



GALILEO – visualization at a whole new level



Eaton's powerful and comprehensive GALILEO visualization program can be used to configure any device from the XV and XP touch panel families.

The powerful and intuitive GALILEO project planning tool is easy to master, while also meeting all the requirements of on-site machine operation. This Eaton-developed visualization software has been designed to meet the needs of any industry and offers integrated project planning for all XV devices and PC runtime solutions. Project engineers have all GALILEO functions at their disposal, without any limitations regarding screens or nested variables.

GALILEO WEB is an integral part of GALILEO, making it possible to create HTML5-based web visualizations with one simple click, even for users without any programming knowledge. Accessing the XV visualization from any remote device, such as a PC, tablet or laptop, is therefore quick and easy.





Easy and intuitive to use and test

- An intuitive and powerful project planning tool
- Reduce the project planning and commissioning times by simulating the project on a PC
- All projects are fully forward-compatible, thereby protecting your investment in the long run
- All functions are available without any limitations regarding the number of nested variables or images



Tailored to the needs of the international machine building sector

- Pre-defined, language-specific keypad configurations
- Automatic online language switching if a different language is selected
- Option to change runtime-related units (e.g. from °C to °F or from cm to inches)
- Unicode support (including Asian character sets)
- The Excel text import/export option enables the creation of error-free translations



Wide range of communication options

- The protocols of most control systems will GALILEO to be used in conjunction with PLC systems from other manufacturers
- Communication with XSOFT-CODESYS-V2 and XSOFT-CODESYS-V3 controllers
- Easy import of PLC variables in XML format
- Secure and easy connection to the control level and to Office environments
- Remote client/server and OPC client
- Option to connect a webcam



Additional GALILEO highlights

- Integrated web visualization
- The integrated video player can play MPEG-4 videos
- Graphics can be resized without loss of quality (scalable vector graphics)
- Design features such as styles, color gradients, semi-transparency and full transparency
- Gesture controls (swipe, scroll, zoom)
- Object groups can be reused
- Viewing window for easy scrolling through sub-screens that are too large to be displayed at once
- Supports switching between 16:9 and 4:3 aspect ratios
- Single-line and multi-line alarm messages with integrated variables
- Variables, objects, bitmaps and styles can be copied between projects

The right visualization software for every device

	XV-102-A...	XV-102-H...	XV-102-B/-D/-E-...	XV-152...	XV-3x3-...	XC-152-...	XP-504...2B
GALILEO 8	•	•	•	•		•	•
GALILEO 10		•	• ¹⁾	•	•	•	•
GALILEO 10 web server					•		•

¹⁾ except for the XV-102 with monochrome 3.5" display

Description	Part no. Article no.
GALILEO	
Licensing certificate for GALILEO visualization software MS Windows™-based intelligent and intuitive visualization tool, single-user license	SW-GALILEO-S 171500
Licensing certificate for GALILEO visualization software MS Windows™-based intelligent and intuitive visualization tool, multi-user license	SW-GALILEO 140379
GALILEO Open license for PC For continuous, unrestricted use of the GALILEO runtime system on a standard PC	LIC-GALILEO-OPEN-PC 140385





Visualization for the easyE4 made easy

The easyE4 also offers a wide range of options for visualization, to optimally adapt the solution to your individual requirements and circumstances. With the integrated display, texts and values can be displayed and changed directly at the base device. Due to the integrated web server, content can also be called up on all mobile devices such as smartphones or tablets.

For visualization and display outside of the control cabinet, the 'easyE' Remote Touch Display as well as the touch display XV-102 ideally complement the easyE4 product range.

The easyE Remote Touch Display (RTD), which is available in 4.3", offers a cost-effective way to operate your application remotely. The contents of the integrated display of the easyE4 base device are mirrored in color on the Remote Touch Display. Alternatively, it is possible to create an individual visualization using easySoft. A distinction is made here between RTD Standard and RTD Advanced.

With the XV-102 'easy' touch display, projects created for the control relay series can be visualized conveniently and clearly. The compact touch display offers you all the design options you need from diagrams to icons and images to create an individual user interface. The visualization on the 3.5" and 5.7" display is implemented using Eaton's own GALILEO software.

Further information on our starter sets at:
Eaton.com/easy

 Get more information

With the easyE4 control relay, simple control tasks, such as temperature control in the food industry, can be solved quickly and easily – without any in-depth programming knowledge. Screw and Push-in terminals are available for quick and easy commissioning.

Visualization outside the control cabinet is handled by the 'easyE' Remote Touch Display or the XV-102 touch display depending on requirements. The functions of the XV-102 as an HMI solution can be adapted specifically to the needs of the easyE4 user. In combination with the GALILEO visualization software, a cost-effective automation solution is created that can be expanded to include additional devices as required.



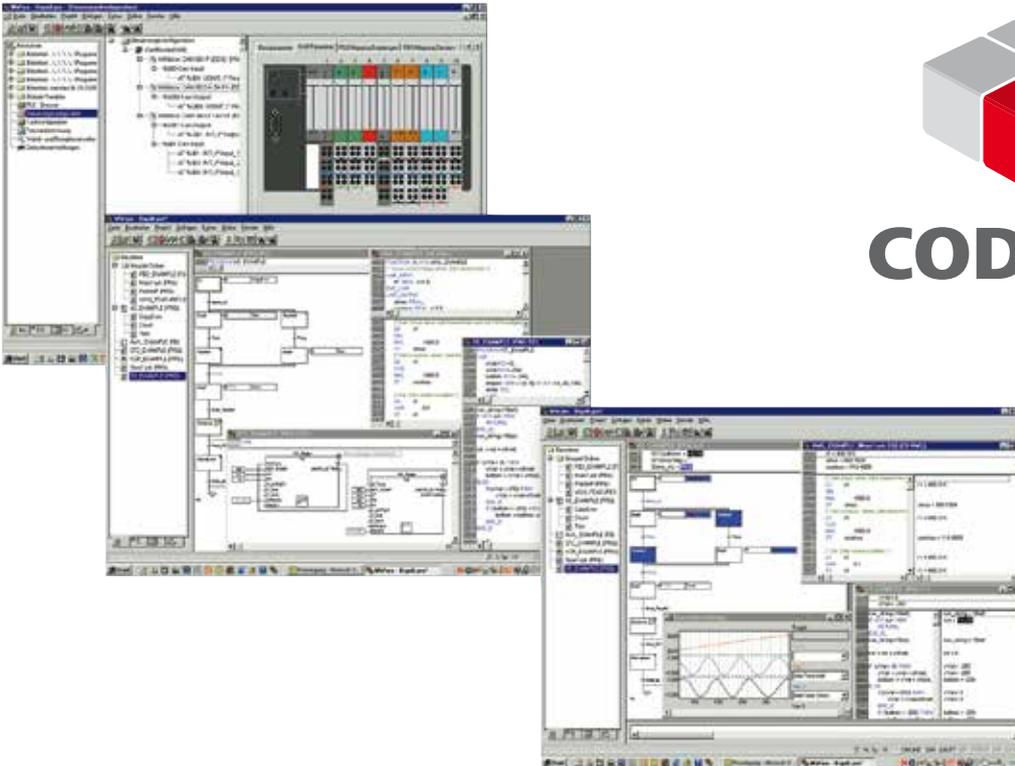
Moeller series

easyE4 visualization

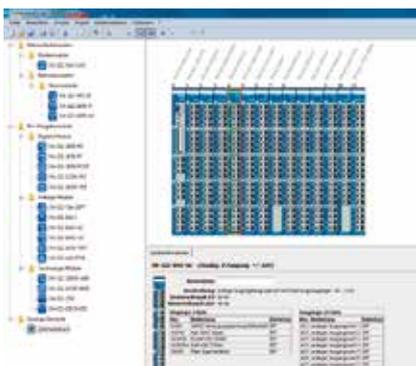
	Display size	PLC license	Built-in interfaces					Part no.	Article no.
	Inches								
			1 x RS232 / 485	1 x USB host 2.0	1 x Modbus TCP/IP	Mirror function	Individual visualization		
easyE Remote Touch Display for easyE4 control relay									
Resistive touch Approvals: cUL (UL508) RTD-Standard: Mirror function of the connected easyE4 RTD-Advanced: Individual visualization with easySoft									
	4.3	Without PLC functionality	-	✓	-	✓	-	EASY-RTD-DC-43-03B1-00	199740
			-	✓	-	✓	✓	EASY-RTD-DC-43-03B2-00	EP-401057
XV-102 without PLC for use with easyE4 control relays									
Resistive touch approvals: cUL (UL508) SD card slots: 1 Individual visualization with Galileo									
	3.5	Without PLC functionality	-	✓	✓	-	✓	XV-102-A0-35TQRB-1E4	198513
	5.7		-	✓	✓	-	✓	XV-102-A3-57TVRB-1E4	199734
easyE4 XV100 starter sets								Part no.	Article no.
	DC base device with display, 3.5" touch panel, Ethernet switch, patch cable, easySoft license code, easyE4 flyer							XV100-BOX-E4-DC1	198514
	UC base device with display, 3.5" touch panel, Ethernet switch, patch cable, easySoft license code, easyE4 flyer							XV100-BOX-E4-UC1	198515
easyE4 Remote Touch Display starter sets								RTD-BOX-E4-DC1	199786
	DC base device with display, 4.3" Remote Touch Display, patch cable, easySoft license code, easyE4 flyer							RTD-BOX-E4-DC1	199786
	UC base device with display, 4.3" Remote Touch Display, patch cable, easySoft license code, easyE4 flyer							RTD-BOX-E4-UC1	199785



CODESYS



XSOFT-CODESYS – PLC programming to international standards



Our software tools simplify both the engineering and the commissioning process:

- XN300 Assist
- I/O-Assist
- SWD-Assist

Free download at Eaton.com/software

XSOFT-CODESYS is an IEC 61131-3 engineering software for configuring and programming control systems based on the manufacturer-independent XSOFT-CODESYS standard. Sophisticated technical features, ease of use and the widespread use of this software as a programming system for automation components from various manufacturers guarantee its success.

In applications where a powerful PLC or HMI-PLC with various fieldbus connections is required, the software is the optimum programming environment. The integrated fieldbus configurators CAN and Modbus-RTU as well as Modbus TCP, EthernetIP and EtherCAT enable the devices to be connected to the preferred fieldbus quickly, intuitively and flexibly. XSOFT-CODESYS is the ideal programming environment for all machine and process-related applications in machine and system engineering.



XN300 Assist										
I/O-Assist										
SMD-Assist										
XSOFT-CODESYS-2										
XSOFT-CODESYS-2-Webvisu										
XSOFT-CODESYS-3										
XSOFT-CODESYS-3-Webvisu										
	●	●	●	●	●	●	●	●	●	XV-102-B/-D/-E-...
	●	●	●	●	●	●	●	●	●	XV-112...
	●	●	●	●	●	●	●	●	●	XV-152...
	●	●	●	●	●	●	●	●	●	XV-3x3-...
										XC-152-...
										XC-104-...
										XC-204-...
										XC-303-...
										XN-312-GW-CAN
										XNE-GWBR-...
										XN-GWBR-...

1) for devices with SmartWire-DT interface

Maximum flexibility

XSOFT-CODESYS is the programming tool for all Eaton XV/XC controllers. It enables programming according to IEC-61131-3, based on the following programming languages: structured text (ST), instruction list (IL), ladder diagram (LD), function block diagram (FBD), sequential function chart (SFC), and continuous function chart (CFC).

For the automation systems XV100, XV300, XC-152 and XC-CPU202, Eaton offers targets for both XSOFT-CODESYS V3 and XSOFT-CODESYS V2; this means that the same hardware can be used with new (configured with XSOFT-CODESYS-3) and existing (programmed with XSOFT-CODESYS-2) machine generations!

Multitasking

The division into several runtime programs (multitasking) optimizes your PLC's resources and facilitates the implementation of time-critical applications. Prioritize fast processes, and assign slower processes only as much processing time as necessary.

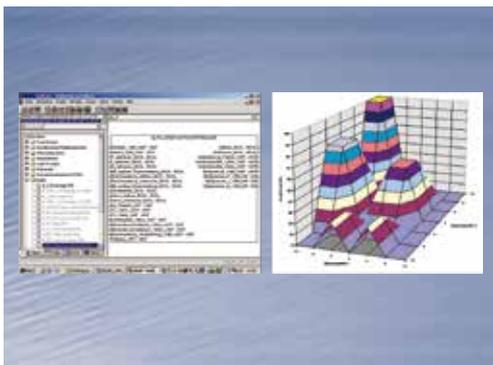
Web visualization

XSOFT-CODESYS can optionally generate an XML description from the visualization information. In XSOFT-CODESYS V2, this description will be stored on the controller together with a Java applet. In XSOFT-CODESYS V3, HTML5-based pages will be generated instead. These pages can then be displayed on a browser via TCP/IP.

Application libraries

To facilitate the programming of controllers with XSOFT-CODESYS, Eaton provides ready-made libraries for many applications:

- Closed-loop control toolbox
- Motion-control toolbox
- FTP server
- FTP client
- UDP and TCP/IP
- Modbus RTU/TCP master/slave
- OS functions
- File handling



XSOFT-CODESYS version 3 offers the following:

- A programming tool that can be expanded by means of plug-ins to handle custom applications
- Expanded language options (object-oriented programming)
- Know-how protection for targets and the programming tool
- Multiple PLC programs in the same project
- New and improved TargetVisu functions
- Improved IT safety functions
- HTML5-based websites
- Fieldbus configurators: Modbus-TCP/RTU, EthernetIP, EtherCAT
- SAE J1939 protocol



Description		Part no. Article no.
XSOFT-CODESYS-2		
Programming according to IEC 61131-1, supports XV100, XV(S)400, XC100, XC200, EC4P, XN-PLC		
	Single-user license	SW-XSOFT-CODESYS-2-S 142582
	Multi-user license	SW-XSOFT-CODESYS-2-M 142583
XSOFT-CODESYS-3		
Programming as per IEC 61131-3, supports XV100, XV300, XV(S)400, XC-152, XC-202, XC-104, XC-204, XC-303		
	Single-user license	SW-XSOFT-CODESYS-3-S 171886
	Multi-user license	SW-XSOFT-CODESYS-3-M 171887