## Catalog | May 2025



**EcoStruxure Operator Terminal Expert** 

# EcoStruxure<sup>™</sup> Operator Terminal Expert

Configuration software for Harmony ranges supporting gestures and intuitive user interface designs







## Discover **Harmony**

Advanced operator interface and industrial relays

Harmony operator interface and industrial relays enhance operational efficiency and equipment availability across industrial and building applications. Harmony includes intelligent connected products and edge terminals that visualize, gather and process data, enabling informed operator decisions

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- Harmony HMI Operator Terminals, IPC and EdgeBox
- Harmony Signaling Devices
- Harmony Electrical Relays
- Harmony Safety



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Each commercial reference presented in a catalog contains a hyperlink. Click on it to obtain the technical information of the product:

- Characteristics, Dimensions and drawings, Mounting and clearance,
   Connections and schemas, Performance curves
- Product image, Instruction sheet, User guide, Product certifications, End of life manual

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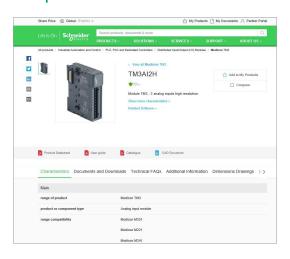


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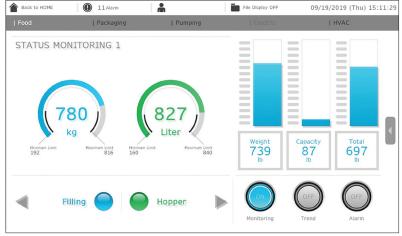
Configuration software for Harmony ranges supporting gestures and intuitive user interface designs

## **EcoStruxure Operator Terminal Expert**



EcoStruxure Operator Terminal Expert allows you to create and edit application screens that control automation systems for Harmony GTU/GTUX/STO7/ST6/STM6 terminals, Harmony industrial PCs (Panel and Box), and other PCs.

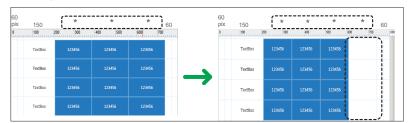
EcoStruxure Operator Terminal Expert features a modern and simple-to-use user interface, easy-to-access functions and information, and a multi-platform working environment. It also shortens design time by providing pre-made libraries, templates, and navigation frameworks.



EcoStruxure Operator Terminal Expert Demo screen

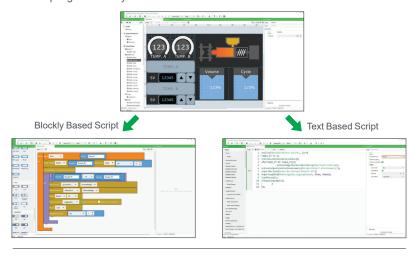
#### Faster design

 Responsive viewbox and grid design allows easy adaptation of the application irrespective of different screen resolutions



Automatic grid adjustment

> Scripting made easy with 2 interactive modes to suit different needs



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#### Intuitive operation

> Multi-touch zoom in/zoom out, slide, pinch, and stretch options similar to smartphones for enhanced user experience (1)



Touch screen gestures

> Multiple screens displaying various information can be viewed in a single screen



Multi-Screen

> High quality graphics and quick adaptation of themes









Themes

<sup>(1)</sup> Available on supported Harmony GTU, GTUX, Harmony iPC, and other PCs that support touch gestures.

## **HMI Software**

#### Touchscreen configuration software with responsive UI design and gestures





Compatible products	Type	Harmony ST07 Harmony ST6/STM6 Harmony GTU, GTUX Harmony iPCs Windows compatible computers		
Maximum number of targets		1		
	Operating system on terminals	Proprietary for Harmony STO7, Harmony ST6/STM6, and Harmony GTU/GTUX Windows operating system for Harmony <i>i</i> PCs		
Functions Reading/writing of PLC variables		Yes		
	Display of variables	Yes		
	Data processing	Yes		
	Sharing of variables between HMI applications	-		
	Saving of variables to external database	-		
Internationalization		16 languages supported by 26 font types		
Development of graphic Native library of graphic objects		Yes		
applications	Curves and alarms	Yes		
	Scripts	Block Script, Java Script		
Communication between HMI application and PLCs		Via I/O drivers: Schneider Electric or third-party protocols (Mitsubishi, Omron, Rockwell Automation and Siemens)		
Uploading of application	ons	-		
Simulation of HMI appli	ications	Yes		
Recipe management		Yes, up to 2048 recipes, 600,000 ingredients in total (2)		
Report and barcode pri	inting	-		
Screen capture		Yes, for Harmony <i>i</i> PCs in PNG format		
Access security		Password protected		
Interface languages		Development in 9 languages: Chinese (China), Chinese (Taiwan), English, French, German, Italian, Korean, Portuguese, and Spanish Online and off-line manuals in 8 languages: Chinese, English, French, German, Italian, Korea Portuguese, and Spanish		
OS compatibility		Windows 10 and Windows 11		

(1) Magelis XBT and Harmony GTO/GTU terminals behave transparently on restoration of power. (2) Requires EcoStruxure Operator Terminal Expert version 3.5 or later.











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Harmony STM6 Edge Box HMI, Harmony iPCs Windows compatible computers	Harmony STU and Harmony GTO (1) Harmony GK/GTU (1)/GTUX and Magelis XBTGH (1) Harmony Panel PCs and Box PCs (HMIBMP, HMIBMU, HMIPSP, HMIPSO, and HMIPEP) Harmony P6
1	32
Windows 10 IoT Enterprise 2019 LTSC 32-bit Harmony iPCs: Windows 8.1, Windows 10	Proprietary for Harmony STU/GTO, Harmony GK/GTU/GTUX, Magelis XBTGH
Embedded/Windows Basic 500 tags Embedded/Windows Machine Control 1,500 tags Embedded/Windows Line Management 4,000 tags Windows Line management plus: 32,000 tags Windows Supervision: 64,000 tags	Yes, up to 8,000 internal and external variables
Yes, depending on the number of tags	Yes
Yes, with VBScript or built-in scripting	Yes, using expression editor or Java programming
Yes, via TCP/IP, OPC, driver or database	Up to 300 variables between 8 terminals, without router PLC Proprietary protocol above TCP/IP
Yes, with relational database (any SQL Database, MS Access and Excel CSV file)	-
Multi-language (depending on the OS)	Up to 15 languages supported by 34 Western alphabets, 4 Asian alphabets, and 2 Middle Eastern alphabets embedded in the application
Yes, user customizable	Yes
Yes	Yes, with log
VBScript, Python, built-in scripting and QuickScript.NET	Java
Via I/O drivers: Schneider Electric or third-party protocols (over 250 drivers: Mits	subishi, Omron, Rockwell Automation, and Siemens)
Yes	Yes
Yes	
Yes, built-in tools with local file or with database	Yes, up to 32 groups, 1,024 ingredients for 256 recipes per group, proprietary or CSV format, complete multilingual support for labels and ingredients
Report is a built-in function that executes the specified Report worksheet and sends the output to hard disk, printer, or PDF.	On the fly alarms, log data. Up to 9,999 active alarms, records, or logs Main USB barcode supported for Harmony with Windows OS and main serial barcode supported for other Harmony.
Yes	Yes, Harmony GTO/GTU, and Harmony Panel PCs and Box PCs (HMIBMP, HMIBMU, and Harmony P6) in JPEG format
Linked to user profiles	
Screens and user interface available in 5 languages: English, German, French, Chinese, and Japanese	Screens, online help, and documentation in electronic format available in 7 languages: English, French, German, Italian, Portuguese, Simplified Chinese, and Spanish
Windows 8.1, Windows 10, Windows 11, Windows Server 2012 R2, Windows Server 2016, Windows Server 2019, and Windows Server 2022	Windows 10 Professional and Windows 11
EcoStruxure™ Machine SCADA Expert	Vijeo Designer™
For more information, refer to the DIA5ED2171201EN catalog.	For more information, refer to the DIA5ED2130614EN catalog.



Schneider Electric

Software type

**EcoStruxure™ Operator Terminal Expert** 

For more information, please refer to the page 11

Configuration software for Harmony ranges supporting gestures and intuitive user interface designs



## Presentation The cross-platform

The cross-platform EcoStruxure Operator Terminal Expert can be used to create HMI applications that control automation systems for:

- Harmony GTU, GTUX
- Harmony STO7
- Harmony ST6/STM6
- Harmony industrial PCs (Panel and Box PCs)
- Windows compatible computers

EcoStruxure Operator Terminal Expert supports English, French, German, Italian, Portuguese, Spanish, Japanese, Traditional Chinese, Simplified Chinese, and Korean languages and provides access to new application types.

EcoStruxure Operator Terminal Expert runs on any PC with a Windows 10 or Windows 11 operating system. This supports WYSIWYG (1) of the developed application and the PLC variables (I/O, internal bits and words), and also helps ensure that the application runs securely on Harmony GTU/GTUX/STO7/ST6/STM6 terminals or Harmony industrial PCs.

EcoStruxure Operator Terminal Expert supports features for creating and organizing HMI applications:

- Intuitive and simple-to-develop user interface
- Gesture experience by multi-touch, zoom in/zoom out, slide, and stretch
- Libraries, templates, and theme design selection
- Graphic configuration by Universe "System Architecture" view
- Windows 10 and Windows 11

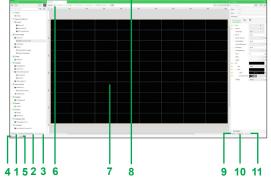


EcoStruxure Operator Terminal Expert Demo screen

#### Configuration

EcoStruxure Operator Terminal Expert is an intuitive configuration software that is used to process HMI projects quickly and easily:

- 1. Tool Chest
- 2. Compound Object Explorer
- 3. Project Explorer
- 4. References
- 5. Error Window and Feedback zone
- 6. Document toolbar
- 7. Editor or Document view
- 8. Application Tool bar
- 9. Event List
- 10. Object List
- 11. Properties



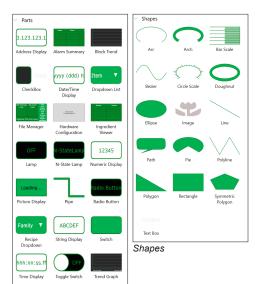
EcoStruxure Operator Terminal Expert window

The software also offers a complete set of application management tools for:

- Up to 2048 recipes with 600,000 ingredients in total
- Full simulation mode for testing the application from the design office
- Retrieval of symbol files for PLC variables generated by:
  - OMRON Corporation
  - Rockwell Automation, Inc
  - Schneider Electric SA
  - Siemens AG.

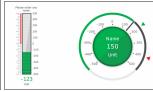
<sup>(1)</sup> What You See Is What You Get (on the screen of the target terminal).

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Parts

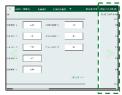




Predefined icons

Compound objects

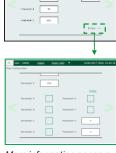




935

202

Slide navigation



More information appears

#### **Graphics editor**

The graphics editor offers interface consistency for simple and more sophisticated objects. This helps application developers to easily create views based on:

- Parts:
- switches (toggle, radio, selector), lamps
- text or number fields
- alarm, trends, recipe ingredient viewer, web browser (1), etc.
- Shapes to be configured:
- lines, rectangles, ellipses, arcs
- polylines, polygons, Bézier curves, scales
- text and images, etc.

#### **Object animations**

9 types of graphic-object animations support the rapid creation of animated mimics on the basis of:

- Pressing the touch panel
- Changing of color
- Filling
- Movement
- Rotation
- Size
- Visibility
- Display of associated value
- Object redesign

#### Predefined icon, image, and compound object libraries

The graphic objects libraries contain objects for efficiently organizing around the business segments. Using the simple "drag and drop" method, library objects can be positioned with the mouse on the mimic being created.

#### **Compound Objects**

- Easily create custom objects and libraries by using the compound object editor.
- Efficiently manage your workflow by copying, editing, importing, and exporting existing compound objects, ensuring you can easily reuse your unique creations.
- Experience fast and convenient sharing of unique compound objects across projects, colleagues, and customers.

NOTE: Creation and editing of compound objects are only supported by Professional and Enterprise Buildtime licenses but it functions on all runtime hardware.

#### **Kev features**

#### **Runtime Navigation**

- Automatic menu generation
- Efficient usage of space: permanent or hidden menus, scroll within the menu that is independent of the rest of the screen
- Less engineering: all information on one screen, free of hierarchies
- More intuitive operation: Icons instead of text, dynamic update of an icon representing the page in the menu

(1) Supported in Harmony GTU / iPCs.

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Themes

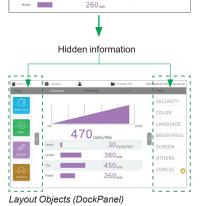
#### Key features (continued)

#### Themes and Color set

- Theme (Studio/Flat themes) and color (10 sets) to preset design
- Quick customization and design consistency between themes
- Product differentiation

# | Teach Name | 1 | Teac

Drop-down tab

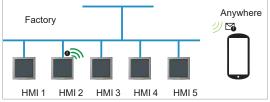


#### Layout Objects (DockPanel)

- Embed several pages in one screen and navigate independently in each section
- Screens are automatically resized to fit into the frame
- Frame sizes can be dynamically changed to show different content

#### **Web Viewer**

- Visualize and operate the HMI screen remotely with mirroring function
- Runs on standard browsers like Chrome, Safari and Edge for devices (PC, Tablet, Smart phone)
- With Web Viewer and Harmony STM6 Gateway Box, the HMISTM6 display panel can become a Faceless HMI for applications that doesn't need a full time operator screen
- Supported by Harmony ST6/STM6/GTU/GTUX, Harmony *i* PCs and other PCs



Web Server API

#### Web Server API

- Interface for browsers, both desktop and mobile:
  - Enables delivery of information independent of time and place to any HTML5 browser
  - Enables fast HMI agnostic development of specific customer/use case tailored UI
- WebSockets for subscription based notifications (events) like alarm notifications, system error notifications, etc.
- User Management support (user name/password)
- Supported only by Professional and Enterprise Buildtime licenses and applicable to all hardware with Ethernet port options

Configuration software for Harmony ranges supporting gestures and intuitive user interface designs

#### Communication protocols between HMI application and devices

Communication is established between the HMI application and the connected control equipment using a communication protocol (driver) that is selected when creating the application in EcoStruxure Operator Terminal Expert.

#### **Communication protocols**

EcoStruxure Operator Terminal Expert supports the following protocols:

- Schneider Electric SA
  - Modbus SIO/TCP Master
  - Modbus TCP Master via USB
  - PacDrive
  - Machine Expert Network
  - Uni-Telway
  - Zelio Logic Smart Relays
- Siemens AG
  - SIMATIC S7 Ethernet/MPI Direct
  - TIA Portal Ethernet
- Rockwell Automation Inc.
  - EtherNet/IP
  - DF1
  - DH-485
- Mitsubishi Electric Corporation
- Various series controllers
- OMRON Corporation
- Various series controllers
- Emerson
  - Industrial Automation/Control Technique Modbus SIO/TCP Master
- Process Management ROC Plus Ethernet/SIO
- CAN in Automation
  - CANopen Slave
- PROFIBUS International
  - PROFIBUS DP Slave
- Crouzet Automation
  - Millenium 3 FBD
- Modbus Organization SIO/TCP Master/Slave
- OPC Foundation
  - OPC UA Server
- FTPs Client

All Schneider Electric drivers provide IEC access to input bits/words and output bits/words: Modbus (RTU and TCP/IP), Modbus Plus (GMU and USB), Uni-Telway, Xway.

The direct I/O access authorizes access to hardware input and output registers.

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## Communication protocols between HMI application and devices (continued)

#### PLC symbols link (1)

EcoStruxure Operator Terminal Expert supports the following configuration tools:

- Schneider Electric SA
- Modbus SIOMaster(SMBP format)
- PacDrive (XML format)
- Modbus TCP Master(XVM/XSY format)
- SoMachine Network
- OMRON Corporation
- CS/CJ/NJ Series EtherNet/IP(TXT format)
- Rockwell Automation
- EtherNet/IP(L5K/CSV Format)
- Siemens AG
- TIA Portal Ethernet(AP format)



EcoStruxure Secure Connect concept

#### **Companion products (2)**

EcoStruxure Secure Connect provides a secure connection between remote display units on the work site (via SiteManager Embedded) and computers or smart devices in the office (via LinkManager or LinkManager Mobile) over a secure central server (GateManager). With EcoStruxture Secure Connect, maintenance personnel can access Schneider Electric software and update it remotely and securely via the HMI, PLC, and other connected devices as if they were on site. Troubleshooting and repair can also be performed remotely upon request.



EcoStruxure Operator Terminal Expert

#### References

The EcoStruxure Operator Terminal Expert configuration software is compatible with Harmony GTU/GTUX/STO7/ST6/STM6 terminals, Harmony *i*PCs and other PCs. The software (3) can be downloaded from our website <a href="https://www.se.com">www.se.com</a>.

EcoStruxure Operator Terminal Expert commercial licenses are available as digital licenses. ID authorization delivered via e-mail to the e-mail address registered while ordering the license.

All EcoStruxure Operator Terminal Expert licenses comprise:

- User documentation in electronic format, including:
  - Online help for the software
  - User Manual for the supported targets
  - Setup Manual for the different protocols supported
- Supported communication protocols

A dedicated web portal www.se.com/licensing is available for easy registration and management of software licenses that allows more control over your license(s).

- Instant license activation and easy account management
- Online view of license status from anywhere

<sup>(1)</sup> Including import of structured variables such as UDTs and ARRAY (of UDT).

<sup>(2)</sup> For more information, please refer to "EcoStruxure Secure Connect catalog".

<sup>(3)</sup> After installation, the trial version of the software is available for 42 days and will have to be activated with the commercial license.

**EcoStruxure Operator Terminal Expert**Configuration software for Harmony ranges supporting gestures and intuitive user interface designs

References (continued)				
Buildtime licenses				
Description	Subscription based	License type/No. of Stations	Compatible with	Reference
EcoStruxure Operator Terminal Expert Basic	1 Month	Single (1)	Harmony STO7 Harmony ST6 Harmony STM6	HMIEOTEBTB1SM
	1 Year	Single (1)		HMIEOTEBTB1SY
EcoStruxure Operator Terminal Expert Professional	1 Month	Single (1)	Harmony GTU/GTUX Harmony STO7  Harmony ST6 Harmony STM6 Harmony iPCs and other PCs	HMIEOTEBTP1SM
	1 Year	Single (1)		HMIEOTEBTP1SY
	1 Year	Group (3)		HMIEOTEBTP3SY
	1 Year	Team (10)		HMIEOTEBTP10SY
	1 Year	Entity (100)	<del>_</del>	HMIEOTEBTP100SY
EcoStruxure Operator Terminal Expert Enterprise	1 Month	Single (1)	<del>-</del> - -	HMIEOTEBTE1SM
	1 Year	Single (1)		HMIEOTEBTE1SY
	1 Year	Group (3)		HMIEOTEBTE3SY
	1 Year	Team (10)	_	HMIEOTEBTE10SY
	1 Year	Entity (100)	_	HMIEOTEBTE100SY
Description	Perpetual	License type/No. of Stations	Compatible with	Reference
EcoStruxure Operator Terminal Expert Basic	-	Single (1)	Harmony STO7 Harmony ST6 Harmony STM6	HMIEOTEBTB1P
EcoStruxure Operator Terminal Expert Professional	-	Single (1)	Harmony GTU/GTUX Harmony STO7	HMIEOTEBTP1P
	-	Group (3)	Harmony ST6 Harmony STM6 Harmony <i>i</i> PCs and other PCs	НМІЕОТЕВТРЗР
	-	Team (10)		HMIEOTEBTP10P
	-	Entity (100)		HMIEOTEBTP100P
Runtime license				
Description	Perpetual	License type/No. of Stations	Compatible with	Reference
EcoStruxure Operator Terminal Expert Runtime	-	Single (1)	Harmony iPCs and other PCs	HMIEOTERT1P

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HMIEOTEBTP100SY	11
HMIEOTEBTP10P	11
HMIEOTEBTP10SY	11
HMIEOTEBTP1P	11
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- Check for Products' Price and Availability
- > Order Products with Generic Commercial References



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- Select Products and Add to Cart
- > Stay Up to Date on the Status of My Products



Support

> Get Quicker Answers
Thanks to Online Support



Training

Access Trainings Dedicated to My Activity

Create your account

Life Is On Schneider

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