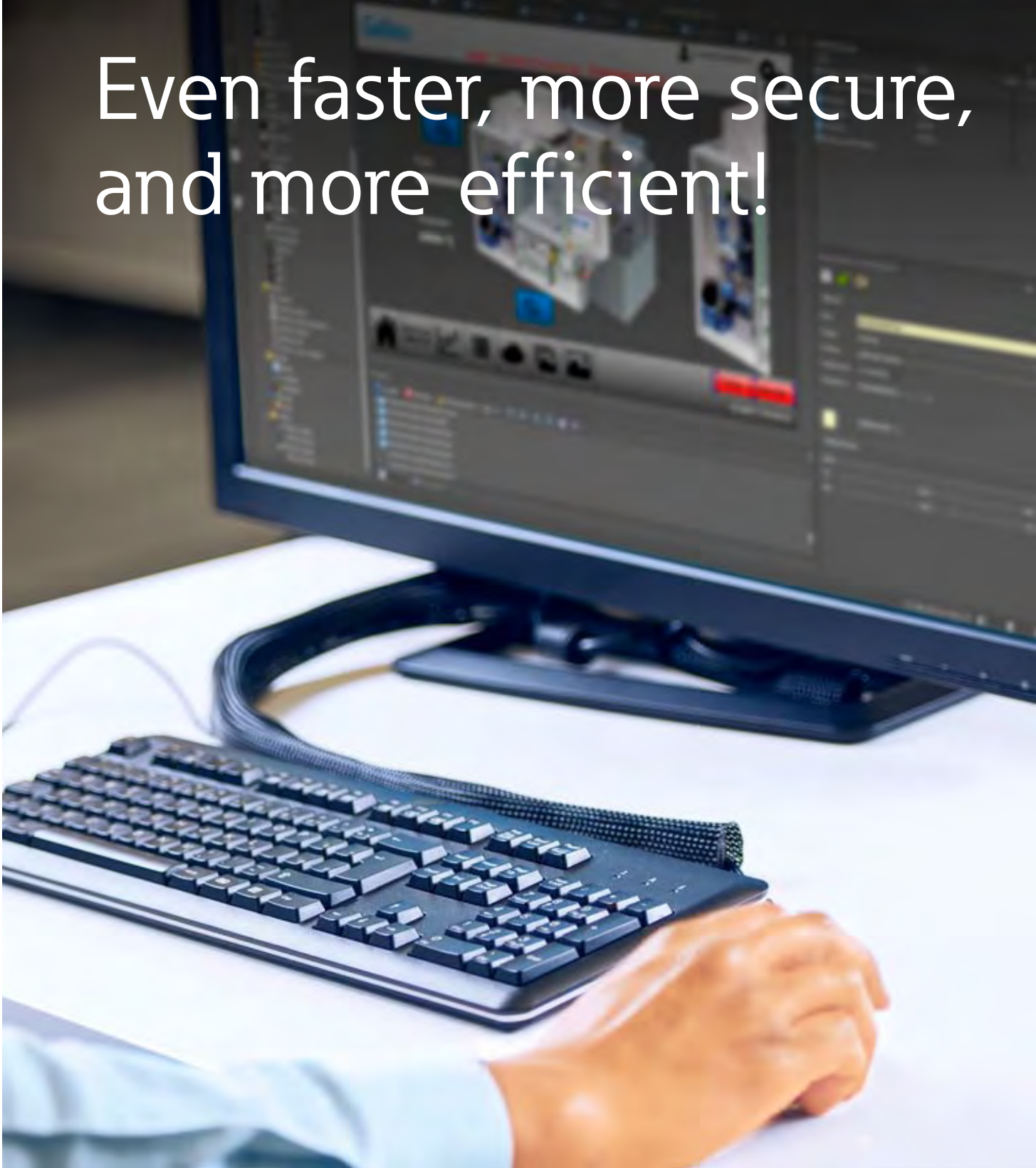# Even faster, more secure, and more efficient!

EAT•N

Powering Business Worldwide

Visualization
taken to a whole new level

GALILEO 10 – As an intuitive and powerful engineering environment that takes little time to master, this brand new version of Eaton's tried-and-true visualization software continues to meet all the requirements involved in on-site machine operation for the international machine-building industry. Except it is now even faster, more secure, and more efficient than ever before – at all machine control levels!

GALILEO is designed to meet the needs of any industry and has seen a continuous series of improvements and enhancements ever since its first version came out in 1995. The guiding principle behind all this? Our customers' needs.

The result: a custom-tailored tool for the international machine-building industry.

For its latest software release, GALILEO 10, Eaton focused particularly on user-friendliness and efficient programming! In addition, forward compatibility with future software versions also played an important role, making sure that your investments will continue to provide returns long into the future.

With a wide variety of new features, Galileo is revolutionizing both controls and operation for the entire lifecycle of both machines and systems: from **engineering**, through **commissioning** and **operation**, all the way to **maintenance**!

Custom-tailored and designed to accommodate your specific programming needs! Traditional controls, modern gesture-based operation – anything is possible.

Regardless of which XV or XP touch panel you are using, GALILEO 10 runs
on all devices and can be quickly and smoothly set up and configured anywhere.

At Eaton, we work hard to make sure you never have to sacrifice efficiency!

XV100 Family

· Resistive touch panel
  in a plastic enclosure
  (3.5″, 5.7″, 7″ wide)
· Resistive touch panel in a metal
  housing with an aluminum bezel
  (5.7″, 8.4″, 10.4″)
· Resistive touch panels in metal
  enclosures for rear mounting
  (5.7″, 7″-wide; 7″-wide version
  also has shipping classification)
· Compact PLCs
  with Galileo Runtime

XV300 Family

· Capacitive touch panels
  in plastic enclosures
· Flush mounting and rear
  mounting versions
· 7″ and 10″ devices with
  high-resolution 16:9 screen

XP500 Family

· Capacitive multi-touch panels
· Industrial panel PCs
  in die-cast aluminum enclosures
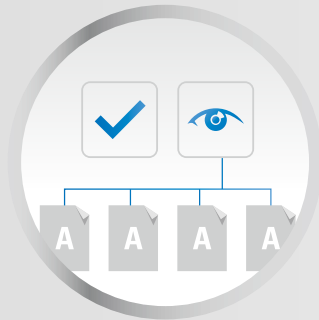· 10.1″, 15.6″, 21.5″
  in 16:9 format

XV400 Family

· Infrared and resistive
  touchscreen panels in a metal
  housing
· 5.7″, 8.4″, 10.4″, 12.1″, 15″
· Plug-in communications cards

① Engineering

Design and set up your projects more quickly, efficiently, and securely

Styles

Styles ensure that objects will have a standardized appearance throughout your entire project.

If you choose to change the attributes for an object, the changes you make will be applied to every single object using the same style.

Sidebar

When an object is selected, its most important attributes will always be shown on a sidebar – this not only makes things easily manageable, but also means that you will only need a few mouse clicks to configure an object.
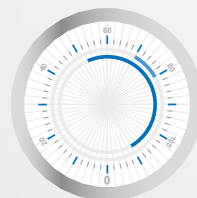
By selecting multiple objects, you can make changes easily and quickly: Simply modify the properties for the selected objects and the changes will be applied to all of them.

Intelligent and powerful search and sorting functions

These functions make it possible to run quick searches anywhere where screens, variables, bitmaps, or scripts are used in your project. The corresponding results will be shown in a clearly laid out list, and all you will need to do to access the result you want is to double-click on it.

Meanwhile, the variable tree, which is sorted by communications, makes it possible to use identical variable names.

The ability to reuse object groups

The ability to reuse a group of objects in an advanced sub-screen makes it possible to arrange similar visualization objects quickly and in a clearly laid out manner. Moreover, it ensures that changes to a data type and to an advanced screen will be applied to all the corresponding instances.

In addition to this, you can create your own data types, and all it takes to assign variables to objects is to conveniently drag and drop them accordingly.

Quick access menu

Moving the mouse over a visualization object (e.g., graph or parameter list) will display a light bulb icon with a list of all the special functions available for that object.

If one of these special functions is selected, it will be automatically added to the screen as a button.

Automatic object recognition

Automatic object recognition makes it easy to group, position, and align all objects.
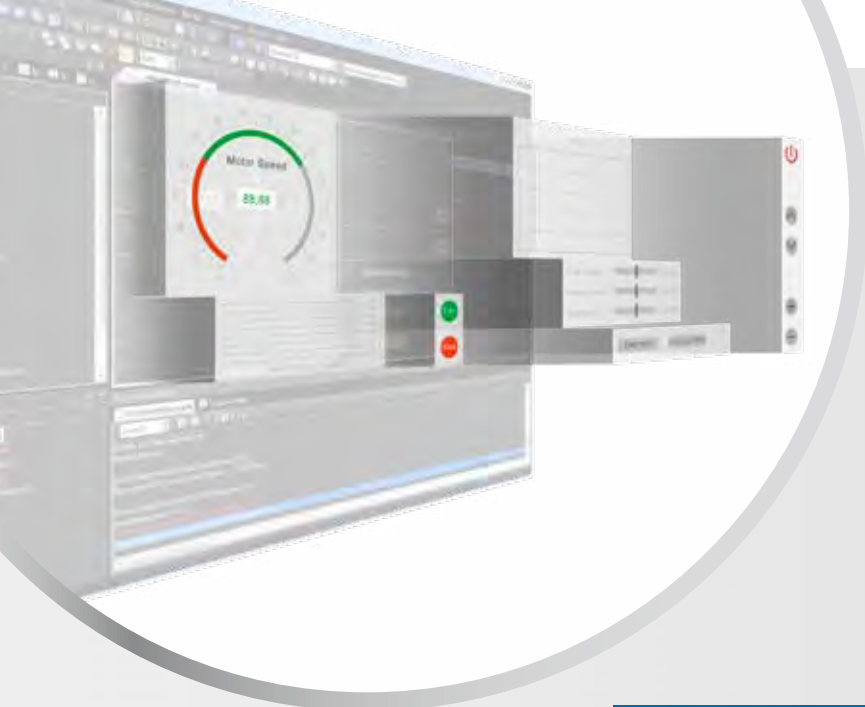
In addition, superimposed objects can also be shown.

Communication

Galileo features comprehensive communication protocols that make it possible to connect to all standard controllers on the market. In fact, it can run up to eight different communication channels simultaneously.

"Undo"- and "Redo" function

Galileo 10 features an undo function for as many as 20 steps. In addition, it comes with a redo function that makes it possible to cancel an unintended "undo."

Pointer-type instrument

Pointer-type instruments closely resembling real-life instruments and featuring anti-aliasing and a broad range of configuration options.
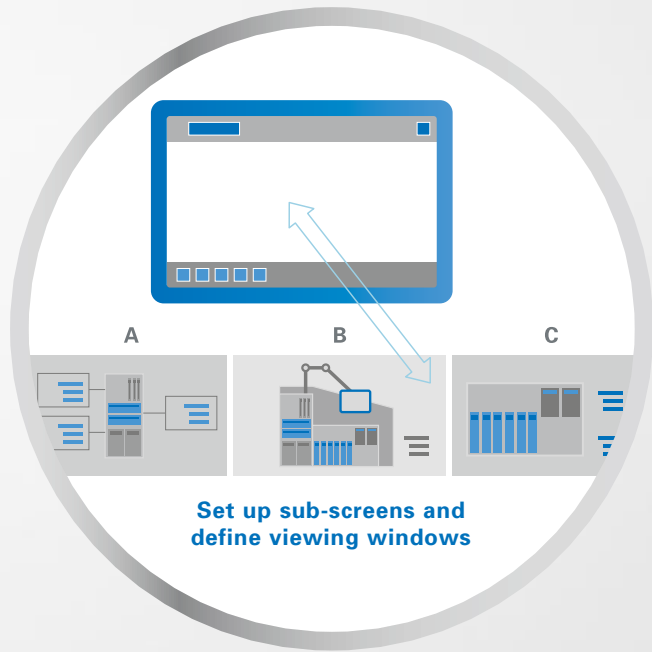
Object Manager

The Object Manager can be used to get a quick overview of all the objects being used on a screen.

It also features a variety of functionalities, including sorting along the Z-axis, showing superimposed objects, anchoring and hiding objects, and displaying selected objects in a synchronized manner on the screen.

Transparent objects

Many objects can also be displayed with transparency, making it possible, for instance, to show the alarm list as a semi-transparent image at runtime.

New button functionalities

A bitmap or a color can be used for each button's background, while a bitmap or text can be used for the foreground.

All shadows and color gradients remain the same when zooming. In addition, the software will run a language-specific check to see whether a text can be placed within a button. If there is not enough space, an indication to this effect will be shown.

Easily import variables

Applies to CODESYS 2, CODESYS 3, and Siemens.

New bitmap functionalities

No bitmap zooming distortion: the program will maintain the appropriate size ratio when zooming. So bitmaps can be used in multiple sizes.

The supported image file format is PNG with an alpha channel (an alpha channel represents information that specifies the degree of transparency for each pixel).

Advanced functionalities for the graph object

The X-axis can now also be used as a measured data axis in graph visualization objects (XY recorder).

Moreover, the Y-axis can be used to display absolute values or percentages.

Containers

This revolutionary approach makes it possible to quickly display a large number of similar visualization objects in an easily manageable format.

First, you use the menus to configure a sub-screen – which can be wider or taller than the touchscreen – or several individual sub-screens. Then, you can define the viewing window through which these sub-screens will scroll at runtime.

A   **B**   **C**

Set up sub-screens and define viewing windows

② Concept

Easily copy your projects and customize them as needed

Standardized concepts

Copying between projects

It used to be that copying elements from project to project meant having to create everything all over again. Well, no more: a dedicated dialog box makes it possible to easily copy variables, objects, bitmaps, and styles and transfer them between projects.

Customization

Screen size changes

With Galileo 10, you can switch between 4:3 and 16:9 aspect ratios for your projects.

16:9
4:3
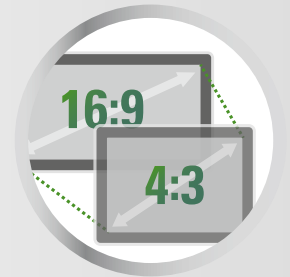
Flexible installation configurations

All XV devices can be installed in portrait or landscape mode, ensuring that they will match your space requirements and accommodate your project's controls perfectly.

The XV300 series features devices for traditional front mounting, as well as devices that can be mounted from the back.

Capacitive glass touchscreen versions are designed to meet the strictest hygiene requirements in the industry.

③ Commissioning

## Commission your projects smoothly and reliably

Project change tracking

XML data formats ensure that project changes can be easily tracked with standard comparison tools.

Project simulation

The convenient Project Inspector feature can be used to run project tests. This ensures that every single change can be tested immediately on the computer (runtime preview), significantly reducing the amount of time involved in commissioning.

Slide sub-screens through the container by swiping

Convenient for commissioning and operation

A   B   C
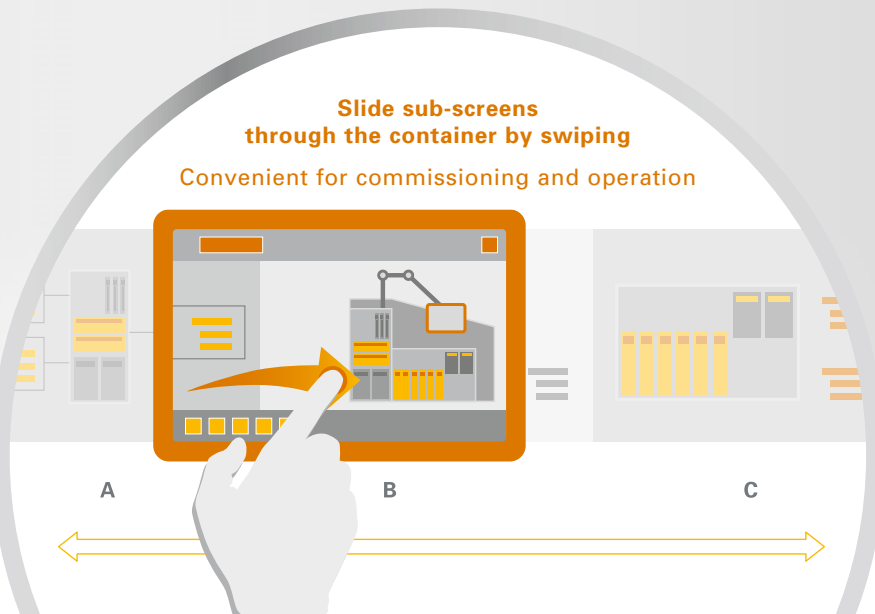
4 Operations

Operate intuitively, manage smoothly

Gesture-based GUI

The device can be conveniently and intuitively operated with swipe, scroll and zoom gestures. In other words, it provides a level of comfort and convenience that has long been the norm with smartphones and tablets and that will now become the standard in industrial applications.
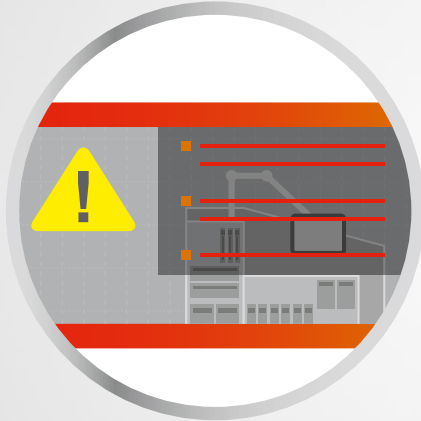
User logger

The software can log and save user actions, as well as any changes that a user makes to values, in the form of a CSV file. This ensures that user input can be tracked in order to provide protection against tampering.

Alarm manager

Alarm messages are shown in an eye-catching red color on a partially transparent area on the monitor, can have one or more lines, and can include a variable such as a value or text. On top of this, the Alarm Manager function will add a timestamp to errors, assign them to one of three alarm groups, and generate an error history.

User Management

The user management function is designed to make your processes even more secure. Even at runtime, device operators will be able to create and delete users, as well as to assign them to previously defined groups.

And in order to improve security even further, the system can be configured to automatically log out users and to monitor the system for invalid login attempts. Moreover, it comes with a password history function that enhances the ability to monitor password changes.
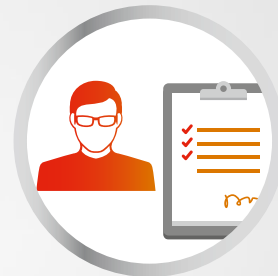
Animations

Just like in a PowerPoint presentation, screen pages can be animated. For instance, a new screen can "fly in" from above or from the side.

5 Maintenance

Streamline maintenance – with optimal assistance

Help Manager

The convenient help system is designed to assist you with images and texts. For example, you can use it to add a marking to a maintenance screen. In addition, the help function for variables provides device operators with a list of variables at runtime, as well as with the text corresponding to the selected variable(s).
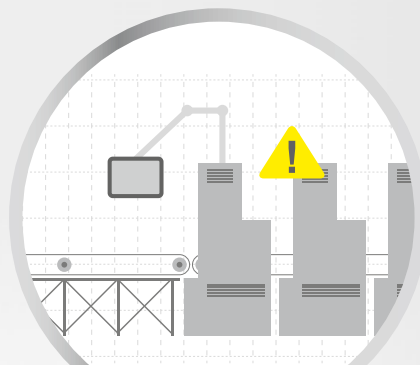
Eaton is dedicated to ensuring that reliable, efficient and safe power supply is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customized, integrated solutions to solve our customers' most critical challenges.

Our focus is on delivering the right solution for the application. But, decision makers demand more than just innovative products. They turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority. For more information, visit **www.eaton.eu**

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or local distributro/agent, please visit
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