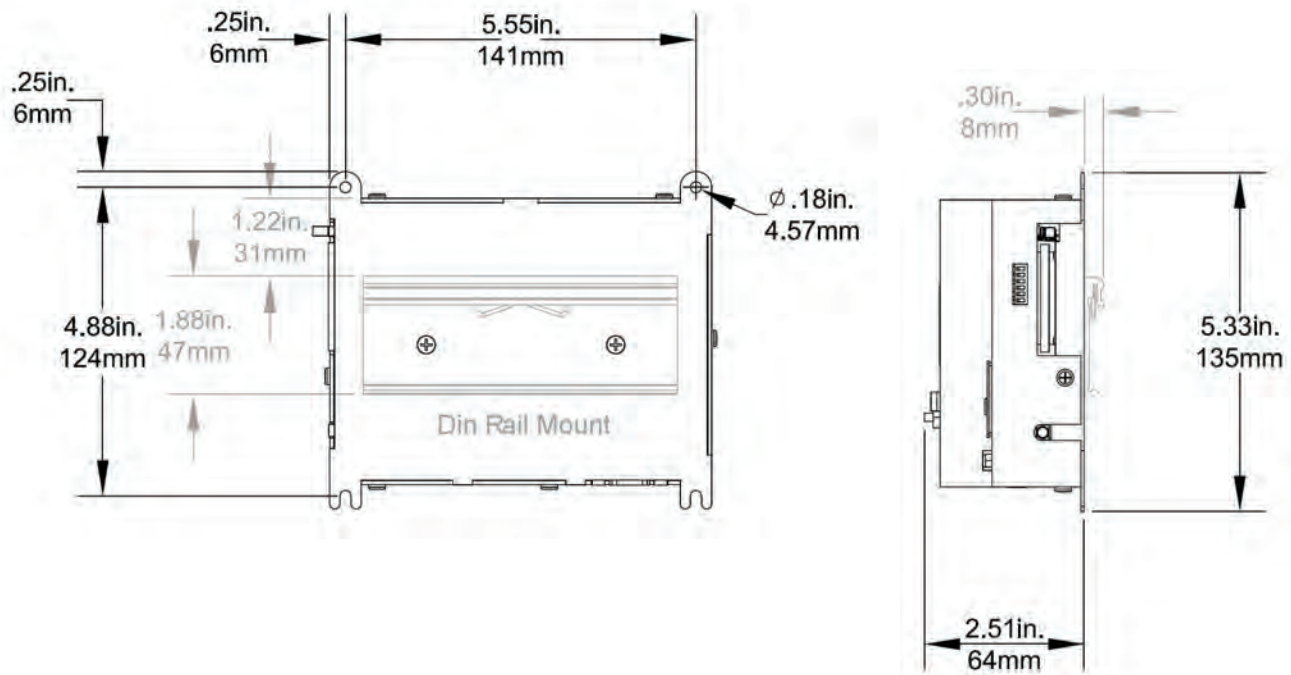
For more information about XPR PowerStations
visit parker-motion.com/Xpress
or call us at **1.800.233.3329**

XPR PowerStations come with Interact Xpress™ software pre-installed, a new HMI solution that fully leverages the wide availability of web browsing software to enable Distributed HMI, remote support and application sharing on the Internet and IP Networks. Xpress HMI applications are developed, edited, published and run in an HMI that is a Web Server.

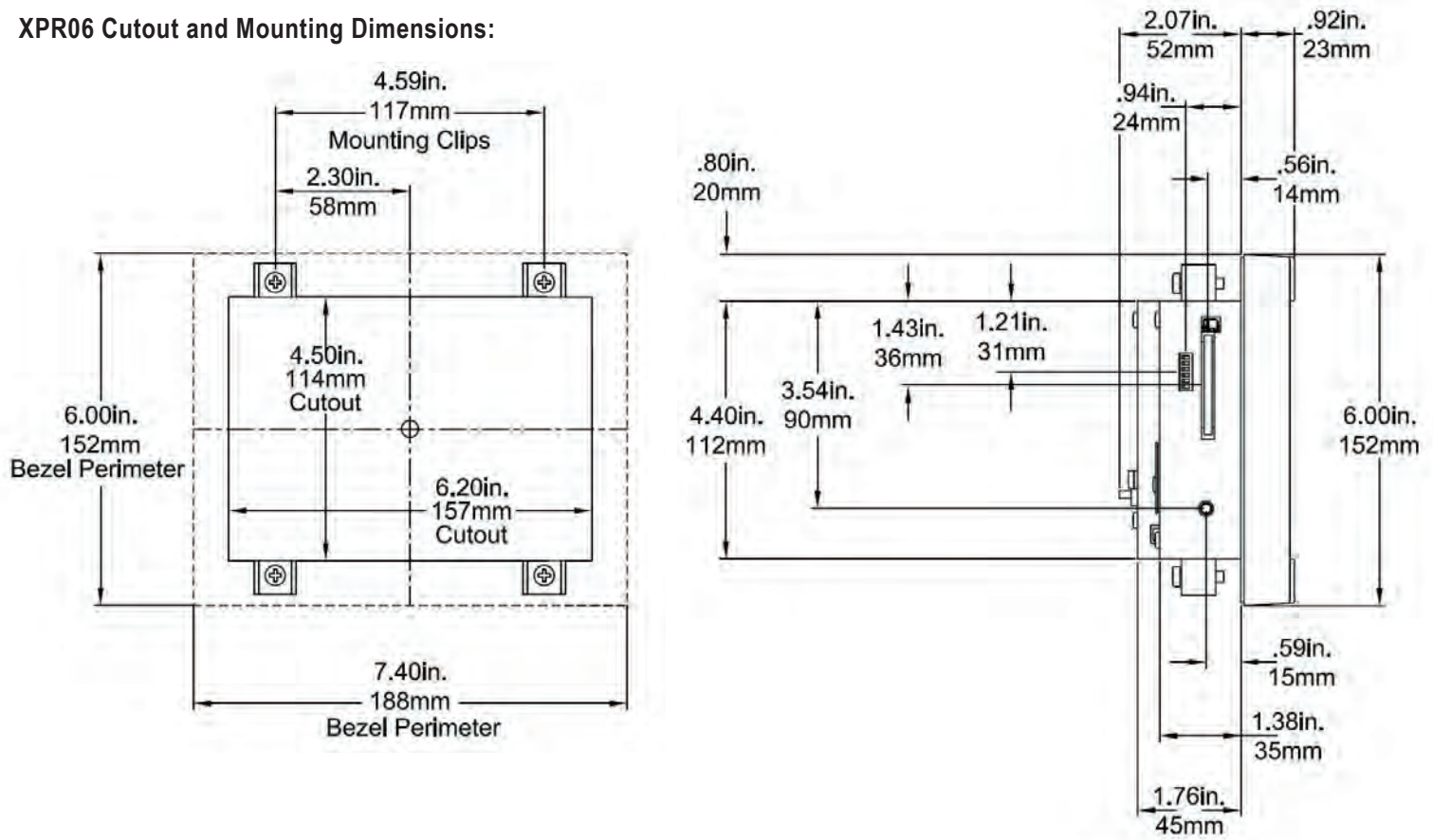
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XPR00 (No Display) Mounting Dimensions:



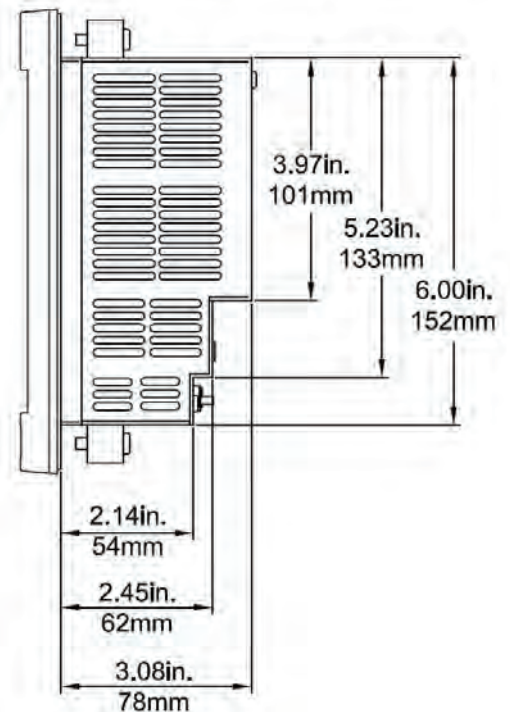
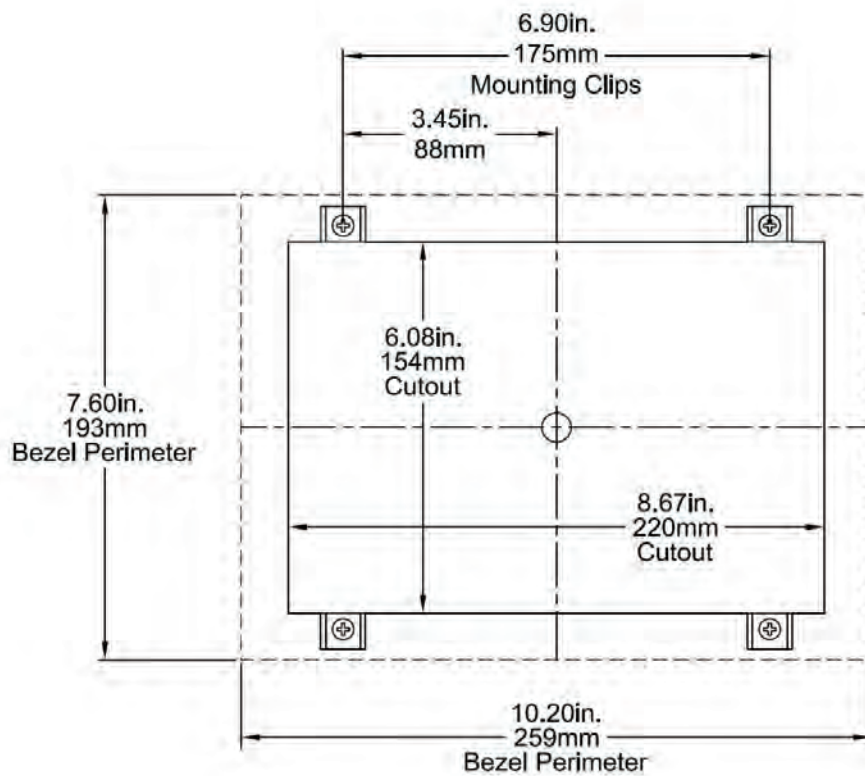
XPR06 Cutout and Mounting Dimensions:



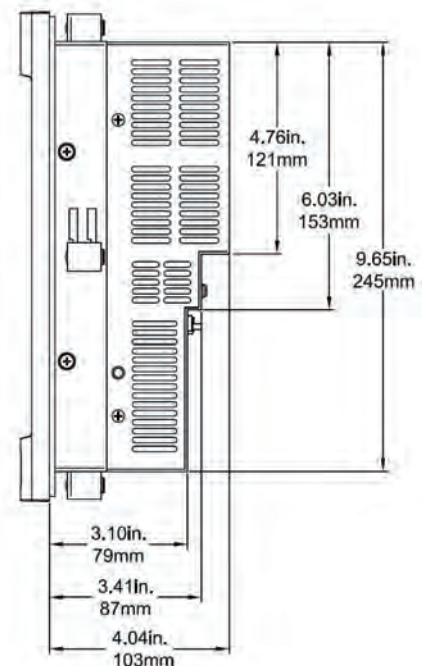
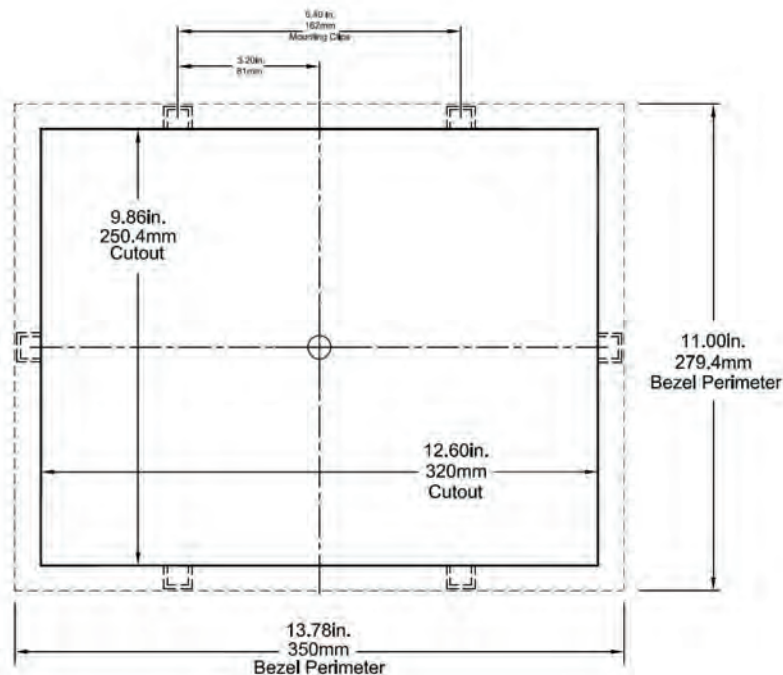
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XPR08 Cutout and Mounting Dimensions:



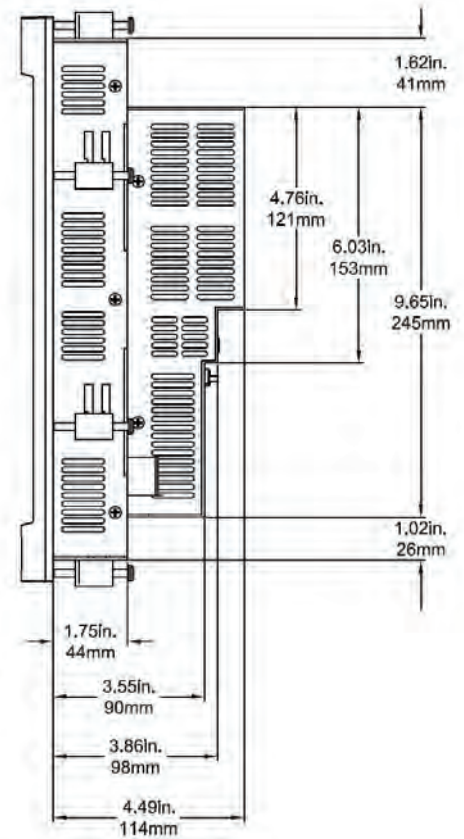
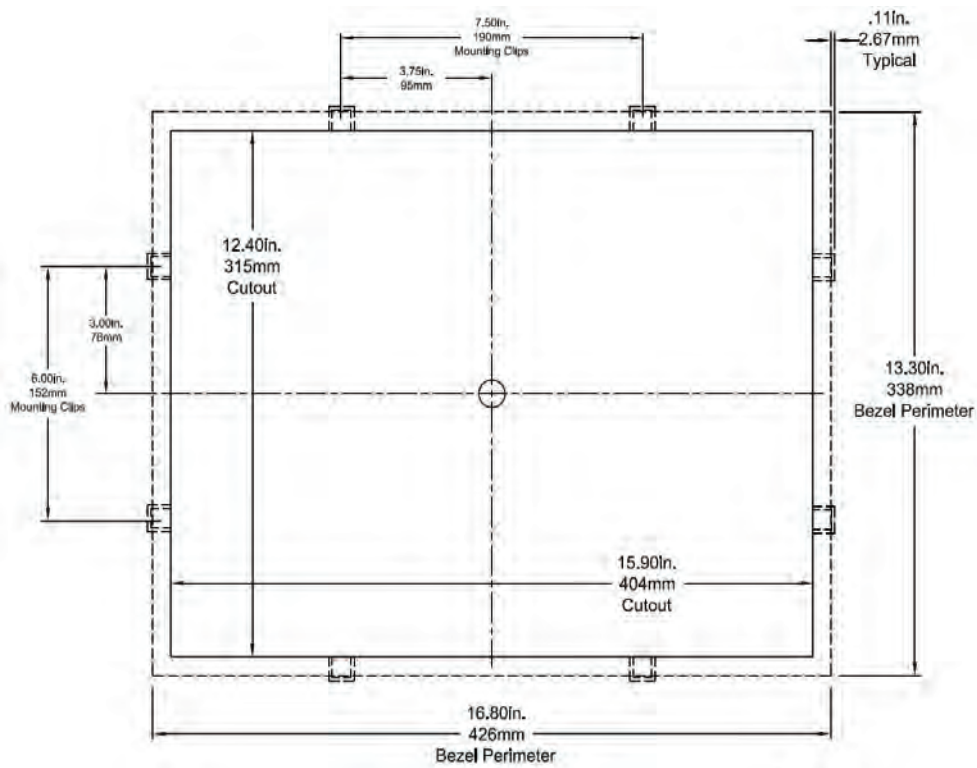
XPR10 Cutout and Mounting Dimensions:



All published product specifications are subject to change without notice.



XPR15 Cutout and Mounting Dimensions:



All published product specifications are subject to change without notice.

Quick and Easy
Client Configuration
for Xpress

XPC Industrial PC Family

Big Computing Power and Connectivity In A Small Package

This CTC-designed and manufactured XPC PowerStation is a compact Industrial PC with a 6", 8", 10" or 15" TFT panel mount touchscreen and a new non-display system. Pre-Configured with Windows CE Version 5, this NEMA4/4X-rated hardware platform offers a cost and space saving solution that is ideal for many industrial computing applications. XPC PowerStations also come with a Pre-Configured Client image for use with our popular Interact Xpress Distributed HMI product. Just provide the IP address for an Xpress Server and you are ready to go as a Web Client.

Each XPC system includes a range of standard features such as CompactFlash non-rotating storage, 2 USB ports, 2 serial ports and a 100BaseT Ethernet port. XPC PowerStations are industrial-hardened workstations that offer next generation processor technology in an affordable configuration.

Model Number Configurations

XPC xxxx - G C - 2 P 1

Display

00XN - Non-Display System
06VT - 6" Color TFT, VGA (640x480)
08VT - 8" Color TFT, VGA (640x480)
10VT - 10.4" Color TFT, VGA (640x480)
10ST - 10.4" Color TFT, SVGA (800x600)
15XT - 15" Color TFT, (1024x768)

DRAM

G - 256MB
H - 512MB
J - 1GB^ (6" Display only)

Operating System

C - Win CE 5.0**
X - Windows XP Pro***

Agency Approvals

1 - No Approvals
3 - UL/CUL/CE
5 - UL/CUL/EC / Class 1 Div. 2~

CompactFlash

P - 256 MB FLASH* (Win CE only)
R - 512MB FLASH* (Win CE only)
T - 4GB FLASH* (Windows XP only)
U - 8GB FLASH* (Windows XP only)

Processor

2 - 500 MHz^ (6" Display only)
4 - 650 MHz^^ (8"-15" Displays only)

* Actual storage volumes may be higher

^ 500 MHz Processor and 1 GB DRAM option only available with 6" and Non-Display models.

^^ 650 MHz Processor option only available with 8" 10.4" and 15" display models.

** Win CE 5.0 models only available with 256MB DRAM and 256MB or 512MB CompactFlash

*** Windows XP Pro models only available with 4GB or 8GB CompactFlash

~ Class 1 Division 2 is an extra cost option. [Approval is pending for 8" and 10.4" products.]

Units are 24VDC. Use P1X-PWRAC power supply for AC power. Power supply cannot be mounted on back of unit.

PA/EPX/XPR/XPC AC Power Supply

P1X-PWRAC

Note:

All systems include 0-50 °C operation, 24VDC power and agency approvals for CE, UL & CUL. Display based systems include an analog resistive touchscreen, NEMA 4/4X rated package.

All published product specifications are subject to change without notice.



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Parker Hannifin Corporation
Electromechanical Automation Division



Categories	Features	Non-Display (XPC00)	6" Display (XPC06)	8" Display (XPC08)	10" Display (XPC10)	15" Display (XPC15)
Display	Specification	Remote Unit No Display	6" Color TFT 5.7" (145mm) Diagonal VGA (640x480) Resolution 350 NIT, 262,144 Color TFT Viewing Angle: +/- 80° L/R, 80° U, 70° D 75,000 hour backlight (to half brightness)	8" Color TFT 8.0" (203mm) Diagonal VGA (640x480) Resolution 380 NIT, 262,144 Color TFT Viewing Angle: +/-65° L/R, 65° U, 55° D 20,000 hr. backlight (to half brightness)	10" Color TFT 10.4" (264mm) Diagonal VGA (600x480) Resolution SVGA (800x600) Resolution 350 NIT, 262,144 Color TFT Viewing Angle: +/-70° L/R, 40°U, 70°D 50,000 hour backlight (to half brightness)	15" Color TFT 15.0" (380mm) Diagonal XGA (1024x768) Resolution 260 NIT. 262,144 Color TFT Viewing Angle: +/-80° L/R, 55°U, 65°D 50,000 hour backlight (to half brightness)
	Interface	Analog Resistive Touchscreen				
Operating System		Win CE version 5.0** or Windows XP Pro				
Processor Support	Processor Cache	CPU 500MHz LX800 processor 256KB (L1/L2)		CPU 650MHz Celeron ULV Processor 256KB (L2)		
Memory	System	256MB (STD) Shared DDR Memory (1) 200-pin SODIMM socket, 256MB (std.)		256 MB (STD) (1) 144-pin SODIMM socket, 256MB (std.)		
	Video	24MB Shared System Memory		8MB Shared System Memory		
Storage Options	CompactFlash Floppy/CD ROM	128MB* (Win CE) or 4GB* (Windows XP Pro) CompactFlash External Type II slot (IDE Bootable) External connection via USB				
Ports	Keyboard Mouse USB	USB 2.0 USB 2.0 (2) USB 2.0 ports Type-A, CD/Floppy/USB Drive bootable with over current protection		PS/2 PS/2 (2) USB 1.1 ports Type-A, CD/Floppy/ USB Drive bootable with over current protection		
	Serial Ethernet Audio	(1) RS232 9-Pin D-sub (1) RS232/422/485 9-Pin D-sub (1) 10/100Base-T w/ RJ45 Stereo output, 1/8" mini plug		(1) RS232 9-Pin D-sub (1) RS232/422/485 9-Pin D-sub (1) 10/100Base-T w/ RJ45 No Audio		
Expansion Slots		N/A				
BIOS Options		Plug-n-Play Configurable Boot Devices: • CompactFlash • USB (CD/ROM, Floppy, Thumb Drive)				
Package	Temperature Range Rel. Humidity Vibration	0-50°C 5-95% (non-cond.) 10-500 Hz .5grms (random-operational-HD) 10-500 Hz 1grms (random-operational-CompactFlash)				
	Shock	10G, 11 msec (operating) 30G, 11 msec (non-operating)				
Power Requirement		24 VDC, 2A maximum, Optional AC Adaptor				
Agency Approval		CE; UL/CUL; Class 1 Div. 2~				



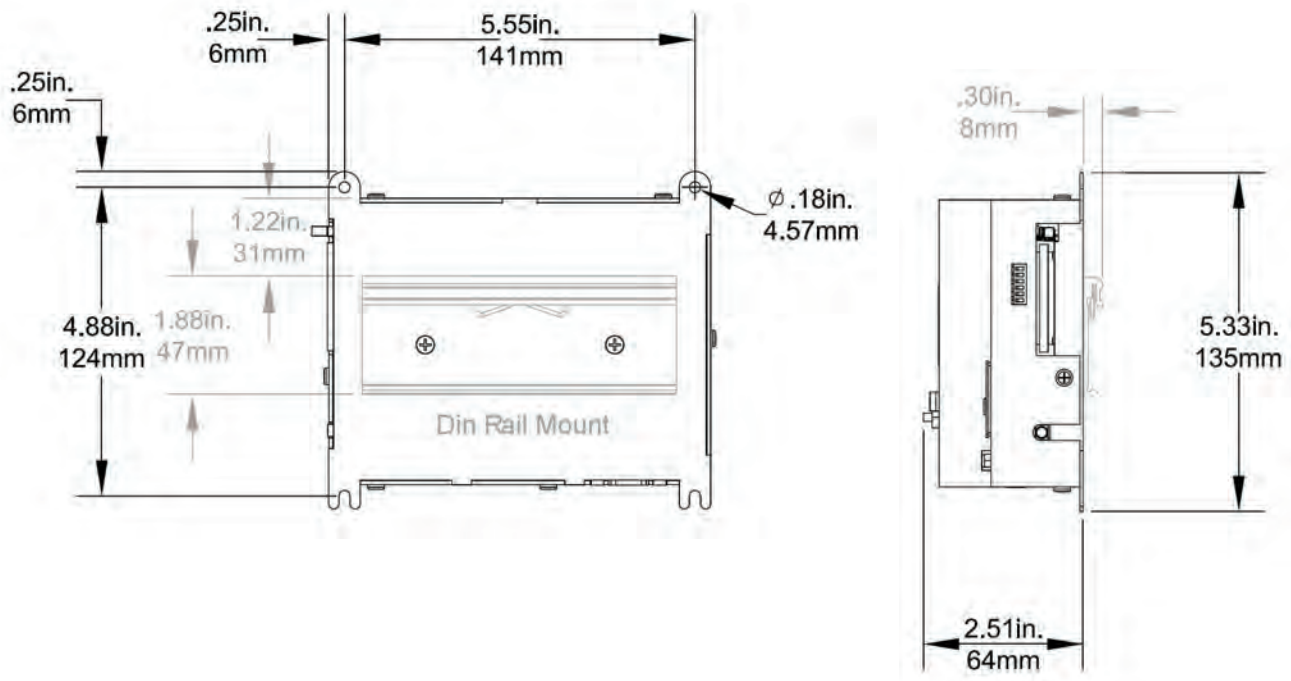
* Actual storage volumes may be higher

For more information about XPC Industrial PCs
visit **ctcusa.com** or call us at **1.800.233.3329**

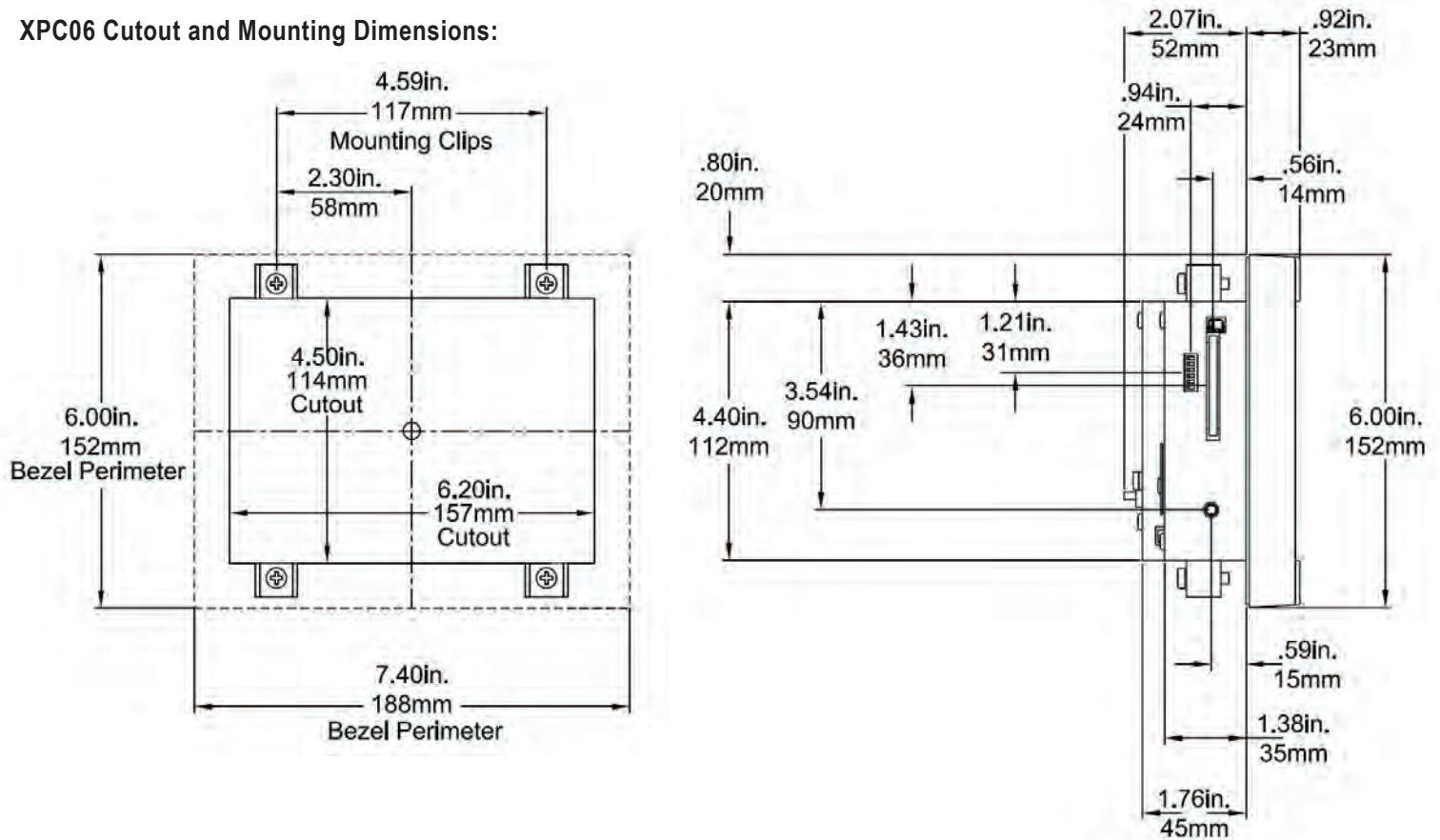
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XPC00XN (No Display) Mounting Dimensions:



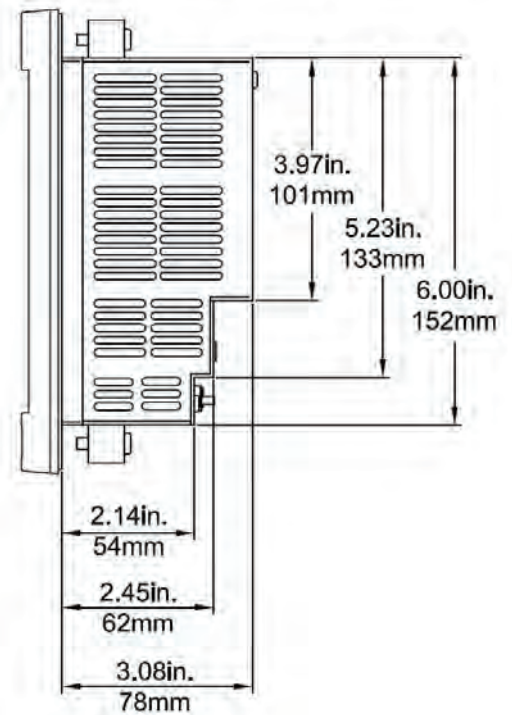
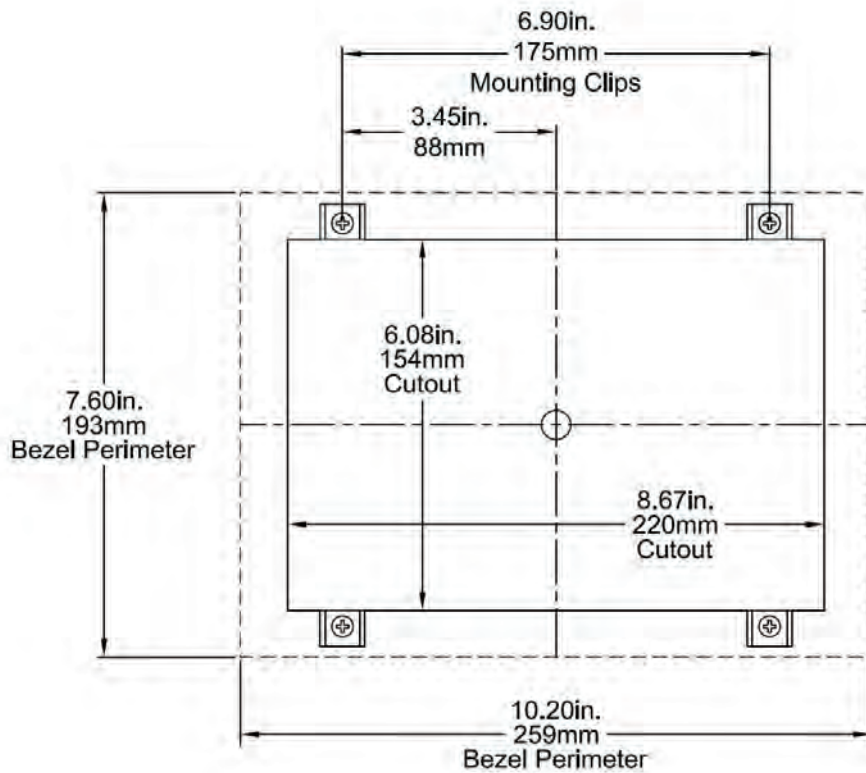
XPC06 Cutout and Mounting Dimensions:



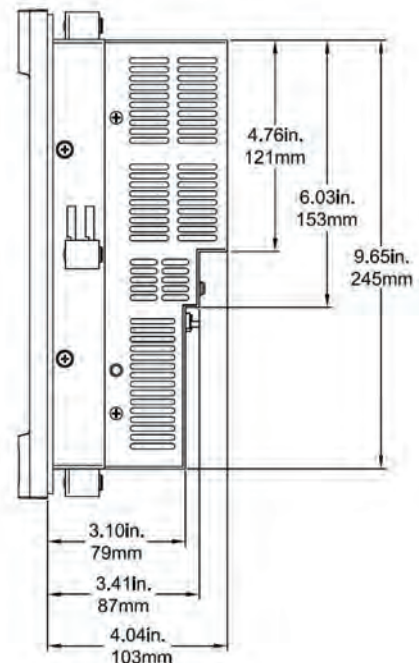
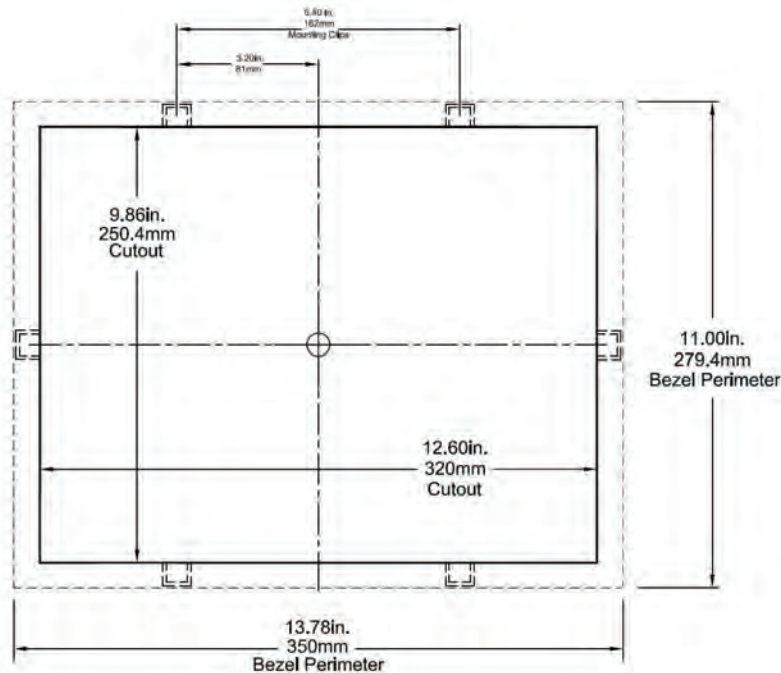
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XPC08 Cutout and Mounting Dimensions:



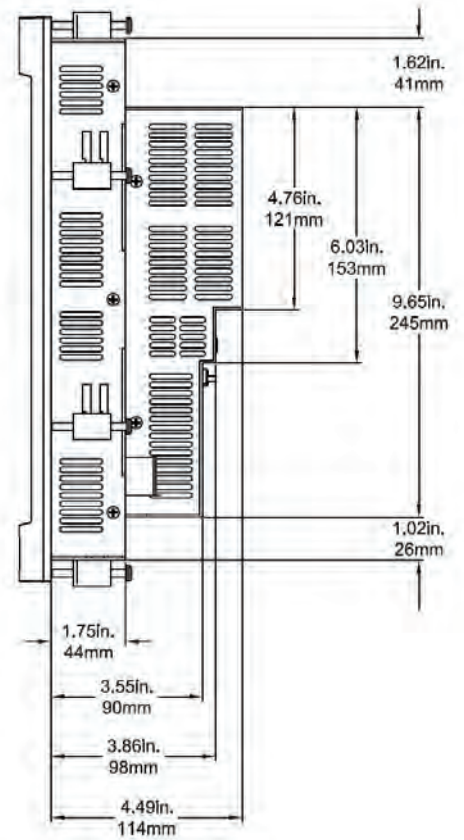
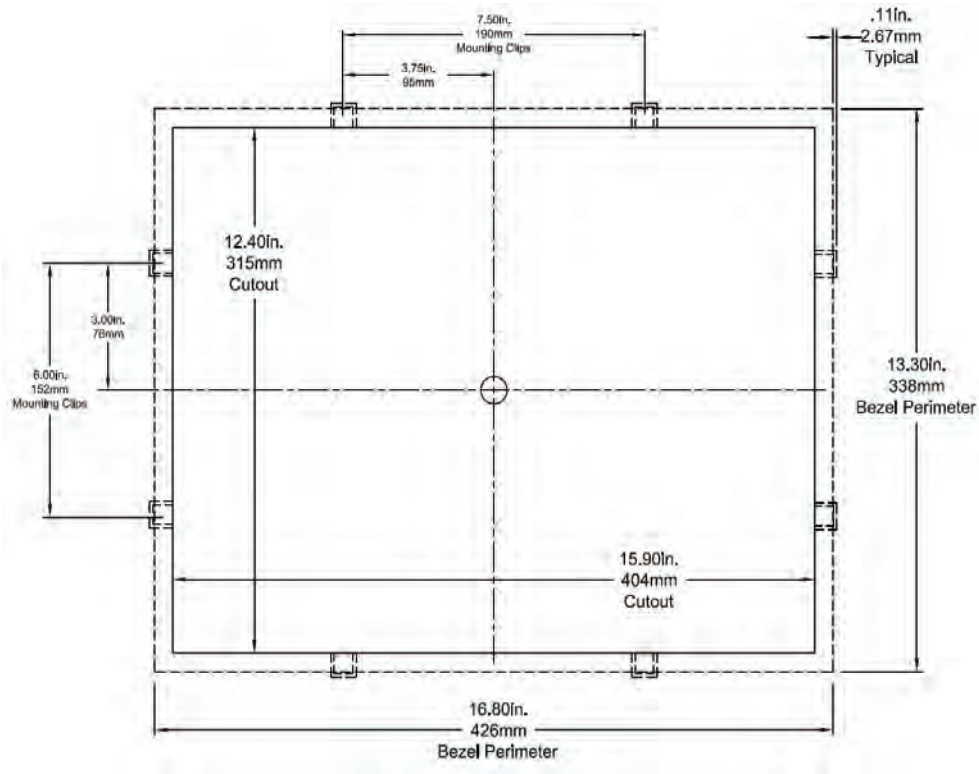
XPC10 Cutout and Mounting Dimensions:



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XPC15 Cutout and Mounting Dimensions:



All published product specifications are subject to change without notice.

HPC/X PowerStations



Hardened Industrial Workstations at Light Duty Prices

With 10", 15", and 17" panel mount touchscreen systems and a non-display system, the new HPC/X PowerStation line is designed and tested to extremes. CTC's award winning InteractX Windows HMI runtime software is included with HPX HMI PowerStations. Both HPC Industrial PCs and HPX HMI PowerStations are NEMA-rated, robust units that are tougher than "light duty" Industrial workstations—with more processor, media and connectivity performance for your money. This updated line now includes an additional serial port, PowerSmart™ onscreen monitoring, a new DC power option and a 15" display Stainless Steel Bezel option for clean room/sanitary work environments. And all PowerStations now come with an industry-leading, 24-Month Warranty!

HPX Model Number Examples

Parker Product Code: 610			
	Performance	Better*	Best*
	CPU	2.0 GHz Celeron	2.8 GHz P4
	DRAM	512MB [^]	1.0GB ^{^^}
	OS	Windows XP	Windows XP
	Hard Drive	40GB	40GB
	Non-Display	HPX00N-XAAA-2-3	HPX00N-XAAA-4-3
	10" Touchscreen VGA (640 x 480)	HPX10T-XAAA-2-3	HPX10T-XAAA-4-3
	10" Touchscreen SVGA (800 x 600)	HPX10S-XAAA-2-3	HPX10S-XAAA-4-3
	15" Touchscreen - Std. Bezel XGA (1024 x 768)	HPX15T-XAAA-2-3	HPX15T-XAAA-4-3
	15" Touchscreen - S. Steel Bezel XGA (1024 x 768)	HPX15A-XAAA-2-3	HPX15A-XAAA-4-3
	17" Touchscreen SXGA (1280 X 1024)	HPX17T-XAAA-2-3	HPX15A-XAAA-4-3

InteractX 2.2 Runtime
License & Software
Included

InteractX 1.92 can be
downloaded to these
units or pre-installed
at the factory.

* All HPX models shown with AC power.
DC Power is also available on all models.

[^] 1.0GB DRAM (not shown) is also available
on "Better" configurations

^{^^} 2.0GB DRAM (not shown) is also available
on "Best" configurations

HPC Model Number Examples

Parker Product Code: 871	
Description	Model #
No Display - AC Power - 2.0 GHz Celeron - CD ROM - HD	HPC00N-27-XGA-BD3
10" VGA (640x480) - Color TFT - AC Power - 2.0 GHz Celeron - CD ROM - HD	HPC10T-27-XGA-BD3
10" SVGA (800x600) - Color TFT - DC Power - 2.0 GHz Celeron - CD ROM - HD	HPC10S-37-XGA-BD3
15" XGA (1024x768) - Color TFT - Standard Bezel - AC Power - 2.0 GHz Celeron - CD ROM - HD	HPC15T-27-XGA-BD3
15" XGA (1024x768) - Color TFT - Stainless Steel Bezel - DC Power - 2.0 GHz Celeron - CD ROM - HD	HPC15A-37-XGA-BD3
17" SXGA (1280x1024) - Color TFT - AC Power - 2.0 GHz Celeron - CD ROM - HD	HPC17T-27-XGA-BD3

NOTE:
All HPC models shown
with 2.0 GHz Celeron
processor and 256MB
DRAM. Models are
also available with 2.8
GHz P4 processor and
up to 2.0GB DRAM.

All published product specifications are subject to change without notice.



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Parker Hannifin Corporation
Electromechanical Automation Division



Categories	Features	10" Display(HPC/HPX10)	15" Display (HPC/HPX15)	17" Display (HPC/HPX17)	Remote (HPC/HPX00)
Display	Specification	10" Color TFT 10.4" (264mm) VGA (640x480) Resolution 450 NIT brightness Viewing Angle: U/D = 50/60°, L/R = 70/70° SVGA (800x600) Resolution 350 NIT brightness Viewing Angle: U/D = 40/70°, L/R = 70/70°	15" Color TFT 15.1" (380mm) Diagonal XGA (1024x768) Resolution 260 NIT brightness Viewing Angle: U/D = 55/80°, L/R = 80/80°	17" Color TFT 17.0" (432mm) Diagonal SXGA (1280x1024) Resolution 350 NIT brightness Viewing Angle: U/D = 75/65°, L/R = 70/70°	Remote Unit No Display 2048x1536 max. monitor resolution
	Interface	Analog Resistive Touchscreen			
Operating System		Windows XP Professional or Windows 2000			
HMI Software		InteractX Unlimited Tag HMI Runtime software and license* (HPX)			
Processor Support		2.0GHz Celeron or 2.8 GHz Pentium 4 Socket 478			
	Chipset	Intel 845GV/ICH4 • 400/533MHZ FSB • Intel Extreme Graphics			
Memory	System	256MB Shared DDR 200/266 (2) 184-Pin Slots, 2.0GB Max.			
	Video	64MB+ Shared System Memory			
Storage Options	Hard Drive CompactFlash Floppy/CD ROM)	(1) 3.5" 80GB**, 160GB Optional, Enhanced IDE (1) External Type II slot (IDE Bootable) Floppy N/A CD ROM CDR, CDRW, or DVD-ROM or None (Bootable)			
Ports	Keyboard Mouse USB Serial Ethernet Parallel External Video Audio	(1) PS/2, with over current protection (1) PS/2, with over current protection (4) 2.0/1.1 ports Type-A, with over current protection (2) RS232 9-Pin D-sub and (1) RS232/422/485 selectable (1) 10/100Base-T w/ RJ45 (1) 25-Pin D-sub (1) Analog 15-Pin D-sub connector (max. resolution 2048x1536) (1) Amplified Output, (1) Line Input, (1) Microphone, AC97			
Expansion Slots		None Standard Optional PCI Slots: (2) ¾ Length			
BIOS Options		Plug-n-Play Configurable Boot Devices: • Hard Drive • CD ROM • CompactFlash • LAN • USB			
Package	Temperature Range Rel. Humidity Vibration Shock	0-50°C 5-95% (non-cond.) 10-500 Hz .5grms (random-operational-HD) 10-500 Hz 1grms (random-operational-CompactFlash) 10G, 11 msec (operating) 30G, 11 msec (non-operating)			
Power Requirement		24 VDC, 2A maximum 90-250 VAC; 50/60 Hz			
Agency Approval		UL/CUL; CE; Optional Class 1 Division 2			



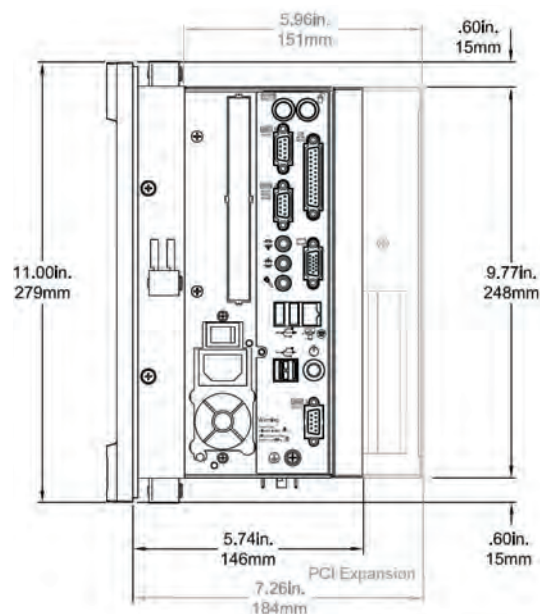
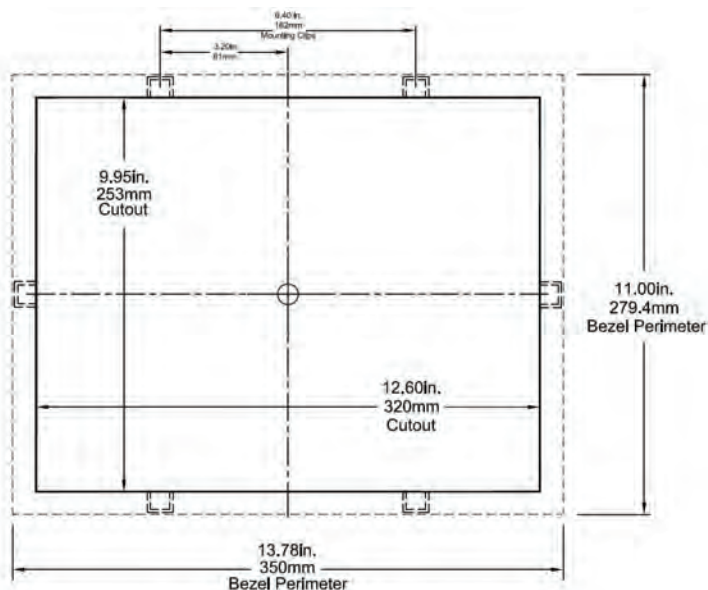
For more information about HPC/X PowerStations
visit **ctcusa.com** or call us at **1.800.233.3329**

* InteractX 2.1 or later recommended
** Actual storage volumes may be higher

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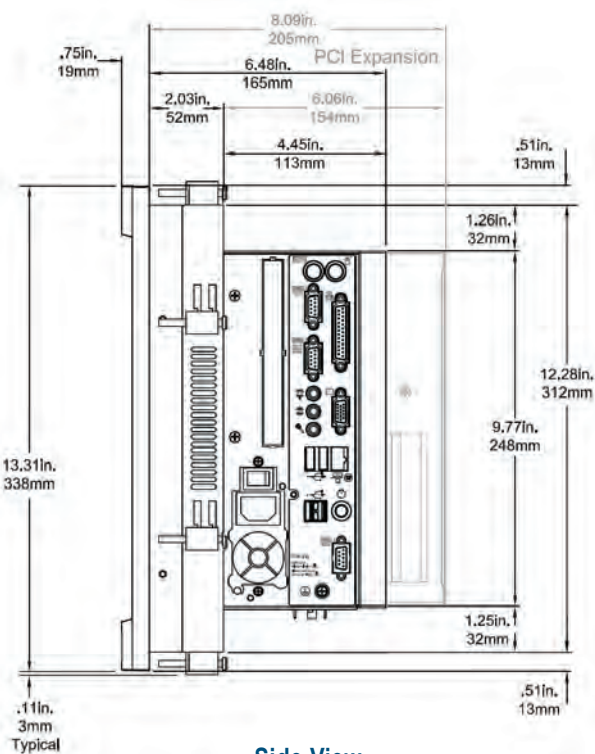
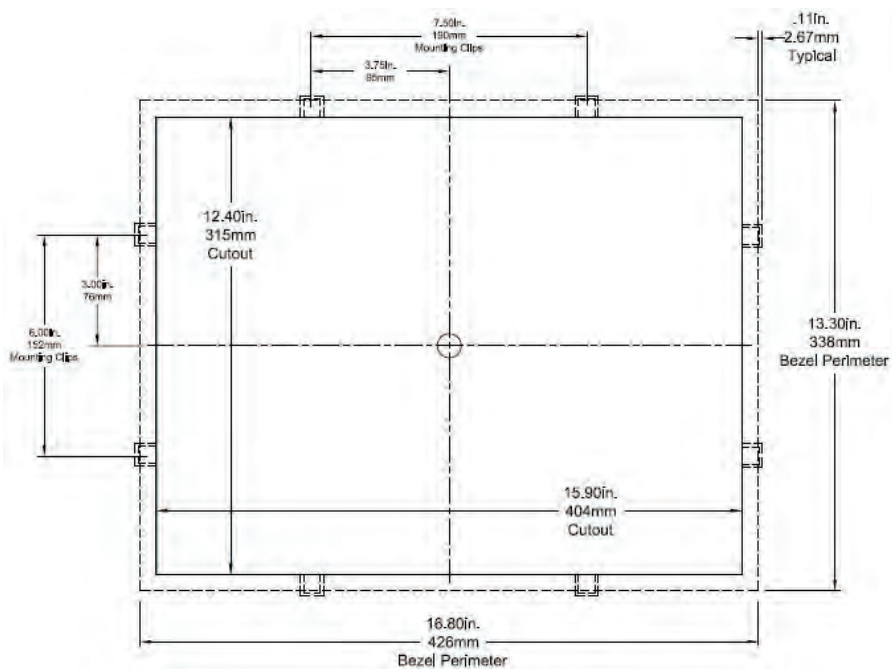


HPC/X10 Cutout Dimensions:



Side View

HPC/X15 Cutout Dimensions:

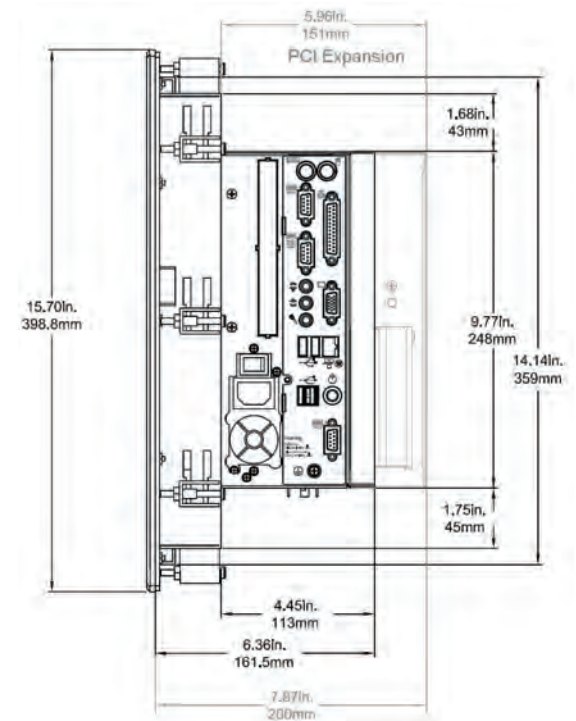
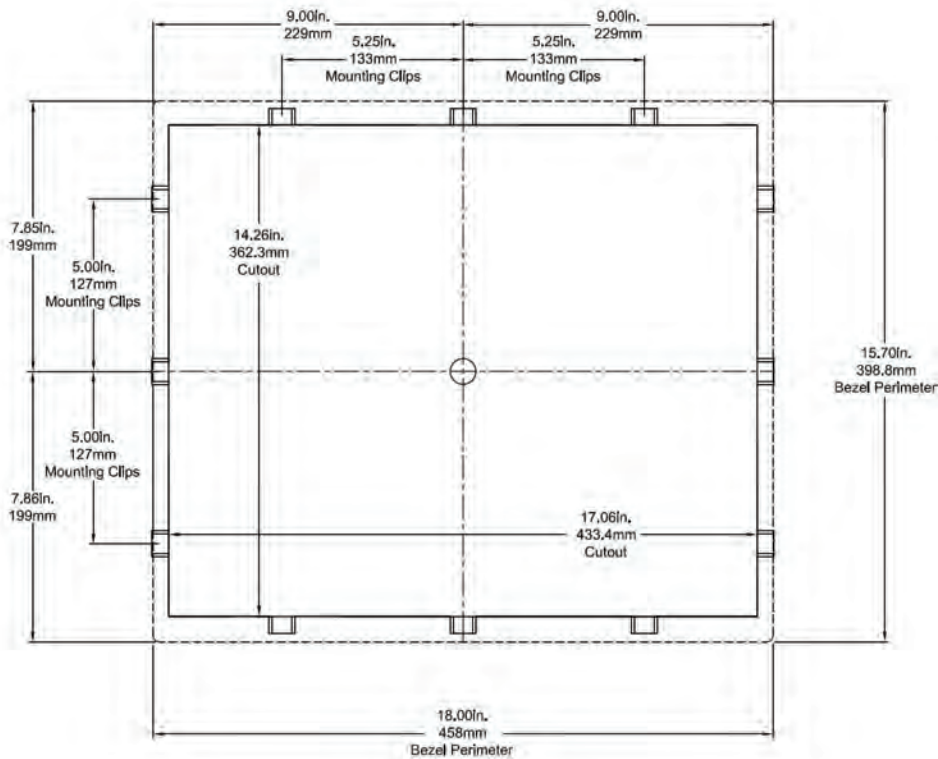


Side View

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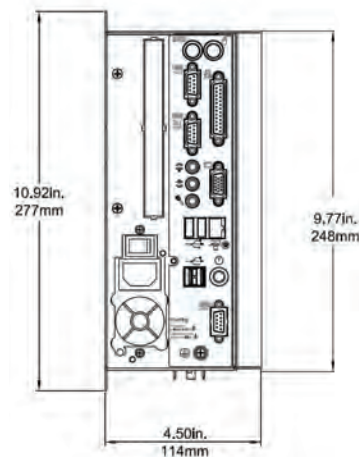
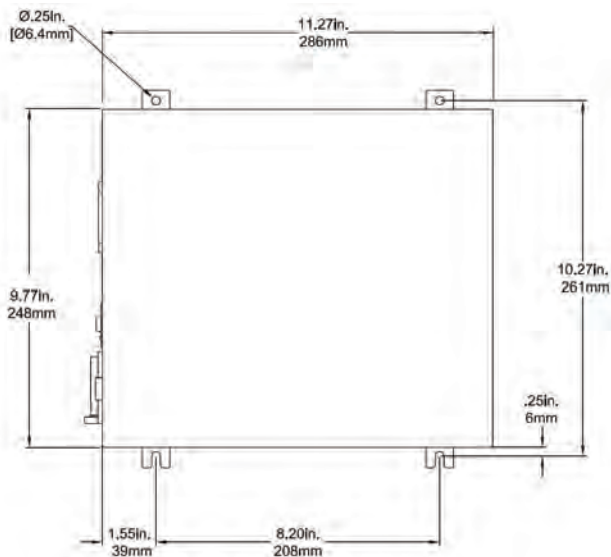


HPC/X17 Cutout Dimensions:

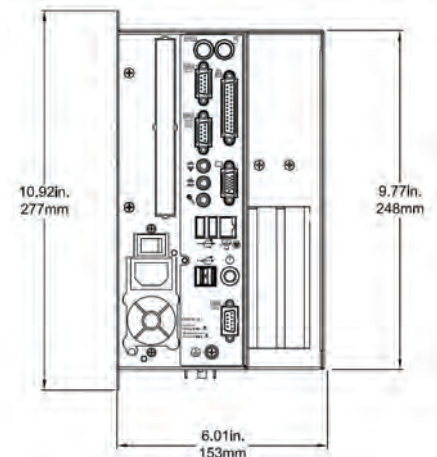


Side View

HPC/X00 Dimensions:



Side View

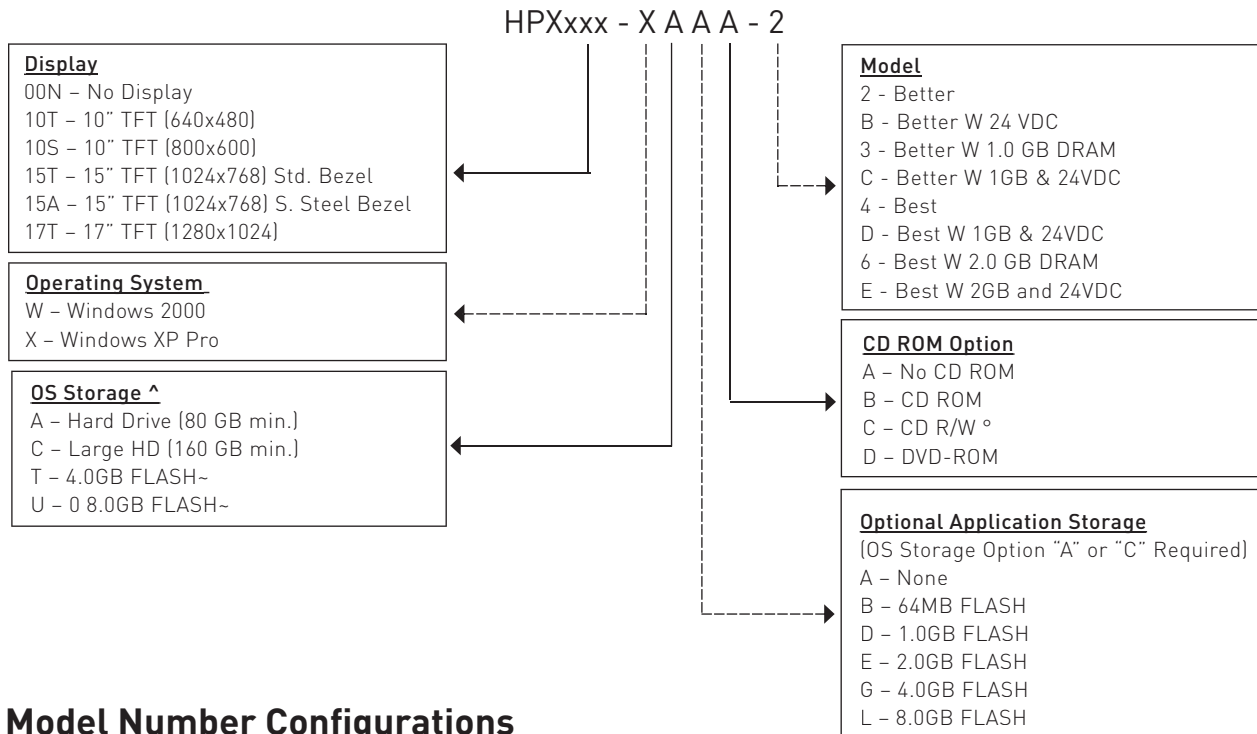


Side View
with PCI Expansion

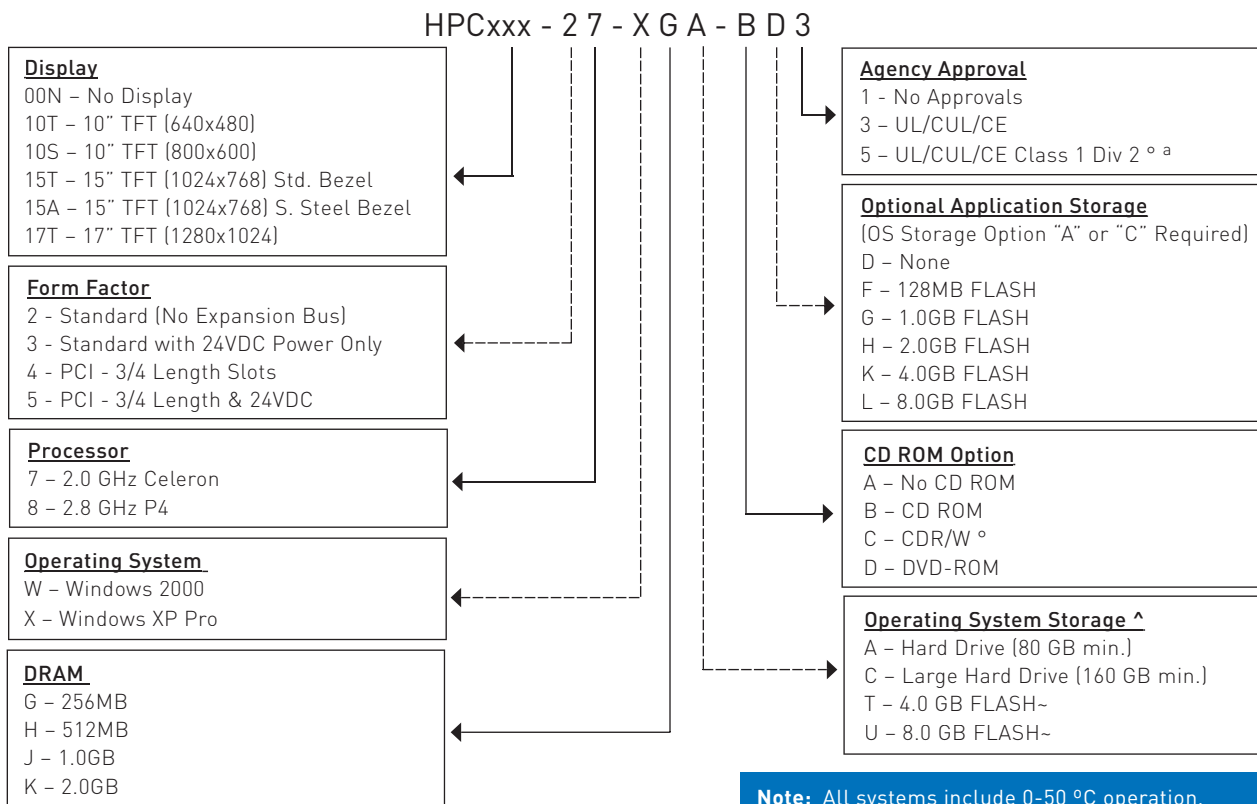
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HPX Model Number Configurations



HPC Model Number Configurations



Note: All systems include 0-50 °C operation, 110VAC power and agency approvals for CE, UL & CUL. Display based systems include an analog resistive touchscreen, NEMA 4/4X rated package.

^ Actual storage volumes may be higher.
 ~ 1GB DRAM recommended with Compact Flash Based systems
 ° Class 1 Div 2 option not available with CDR/W option.
 a C1D2 systems now ship with USB and PS/2 ports uncovered.

All published product specifications are subject to change without notice.

Parker Factory Display Specifications

Categories	Features	32" Display (PFD32)	40" Display (PFD40)	46" Display (PFD46)
Display	Specification	32" Color TFT 31.5" (800mm) Diagonal 1366x768 Native Resolution Brightness: 500 cd/m2, Contast Ratio: 600:1 Viewing Angle: +/- 88° L/R, 88° U, 88° D	40" Color TFT 40.0" (1016mm) Diagonal 1366x768 Native Resolution Brightness: 500 cd/m2, Contast Ratio: 1200:1 Viewing Angle: +/-89° L/R, 89° U, 89° D	46" Color TFT 46.0" (1168mm) Diagonal 1366x768 Native Resolution Brightness: 500 cd/m2, Contast Ratio: 1200:1 Viewing Angle: +/-89° L/R, 89° U, 89° D
Operating System		Windows CE version 5.0		
Processor Support	Processor Cache	CPU 500MHz LX800 processor 256KB (L1/L2)		
Memory	System Video	256MB Shared DDR Memory (1) 200-pin SODIMM socket, 256MB (std.) 24MB Shared System Memory		
Storage Options	CompactFlash Floppy/CD ROM	512MB* CompactFlash External Type II slot (IDE Bootable) External connection via USB		
Ports	Keyboard Mouse USB Serial Ethernet Audio	USB 2.0 USB 2.0 (2) USB 2.0 ports Type-A, CD/Floppy/USB Drive bootable with over current protection (1) RS232 9-Pin D-sub (1) RS232/422/485 9-Pin D-sub (1) 10/100Base-T w/ RJ45 Stereo output, 1/8" mini plug		
BIOS Options		Plug-n-Play Configurable Boot Devices: • CompactFlash • USB (CD/ROM, Floppy, Thumb Drive)		
Package	Temperature Range Rel. Humidity	0-40°C 20-80% (32"), 10-80% (40" and 46")		
Power Requirement		100-120VAC and 220-240VAC @50/60Hz		
Agency Approval		EN61000-6-3, EN55011, EN55022 Class B EN61000-6-2, EN61000-4- 2,3,4,5,6,8 & 11 EN60950-1 UL508 Listed UL 60950-1 NEC Class 2 CE marked for EMC (89/336/EEC)		



* Actual storage volumes may be higher

See for yourself why PFD offers a technology leap for Factory Displays Systems . . . Visit us at **parkermotion.com/PFD** or call us at **800-233-3329**.



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PFD-309 3-05-09



ENGINEERING YOUR SUCCESS.

Parker Factory Display

Production and Lean Visualization Systems



Visual Impact: Your Next Productivity Advantage

One of the best ways to cut the high cost of downtime and scrap, is to empower workers with real-time, situational awareness for faster response to downs and non-conforming conditions on the factory floor. That's why the new Parker Factory Display (PFD) visualization system pays for itself so quickly.

PFD offers unprecedented flexibility and impact for delivering critical messages to associates on the factory floor. Whether presenting Andon displays, lean metrics, production status, OEE data, safety policies or employee announcements, the Parker Factory Display is much more than a "scoreboard" that simply displays text.

Contact Information:

Parker Hannifin Corporation
Electromechanical Automation Division
50 W. TechneCenter Drive
Milford, OH 45150
1-800-233-3329.
www.parkermotion.com/HMI

Product Features:

- **Information Anywhere! - Move** information around or even off the plant floor with integrated Web Publishing capabilities.
- **Intuitive development tools and templates** allow easy screen customization and configuration.
- **Customer Designed Templates** allow corporate-wide, standard metrics to be deployed **Faster and Easier** than any other technology.
- **Direct PLC connectivity** automates data collection - over 40 drivers included at no charge.
- **HD image quality** supports stunning graphical capabilities and rich media for high impact presentations.
- **Continuous Improvement database** can be distributed to multiple locations - even exported to common formats for further analysis.
- **Sophisticated security** allows 6 different access levels including "view only" for remote users.
- **Offered in 32", 40" and 46"** widescreen sizes with 16.7 Million colors. (Contact us for larger display requirements)
- **Thermal sensors and fans** provide cooling in Industrial environments.
- **Power can be scheduled** to match downtime - saving energy.
- **VESA 200mm mounting**



ENGINEERING YOUR SUCCESS.

A “Next Generation” Solution for Plant Floor Display Applications

The new Parker Factory Display (PFD) offers unparalleled visual impact that enhances the message, while its distributed architecture easily integrates into your existing manufacturing and IS infrastructure. Whether

- Lean Metrics
- Production Status
- OEE Data
- Andon Displays
- Safety Displays
- Announcements
- Fully User Configurable

remotely publishing displays from anywhere via the Web or visualizing non-conforming parts on a production line, the Parker



Factory Display does so much more than other production board displays and Andon systems . . . and at a lower cost!

Factory Visualization Improves Workforce Productivity

- Faster downtime response
Rapid ROI based on high cost per minute of lost production
- Lean manufacturing visualization improves worker response time
- Empowered and informed workforce
- Andon functionality



Web Publishing To Manage Display Content Remotely

- Information Anywhere!
- Distribute information where YOU need it.
- Remotely display and manage your Visualization from anywhere you have Internet Access.
- Configure your applications locally or from a central location and distribute to the point of display.
- Push standardized corporate templates to multiple locations.
- Use Photos, Videos and Rich Media within your application - Leads to reduced downtime via earlier recognition or fault and problem conditions.
- Aggregate information from multiple locations across the internet, intranet or other network connections.



Viewable Distance

Model	Max. Character Size	Max. Viewable Distance
PFD32	6"	200'
PFD40	7.5"	328'
PFD46	8.625"	375'

Parker Factory Display Software

Parker Factory Display comes with pre-installed software that fully leverages the wide availability of web browsing software for remote support and application sharing on the Internet and IP Networks. PFD applications can be developed, edited, published using its built in Web Server.

ASSEMBLY LINE STATUS

ORDERS COMPLETED

3244

TARGET THIS MONTH

7500

LINE 1

PART JAMMED

Line tooled for Part #

112745

LINE 2

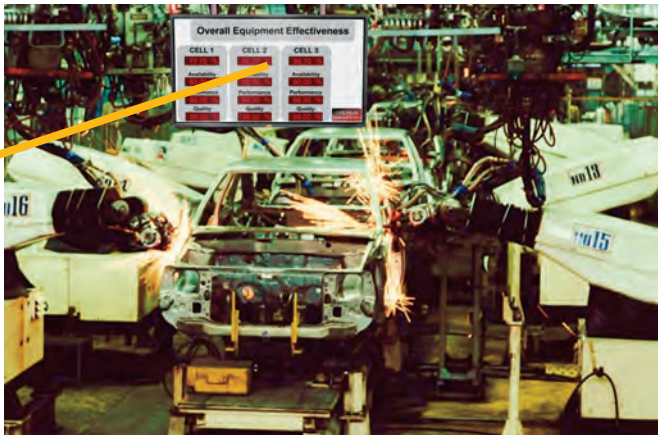
COOLING SENSOR

Line tooled for Part #

238119

Go to Control Screen

Time On	Description	Priority	Group
14:08:00	Cooling Sensor	WARNING	LINE 2
14:08:00	Component Jam	WARNING	LINE 1



Parker Factory Manager PC Development Software

Parker Factory Manager (PFM) is Windows-based software that comes with every Parker Factory Display. PFM allows you to develop, edit and publish PFD applications from any PC. This stand-alone tool enables development of your Parker Factory Display even when you are not connected to it or on the corporate network.

Quick Development Tools

Have your Vizualization System up in running in record time, with our HMI-inspired development environment. Pre-configured tools allow you to create a custom displays faster than other systems

using a simple “Drag and Drop” interface. Every PFD comes ready to connect directly to plant floor data sources with over 40 communications drivers for the most popular PLC’s and motion controller—all included at no extra cost.

We’ve also provided templates for many common applications in order to save you even more time.

Templates include:

- OEE Calculation
- Safety Displays
- Production Displays
- First Article Quality



The PFM development environment is identical in all tools: Offline development package, on the Display or web published into Internet Explorer.

Development System Software Requirements

Windows 2000/XP Pro