XP500 industrial PC family
Control solution with capacitive multi-touch technology

For those who stay at the forefront of technology

Powering Business Worldwide

XP500

Designed for simple and flexible operation

Use multiple fingers to zoom, scroll and swipe—intuitive multi-touch operating concepts have long been the norm for smartphones and tablets, but are now also available to the industrial world. With Eaton's XP500 industrial PC product family, users can operate the functions keys on the screen by using several fingers or both hands.

Operators can also scroll and zoom with two fingers to navigate around the elements or documents in the help system. High-precision sensors prevent operating errors and accidental machine starts. Critical functions can only be activated by pressing multiple control fields at once, which ensures significantly greater system safety.

Eaton makes everything easier

Easy to maintain: hygienic design

The smooth, anti-glare display is made from tempered safety glass and has a special easy-care design without any gaps or edges, which means no residues will be left behind after cleaning, even when using strong cleaning agents.

Easy to protect: protect mode

The XP500 devices run on the Windows® 10 Enterprise LTSC operating system and feature a special protection mode that secures the system against unauthorized access or changes and increases reliability. The boot time is also minimized.

Easy to choose: select one of two Eaton visualization software bundles

XP500 with HMI software: Devices in the HMI software bundle come with the GALILEO Open Runtime license as standard.

XP500 with SCADA software: Devices in the SCADA software bundle come with a Visual Designer 4K Tag Runtime as standard. Optional software packages are available for more tags or features.

10.1" 15.6" 21.5"

Welcome to a new era of process visualization

The powerful industrial PCs in the XP500 series provide a high-end HMI solution. The XP500 series is characterized by modularity, durability and intuitive operation—all packed into a high-quality, sleek design. The product range centers around the capacitive multi-touch devices, which offer widescreen displays measuring 10.1, 15.6 and 21.5 inches. These devices enable precise, multi-finger operation of the user interface.

XP500 devices run on the Windows 10 operating system in order to make integration into existing production networks and administration as straightforward as possible. The inclusion of Eaton's Cybersecurity Guideline provides an excellent starting level of protection against unauthorized access to the hardware and software. This protection can subsequently be extended and adapted to suit local requirements by the system administrator.

The perfect all-rounder for all industrial applications

The compact and fanless design of the XP500 devices take up very little space. The modularity of the system, easy operation and rugged construction of the devices open up a wide range of applications in the machine and system building, as well as in building automation.

Machine and system building

XP500 devices are designed for harsh industrial use. The devices are easy to integrate due to complete PC openness, high levels of security and the flexibility with which the Windows 10 Enterprise LTSC operating system can be configured. Two on-board, independent Ethernet interfaces ensure integrated networking.

Building management

A broad range of applications for XP500 devices can also be found in the building management sector. The devices can be integrated into building management systems and used to manage premises or monitor and remotely control security-relevant systems, such as HVAC control units.

Hazardous applications

The front of the XP500 devices has IP65 degree of protection and the panel PCs are certified to UL® Class I Division 2, which makes them suitable for use in harsh industrial environments as well as in hazardous applications in the process industry.

A flexible solution
for a variety of applications

In addition to panel PCs for standard industrial panel applications, the XP500 product family offers scalable solutions for the first time due to the multi-component and modular family. The new product family allows for implementing various applications and adding onto existing ones through the ability to add additional terminals and extended terminals to your panel or box PC.

This helps to ensure that your system is both future-proof and flexible.

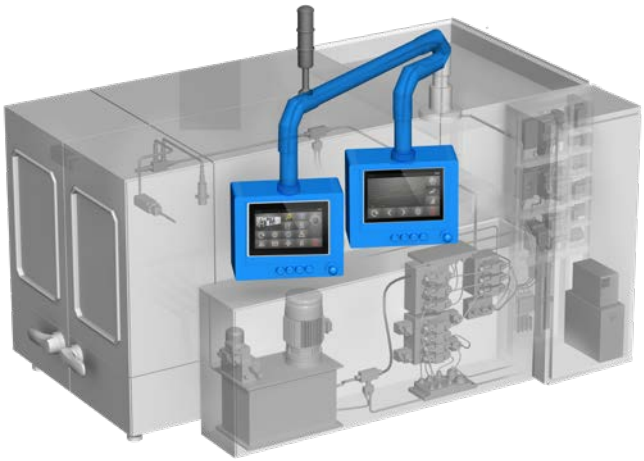
"Thanks to the XP500 system, I can now control my packaging machines over long distances with minimal effort. I use the panel PC in combination with the extender module. On the packaging lines themselves, two terminals help me to keep track of the situation across the entire plant."

Dual display

The application can be extended to the second screen using the terminal. This would make it possible to implement an application that combines multiple operating and monitoring levels, such as a camera feed and the control system. The video feed can then be shown in full screen mode on one display, while the actual system control is running on the panel PC.

Panel PC

Terminal



Extended display

The panel PC features a graphics output and several USB interfaces. These interfaces allow the display of the panel PC to be extended or mirrored. This enables the application on the panel PC to be displayed on a second screen with touch functionality—the terminal.

A good example would be an application that spans multiple floors. The operator would have less distance to travel and faster, easier access to the system control on several levels.

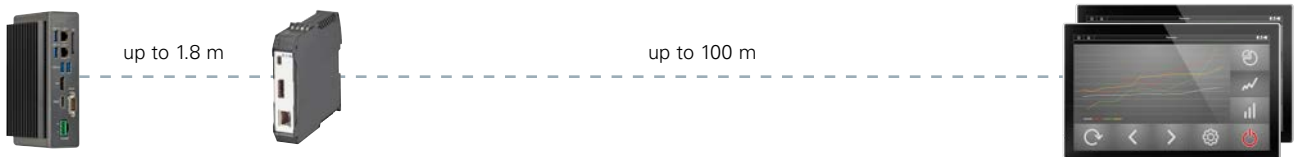
Panel PC

Extender

Terminals with extender

Box PC with extended display

The processing unit—the box PC—can be used independently or in tandem with the terminal. If used as a standalone box PC, the PC can be installed in a decentralized location subject to environmental controls when environmental conditions are a factor. Using an extender, the box PC can then be connected to a terminal with an integrated extender counterpart. This connection enables control and visualization across the entirety of larger systems.



Box PC

Extender

Terminals with extender

Your connection to the future

Panel PC

Panel PC

The panel PCs in the XP500 series feature an exceptional degree of openness and outstanding performance parameters. The devices run on the Windows 10 Enterprise LTSC operating system, are compatible with a wide range of application software and can also be perfectly combined with Eaton's visualization software. With IP65 degree of protection, the devices are suitable for use in ambient temperatures ranging from 0 °C to +45 °C.

The efficient panel PCs feature an Intel® Atom® E3950 quad-core CPU and ensure a high processing capacity as well as high-performance graphics. In addition to the two Ethernet and four USB interfaces, the devices are equipped with a configurable RS-232/RS-422/RS-485 interface. Furthermore, an SD card can be used for operation or data storage in addition to the internal mass storage of 64 GB.

Box PC

The PC and terminal can be used as separate units, which is ideal for users looking for a more flexible way to incorporate the XP500 industrial PC into their machine, plant or building. The box PC is placed in the control panel and exchanges data with one or more terminals. The box PC has the same interfaces as the panel PC and offers a slim PC solution for the control panel because of its compact design.

Extender

The extender unit allows full HD video and USB data to be transferred over a distance of up to 100 meters, making it a reliable transmission option for modular machines, plants and building applications in particular. The extender can be easily mounted on the DIN rail. As well as an RJ45 connector, the device is equipped with a USB 2.0 port and a DisplayPort™ connection. Its suitability for use in ambient temperatures ranging from –20 °C to +50 °C demonstrates that the extender module is particularly resilient.

Terminals with/without extender on-board

The robust terminals measuring 10.1, 15.6 and 21.5 inches open up a wide range of options for distributing the XP500 system around your plant. The PC-based touch monitors can be used purely as visualization devices for display and direct input or alternatively they can be used with an extender on-board for transmission distances of up to 100 meters. The standard devices each have a DVI-I, DP, and USB-B port and the extended devices have an RJ45 port.

21.5"

15.6"

10.1"

The modular system for

maximum flexibility

Ordering information

Description	Catalog number
XP panel and box PCs with Galileo	
10.1-inch panel PC, Intel Atom E3950 quad-core CPU, 8 GB DDR3-RAM, 64 GB solid-state drives	**XP-504-10-A10-A01-2B**
15.6-inch panel PC, Intel Atom E3950 quad-core CPU, 8 GB DDR3-RAM, 64 GB solid-state drives	**XP-504-15-A10-A01-2B**
21.5-inch panel PC, Intel Atom E3950 quad-core CPU, 8 GB DDR3-RAM, 64 GB solid-state drives	**XP-504-21-A10-A01-2B**
Box PC, Intel Atom E3950 quad-core CPU, 8 GB DDR3-RAM, 64 GB solid-state drives	**XP-504-BP-A10-A00-2B**
XP panel and box PCs with Visual Designer	
10.1-inch panel PC, Intel Atom E3950 quad-core CPU, 8 GB DDR3-RAM, 64 GB solid-state drives	**XP-504-10-A10-A01-2V**
15.6-inch panel PC, Intel Atom E3950 quad-core CPU, 8 GB DDR3-RAM, 64 GB solid-state drives	**XP-504-15-A10-A01-2V**
21.5-inch panel PC, Intel Atom E3950 quad-core CPU, 8 GB DDR3-RAM, 64 GB solid-state drives	**XP-504-21-A10-A01-2V**
Box PC, Intel Atom E3950 quad-core CPU, 8 GB DDR3-RAM, 64 GB solid-state drives	**XP-504-BP-A10-A00-2V**
XP Accessories	
10.1-inch terminal, DisplayPort, DVI-I and USB-B input	**XP-504-10-TERMINAL**
10.1-inch terminal extender RX, Cat 7 Ethernet input	**XP-504-15-TERMINAL**
15.6-inch terminal, DisplayPort, DVI-I and USB-B input	**XP-504-21-TERMINAL**
15.6-inch terminal extender RX, Cat 7 Ethernet input	**XP-504-10-TERM-EXT**
21.5-inch terminal, DisplayPort, DVI-I and USB-B input	**XP-504-15-TERM-EXT**
21.5-inch terminal extender RX, Cat 7 Ethernet input	**XP-504-21-TERM-EXT**
Range extender TX, DisplayPort and USB-B input, Cat 7 Ethernet output	**XP-504-EXT-MODUL**

We make what matters work.*

At Eaton, we believe that power is a fundamental part of just about everything people do. Technology, transportation, energy and infrastructure—these are things the world relies on every day. That's why Eaton is dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because that's what really matters. And we're here to make sure it works.

See more at Eaton.com/whatmatters

For more information, visit
Eaton.com/xp500

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