

XV-303 and XV-313

Modern and versatile
visualization devices



Powering Business Worldwide

The 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 become a reality in industrial applications as well. Our XV-303 and XV-313 panels with capacitive multi-touch technology are not just tremendously intuitive, they are redefining how man and machine interact. Streamlined, high-resolution devices ready to meet your needs even in harsh industrial conditions.



7" version



10.1" version



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.



Heavy-duty

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

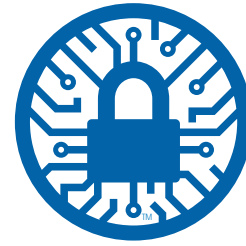


Hygienic

Control console mounting creates a flat surface with no sharp edges which meets strict hygienic requirements. XV-313 devices with rear-mounting configuration can be seamlessly integrated into your machine systems.

powerful and versatile

An Eaton secure-by-design solution



15.6" version

Cybersecurity as an integral part of XV-303/-313 with Linux

Eaton operates an independent development center, the 'Cybersecurity Center of Excellence' (CCoE), specifically designed to combat the threats posed by cyber attacks. All Eaton products are regularly qualified for secure operation.

The XV-303 and XV-313 devices with an embedded Linux operating system seamlessly integrate into Eaton CCoE's 'Defense in Depth' cybersecurity concept. For example, the XV-303/XV-313 devices with Linux operating system boot from a write-protected memory, and only operating system software updates, signed by Eaton can be installed on the devices.

All device settings and interfaces are secured via password entries, which also withstand a brute force attack. Communication channels can be selectively activated and encrypted for the required tasks.

However, cybersecurity and usability are not mutually exclusive. Guided by the first-boot agent, the prepared application software and device configuration are installed easily and efficiently via a USB memory during machine or system commissioning. The application software and process data can optionally be installed on an encrypted SD card, and in the event of a device replacement, the application-specific data can simply be taken over to the replacement device.

Eaton.com/cybersecurity

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, the application software and process data can be installed on a SD card. In the event of a device replacement, the application-specific data can simply be taken over to the replacement device.

Whether you need CANopen, J1939, Ethernet/IP, EtherCAT, Modbus (TCP/RTU), – the wide variety of fieldbus interfaces on XV-303/-313 devices ensures that you will be able to use the right protocol for your application.



Protected

Correctly installed, the rear-mount versions reach degrees of protection of up to IP69K in the front. This means, that the devices can be used in areas with splashing water or dust without hesitation.



Powerful

High system performance makes it possible for our XV-303/-313 devices to have a highly responsive, state-of-the-art user interface with gesture control and animations.



Modern design

With its modern design, the XV-303/-313 series enhances the impression of the entire machine or system. Together with other Eaton products, such as the RMQ flat pushbuttons, this creates a modern overall concept.

GALILEO 11 visualization system: Runtime license integrated in XV-303/-313



Galileo is an intuitive and powerful engineering environment that takes little time to master but meets every requirement involved in today's on-site machine operation. It is custom-tailored to the needs of the international machine and systems building industry and reflects the very latest developments in visualization technology.

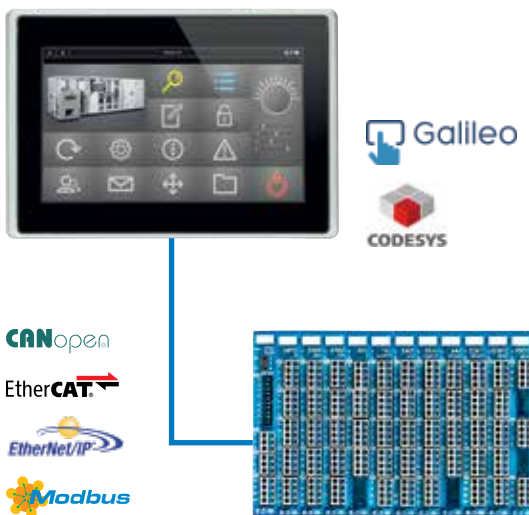
The comprehensive integrated communication protocols make it possible to provide visualization for all common PLCs and controllers.

Visualization controls like value display, gauge, graph charts, lists and many more offers great design possibilities for visualizing PLC tag values. At the same time, controls like value entry with modern looking on-screen keyboard, slider, list selection box, recipe and more facilitate the changing of PLC tag values. Navigation between the different visualization screens can be easily achieved by using animated screen changes, defining menus or dialogs. Additional functionalities like scripting, trigger script execution on events and a built-in user management complete the broad range of customization.

The possibility to create your own user defined controls with parameter interface (tags, text, images, script assignments, ...) improves reusability and graphical consistency across the project and saves time during the development phase.

By activating the web visualization functionality of Galileo, remote devices such as PC's, Tablet's or Smartphones can easily access the XV-303/-313 visualization. Based on the HTML5-standard all common web browsers (Safari, Chrome, Edge) are supported. It is possible to make an existing visualization web-accessible with just a few simple configuration clicks, or to design a specially tailored visualization for web purposes (e.g., tailored content for portrait mode view, reduced functionality for web access).

The Galileo Design Tool offers a simulator with which the created visualization can be easily tested on the developer PC.



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.

Configuration with XSOFT-CODESYS-3 PLC 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.

Connect to SmartWire-DT gateway for wider communication options

The XV-303/-313 devices can process data from devices that are connected to the intelligent wiring system SmartWire-DT. This is enabled using a SmartWire-DT gateway which is available for different fieldbus systems.



Customer reference - wastewater application

FlexBio Technologie GmbH located in Einbeck, Germany, operates its own wastewater treatment plants including post-treatment systems such as biogas technology, waste fermentation plants and water treatment solutions. The XV300 HMI/PLC, in combination with XC300 PLC and the XN300 I/O system, allowed FlexBio to implement lean yet powerful automation.

When it came to visualization software, FlexBio opted for Eaton's proprietary Galileo software. Web visualisation and HTML5 functionality are integral components of Galileo, allowing users to conveniently access and remotely maintain the system from anywhere, on any device. Both FlexBio and most system operators use this option.



Read more about this solution

Technical data

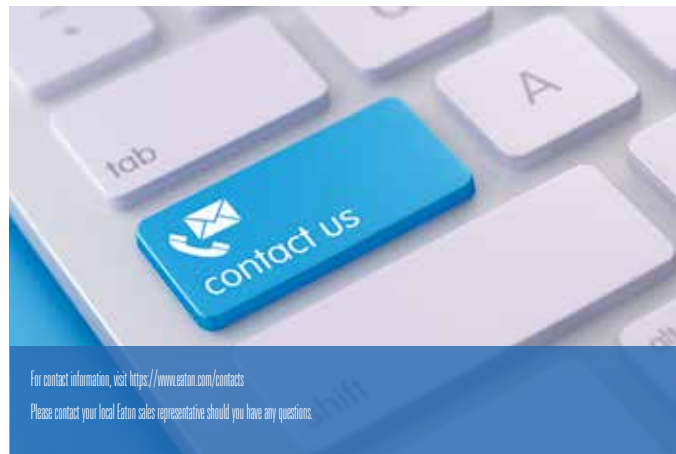
XV300 HMI / HMI-PLC

	PLC license	Built-in interfaces					Ordering information	
Touch screen: Projected Capacitive Touch (PCT) Front glass: Non-reflective toughened glass Processor: 800 MHz ARM Memory (RAM): 512 MB SD card slot USB host Operating system: Embedded Linux Approvals: cUL, DNV	Included	1 x Ethernet 10 / 100 Mbps	2 x Ethernet 10 / 100 Mbps	1 x RS232	1 x RS485	1 x CANopen	Part no.	Catalog no.
7.0" built-in version								
Resolution: WSVGA 1024 x 600 pixels								
	-	✓	-	✓	✓	✓	XV-303-70-B00-A00-2B	EP-401361
	-	-	✓	✓	✓	✓	XV-303-70-C00-A00-2B	EP-401362
	✓	✓	-	✓	✓	✓	XV-303-70-B00-A00-2C	EP-401363
	✓	-	✓	✓	✓	✓	XV-303-70-C00-A00-2C	EP-401364
7.0" rear-mounted version								
Resolution: WSVGA 1024 x 600 pixels								
	✓	✓	-	✓	✓	✓	XV-313-70-B00-A00-2C	EP-401371
10.1" built-in version								
Resolution: WSVGA 1024 x 600 pixels								
	-	✓	-	✓	✓	✓	XV-303-10-B00-A00-2B	EP-401365
	-	-	✓	✓	✓	✓	XV-303-10-C00-A00-2B	EP-401366
	✓	✓	-	✓	✓	✓	XV-303-10-B00-A00-2C	EP-401367
	✓	-	✓	✓	✓	✓	XV-303-10-C00-A00-2C	EP-401368
10.1" rear-mounted version								
Resolution: WSVGA 1024 x 600 pixels								
	✓	✓	-	✓	✓	✓	XV-313-10-B00-A11-2C	EP-401372
	✓	✓	-	✓	✓	✓	XV-313-10-B00-A00-2C	EP-401373
	✓	-	✓	✓	✓	✓	XV-313-10-C00-A00-2C	EP-401374
15.6" built-in version								
Resolution: WXGA 1366 x 768 pixels								
	-	-	✓	✓	✓	✓	XV-303-15-C00-A00-2B	EP-401369
	✓	-	✓	✓	✓	✓	XV-303-15-C00-A00-2C	EP-401370
Description							Part no.	Catalog no.
Memory card								
	SD memory card with min. 1 GB memory capacity						MEMORY-SD-A2-S	181638

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