

XV300 HMI and HMI-PLC panel
with capacitive multi-touch technology

Think differently

Eaton's line of intelligent human machine interfaces



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Powering Business Worldwide

XV300

Flexible, modern, state-of-the-art operator interface and Supervisory Control and Data Acquisition (SCADA) HMI

Visual Designer SCADA software runtime license integrated in XV300 HMI

Visual Designer is a powerful engineering development and runtime environment that serves as both a potent HMI/Operator Interface for traditional monitor and control functions as well as a fully featured SCADA package. Visual Designer supports alarm, event, and data archiving and retrieval to local storage or to networked SQL relational databases, web serving to Windows®, Android and iOS devices via HTML5, email services, document and media viewing, recipes, report generation, scheduling and a host of advanced security and remote access capabilities. Multi-touch support for gestures such as swipes, pinch, pan and zoom enhances the user experience in a modern, intuitive interface. A ribbon format user interface already familiar to many users makes Visual Designer easy to navigate and learn.

The easy-to-use yet sophisticated engineering tools in Visual Designer reduce development time and empower developers to create value for their end customer with object-oriented, re-usable templates and controls that meet the specific needs of any industry. With native support for more than 240 industrial protocols plus OPC client and OPC server capabilities, Visual Designer can be the data hub for an entire machine, process or plant. Visual Designer runtime software comes pre-bundled on some XV300 models and as an option it can be licensed in the field on all others.



The new face of today's industry

Intuitive user guidance, precise gesture-based controls, multimedia integration—the ease of use we experience every day on our smartphones and tablets has now become a reality in industrial applications as well. Our XV300 panels with capacitive multi-touch technology are not just tremendously intuitive, they are redefining how man and machine interact. Streamlined, high-resolution devices are ready to meet your needs even in harsh industrial conditions.



Heavy-duty

With their compact and sleek design, featuring a heavy-duty, flat, anti-glare toughened glass panel, these panels are ideal for industrial applications in harsh environments.



Powerful

High system performance and a powerful graphics processing unit make it possible for our XV300 devices to have a highly responsive, state-of-the-art user interface and allow for the integration of multimedia elements such as video, PDF and web contents.



Adaptable

Our panels can be used in landscape or portrait mode, ensuring that you will be able to fit them where you want while getting the visualizations you need.



Hygienic

Control console mounting creates a flat surface with no sharp edges, which meets strict hygienic requirements. XV300 devices with rear-mounting configuration can be seamlessly integrated into your machine systems.

Technical data



Model	XV-303-70-... (7-inch built-in version)	XV-303-10-... (10-inch built-in version)	XV-313-70-... (7-inch rear-mount version)	XV-313-10-... (10.1-inch rear-mount version)
Display				
Screen diagonal	7" widescreen	10.1" widescreen	7" widescreen	10.1" widescreen
Resolution	1024 x 600 pixels	1024 x 600 pixels	1024 x 600 pixels	1024 x 600 pixels
Backlight	LED	LED	LED	LED
Actuation				
Touch sensor	Multi-touch touch panel	Multi-touch touch panel	Multi-touch touch panel	Multi-touch touch panel
Technology	Projected Capacitive Touch (PCT)	Projected Capacitive Touch (PCT)	Projected Capacitive Touch (PCT)	Projected Capacitive Touch (PCT)
Enclosure				
Front glass	Non-reflective tempered glass	Non-reflective tempered glass	Non-reflective tempered glass	Non-reflective tempered glass
Device dimensions (w x h x d)	196 x 135 x 51 mm	269 x 174 x 58 mm	209 x 151 x 51 mm	282 x 190 x 58 mm
Installation cut-out (w x h)	182.6 x 122 mm +/-1	255.2 x 160.4 mm +/-1	181.5 x 125.6 mm	254.4 x 164.5 mm
System				
Processor	800 MHz ARM Cortex-A9	800 MHz ARM Cortex-A9	800 MHz ARM Cortex-A9	800 MHz ARM Cortex-A9
Memory (RAM)	512 MB	512 MB	512 MB	512 MB
Internal mass memory	1 GB (SLC)	1 GB (SLC)	1 GB (SLC)	1 GB (SLC)
Non-volatile data memory	120 kB	120 kB	120 kB	120 kB
Removable memory	1x SD card slot	1x SD card slot	1x SD card slot	1x SD card slot
Interfaces	1 x Ethernet 10/100 Mbps Optional 2nd 10/100 Mbps Ethernet 1 x USB Host 2.0 1 x USB Device 1 x RS-232 1 x RS-485 1x CAN Optional PROFIBUS® Optional SmartWire-DT®	1 x Ethernet 10/100 Mbps Optional 2nd 10/100 Mbps Ethernet 1 x USB Host 2.0 1 x USB Device 1 x RS-232 1 x RS-485 1x CAN Optional PROFIBUS Optional SmartWire-DT	1 x Ethernet 10/100 Mbps Optional 2nd 10/100 Mbps Ethernet 1 x USB Host 2.0 1 x USB Device 1 x RS-232 1 x RS-485 1x CAN Optional PROFIBUS Optional SmartWire-DT	1 x Ethernet 10/100 Mbps Optional 2nd 10/100 Mbps Ethernet 1 x USB Host 2.0 1 x USB Device 1 x RS-232 1 x RS-485 1x CAN Optional PROFIBUS Optional SmartWire-DT
Power supply	24Vdc	24Vdc	24Vdc	24Vdc
Operating system	Windows Embedded Compact 7 Pro	Windows Embedded Compact 7 Pro	Windows Embedded Compact 7 Pro	Windows Embedded Compact 7 Pro
Visualization software	Optional Visual Designer runtime license (1500 tags with 4000 tag option)	Optional Visual Designer runtime license (1500 tags with 4000 tag option)	Optional Visual Designer runtime license (1500 tags with 4000 tag option)	Optional Visual Designer runtime license (1500 tags with 4000 tag option)
PLC software	Optional XSoft-CoDeSys-3/ XSoft-CoDeSys-2 runtime license	Optional XSoft-CoDeSys-3/ XSoft-CoDeSys-2 runtime license	Optional XSoft-CoDeSys-3/ XSoft-CoDeSys-2 runtime license	Optional XSoft-CoDeSys-3/ XSoft-CoDeSys-2 runtime license
Environment				
Approvals (pending)	CE, cUL® 508, ATEX Zone 22 (reduced impact resistance)	CE, cUL 508, ATEX Zone 22 (reduced impact resistance)	CE, cUL 508, ATEX Zone 22 (reduced impact resistance)	CE, cUL 508, ATEX Zone 22 (reduced impact resistance)
Degree of protection (pending)	Front: IP65, NEMA® 4X (indoors only), IP20 on rear	Front: IP65, NEMA 4X (indoors only), IP20 on rear	Front: IP65, NEMA 4X (indoors only), IP20 on rear	Front: IP65, NEMA 4X (indoors only), IP20 on rear
Operating temperature	0 to +50 °C	0 to +50 °C	0 to +50 °C	0 to +50 °C
Storage temperature	-20 to +60 °C	-20 to +60 °C	-20 to +60 °C	-20 to +60 °C

XV300

High-performance, heavy-duty, state-of-the-art HMI-PLC

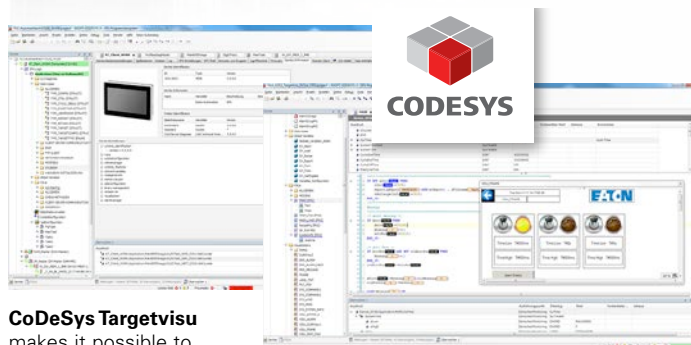


Numerous interfaces and expandable memory

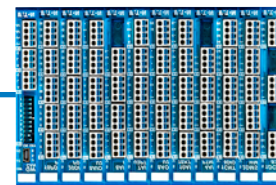
An impressive variety of ports and interfaces provides maximum versatility for extensive networking. For example, the two Ethernet ports, which are independent from each other, make it possible to safely and reliably separate the open control layer from the function-specific field level.

An SD card slot makes it possible to expand the device's internal memory if necessary. In addition, it can be used to easily load system updates. Moreover, the entire system can be booted and run from an SD card if necessary.

- 1 SD card slot
- 2 USB host
- 3 One or two Ethernet ports
- 4 RS-232
- 5 RS-485
- 6 SmarWire-DT available
- 7 PROFIBUS DP/MPI/PPI available
- 8 CANopen
- 9 24 Vdc



CANopen



Can be perfectly combined with the XN300 I/O system

XN300 is an ultra-compact, slice-card-based modular I/O system with a plug-in connection system that can be combined with XV300 products in order to create the perfect device combination for any application. Application-oriented functions result in lower device costs and make it possible to obtain the perfect system solution while taking up a minimal amount of space. Simply put, combining XV300 and XN300 is the perfect way to obtain the ideal solution for your application.

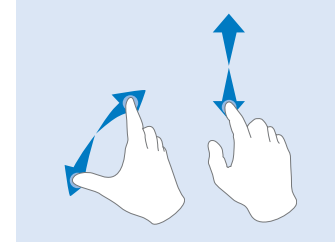
Can be configured with XSoft-CoDeSys-3 programming software

When used to implement an efficient HMI-PLC combination, the optional CoDeSys-based PLC function enables users to develop powerful and comprehensive programming functions in line with the IEC 61131 international standard. In fact, with sophisticated technical features, ease of use and the software's popularity as a programming system for automation components from a wide variety of manufacturers, it is no surprise that it has become the system of choice for many successful companies.

XV300 panels can be configured with either XSoft-CoDeSys Version 2 or Version 3. This way, you can rest assured knowing that you will be able to use existing programs in the future while also having the option of implementing new designs with the latest tools at your disposal.

Whether you need CANopen®, J1939, EtherNet/IP, EtherCAT, Modbus® (TCP/RTU), SmartWire-DT™ or PROFIBUS® DP—the wide variety of fieldbus interfaces on XV300 devices ensures that you will be able to use the right protocol for your application.

XV300 supports gestures



You can also choose models bundled with both Visual Designer and XSoft-CoDeSys to provide a uniquely powerful integrated visualization and logic solution that reduces system complexity and saves money.

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.

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Printed in USA
Publication No. BR048001EN / Z22780
May 2019

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