



High performance IoT-ready modular HMI panels

Life Is On Schneider



# Get technical information about your product



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

# Find your catalog

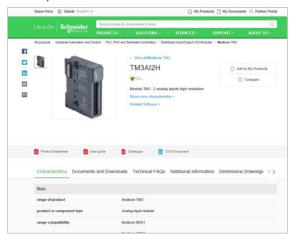


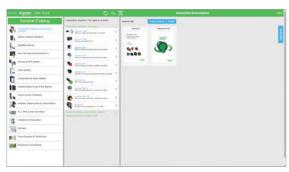
- With just 3 clicks, you can reach the Industrial Automation and Control catalogs, in both English and French
- > Download Digi-Cat with this <u>link</u>

# Select your training



- > Find the right <u>Training</u> for your needs on our Global website
- > Locate the training center with the selector tool, using this link





- Updated quarterly
- Embeds product selectors and configurators, 360° images, training centers,
- · Optimized search by commercial reference





# General contents

### **Harmony GTU**

	General presentation	
	Unique HMI flexibility	page 2
	Operate intuitively and comfortably	page 2
	Maintain easily	
	Ready for IIoT	page 3
Se	election guide	page 4
	Presentation	
	Operation	page 6
	Environment	page 6
	Maintenance	
	Configuration	page 7
	Communication	
	Via Ethernet protocol	page 7
	Via Modbus protocol	page 8
	Via wireless connectivity with Smart WLAN display	page 8
	Via fieldbus modules	page 8
	Via USB for HMI accessories	page 9
	Functions	
	Software functions	page 9
	Companion Products	
	Industrial automation solutions	
	Harmony GTU Hardware and Software compatibility table	
	Panel operating modes	
	Edit mode	page 11
	Operating mode	page 11
	Conformal coating for improved environmental resistance $\dots$	page 11
	Description	page 12
	Advanced and Smart Display modules	page 12
	Display modules with Multi-display adapter	page 13
	Standard, Premium and Open Box modules	page 14
	References	
	Advanced and Smart displays	page 17
	Standard, Premium and Open Box modules	page 17
	Accessories	page 18
	Separate parts	page 18
	Replacement parts	page 19
	Connection accessories	page 20
	Equivalent product table	page 23
	Connection system	page 24
	Product reference index	nage 26

High performance IoT-ready modular HMI panels Unique HMI flexibility, Operate intuitively and comfortably

Harmony GTU High performance IoT-ready modular HMI panels

Harmony GTU is a high-end HMI range designed in a uniquely modular format that allows you to select and assemble the optimum combination of display unit and processing box as required by your applications.

Harmony Universal panels combine operator efficiency, simplified installation, and flexibility to suit all industrial architectures. This range comprises display modules (Advanced and Smart) and box modules (Standard, Premium and Open).





Advanced display + Premium box

Smart display + Open box

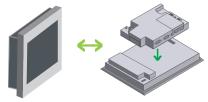
Certified for use in the most demanding automation systems, including industrial control equipments, hazardous locations, and marine

applications.

### Unique HMI flexibility

### Modular and scalable

- Choice of screen size, format, image quality, and processing levels enable Harmony GTU to be used in wide range of applications
- Universal panels are available in various combinations by simply assembling display modules and box modules



Harmony GTU panel = Display module + Box module

### Monitoring and communication capable

- > Easily integrated in industrial architectures via embedded dual interfaces (2 serial ports with different signal types, 2 Gigabit Ethernet ports, 2/4 USB host ports) and an optional fieldbus interface
- > Innovative wireless connectivity of 12" Smart WLAN display with embedded antenna



Wireless Harmony 12" Smart display

### Operate intuitively and comfortably

### Smartphone-like interface

- Easy and comfortable handling with intuitive navigation similar to smartphones/ tablets
- Projected-Capacitive or Resistive technology designed multi-touch screen supports zooming in/out, swiping, and scrolling through menus even with protective gloves or a protective display screen cover





Touch Screen Gesture



Harmony GTU → Multiple combinations with easy assembly

Harmony GTU panel box units have SD

or CFast card slots for huge external

### **Harmony GTU**

High performance IoT-ready modular HMI panels Maintain easily, Ready for IIoT

### Operate intuitively and comfortably (continued)

### Operator efficiency with good visualization

- > High-resolution screen with 16 M colors for a crystal-clear view
- > 16/9 Wide display available in 5 sizes (7", 10", 12", 15", 19") for easy sharing of images with external multimedia devices
- LED backlight for maximum screen comfort with excellent brightness, complete dimming (100 levels), and auto-adjustment to environment

### Maintain easily

- > Parts can be replaced individually thanks to the modular design
- > Easy installation with anti-drop retractable embedded fasteners and no accessories
- > Robust panel housed in an aluminum material with high temperature resistance (up to 60 °C)
- > Dual removable storage units in Box modules speed up maintenance of panels
- Easy migration of Harmony GTU panels with Smart display as these displays have cut-outs similar to old range of HMI



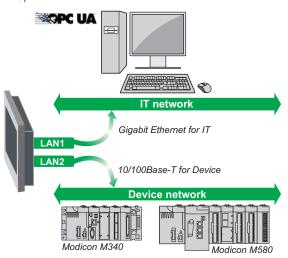


data storage.

Open Box Harmony GTU
panels enable EcoStruxure™
Machine SCADA Expert for
database link and traceability.

### Ready for IIoT

- Dual LAN (Local Area Network) separates IT and PLC communication for better performance and data security
- Manage all types of data with Open HMI: Microsoft Office and PDF documents, CAD files, Web pages, and Multimedia (sound and video)
- Database link or data analysis with EcoStruxure Machine SCADA Expert (Line Management configuration tool) Software used on Open Box
- Leverage plant floor-to-enterprise communication with OPC-UA interface on Open Box

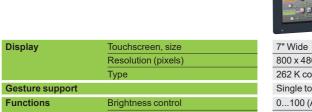


**Harmony GTU**High performance IoT-ready modular HMI panels

**Applications** 

Type of display module

Display of text messages, graphic objects, and synoptic views Control and configuration of data



**Functions** Front USB ports Wireless antenna Backlight service life **Dimensions** External W × H × D mm/in. Cut-out W × H mm/in.

Supply voltage Environment Conformity to standards Compatible box models Display module reference

Type of box module







HMIDT351	HMIDT551	HMIDT651		
Standard, Premium and Open box models				
EN, IEC, UL 508, CSA, ATEX, Marine				
Operating temperature 0-60 °C,	Front face protection IP67			
1224 V				
190 × 135/7.48 × 5.31	255 × 185/10.03 × 7.28	295 × 217/11.61 × 8.54		
204 × 149 × 67/ 8.03 × 5.86 × 2.64	269 × 199 × 67/ 10.59 × 7.83 × 2.64	309 × 231 × 67/ 12.17 × 9.09 × 2.64		
50,000 h				
_				
Optional with XBTZGUSB (Type	e A port) or HMIZSUSBB (Type m	nini-B port)		
0100 (Adjusted with touch par	nel or software)			
Single touch: sliding, scrolling				
262 K colors, TFT				
800 x 480	1,280 x 800	1,280 x 800		



CPU				
Operating system				
Memory	RAM			
momory	Backup memory			
	Main storage: OS with HMI application			
	Memory storage extension			
Functions	Real-time clock			
	Max. variables			
Video interface				
Sound input interface				
Sound output	Speaker output			
interface	LINE output			
Alarm output/Buzzer o	utput			
Communication	Ethernet port			
	Serial line			
	Expansion unit			
	USB			
Optional battery				
Third-party protocols	supported			
Compatible display units				
Box module reference				

RISC, 600 MHz
Real Time
256 MB
512 KB (FRAM/MRAM)
1 GB internal flash EPROM
SD card (up to 4 GB)
Yes, built-in
8,000 (in Vijeo Designer)
No
-
-
-
-
x2 RJ45 (independent)
RS-232C (COM1) + RS-485 (COM2)
-
2x USB 2.0 (Type A), 1x USB 2.0 (Type mini-B)
Yes (HMIZGBAT)
Siemens, Omron, Mitsubishi, Allen-Bradley (Rockwell Automation), ABB
HMIDT351, HMIDT551, HMIDT651, HMIDT542, HMIDT642, HMIDT732
HMIG2U (3)

- (1) Vijeo Designer and EcoStruxure Operator Terminal Expert Runtime unlimited version pre-installed.
  (2) Microsoft Office & PDF readers, Internet browser V11, .Net 4.6.2, Vijeo Citect web client.
  (3) Vijeo Designer unlimited version pre-installed.
- (4) EcoStruxure Machine SCADA Expert Runtime license to be ordered separately.

Display of text messages, graphic objects, and synoptic views Control and configuration of data











10.4"	12.1"		15"	15" Wide	19" Wide	
800 x 600	1,024 x 768		1,024 x 768	1,366 x 768		
16 M colors, TFT						
Single touch: sliding, scro	lling; Multi-touch: zo	ooming, double tou	ch			
0100 (Adjusted with em	bedded sensor, tou	ch panel or softwar	e)			
1x Embedded USB 2.0 (T	ype A), 1x USB 2.0	(Type mini-B)				
-		Yes	-			
50,000 h						
273 × 215 × 67/ 10.74 × 8.46 × 2.64	315 × 241 × 67/ 12.40 × 9.50 × 2.6	64	397 × 296 × 67/ 15.63 × 11.65 × 2.64	414 x 295 x 69/ 16.30 x 11.61 x 2.72	483 x 337 x 69/ 19.02 x 13.27 x 2.72	
259 × 201/10.20 × 7.91	302 × 228/11.90 >	8.98	384 × 283/15.11 × 11.14	369 x 277/14.53 x 10.91	465 x 319/18.31 x 12.56	
1224 V						
Operating temperature 0-	60 °C, Front face pr	otection IP67		Operating temperature 0-55 °C	C, IP67	
EN, IEC, UL 508, CSA, AT	EX, Marine					
Standard, Premium and C	pen box models	Open box model	Standard, Premium and Open box models	Premium and Open box mode	ls	
HMIDT542	HMIDT642	HMIDT643	HMIDT732	HMIDT752	HMIDT952	
47	•				·	





RISC, 600 MHz	x86, 1.33 GHz
Real Time	Windows 7 Embedded
256 MB	2 GB
512 KB (FRAM/MRAM)	
1 GB SD card	32 GB CFast card
SD card (up to 4 GB)	SD card (up to 4 GB) and CFast card (up to 32 GB)
Yes, built-in	
8,000 (in Vijeo Designer)	12,000 (in Vijeo Designer)
No	1x DVI-D OUT
-	MIC or LINE input (software switch)
300 mW (rated load: 8 Ω, frequency: 1 KHz)	
Rated load: 10 KΩ or more	
Yes (24 V == /50 mA or less)	
x2 RJ45 (independent)	
RS-485 (Isolated) (COM1) + RS-232C/RS-422/RS-485 (COM2)	
1x fieldbus unit	1x fieldbus unit
2x USB 2.0 (Type A), 1x USB 2.0 (Type mini-B)	3x USB 2.0 (Type A), 1x USB 2.0 (Type mini-B)
Yes (HMIZGBAT)	
Siemens, Omron, Mitsubishi, Allen-Bradley (Rockwell Automation), ABB	
HMIDT351, HMIDT551, HMIDT651, HMIDT542, HMIDT642, HMIDT732, HMIDT752, HMIDT952	HMIDT351, HMIDT551, HMIDT651, HMIDT542, HMIDT642, HMIDT643, HMIDT732, HMIDT752, HMIDT952
HMIG3U (1)	HMIG5U2 (2) (3), HMIG5UL8A and HMIG5UL8B (4)

### High performance IoT-ready modular HMI panels



Harmony HMIGTU color display modules



Harmony HMIGTU Box modules

6

### **Presentation**

The Harmony GTU series are high-end HMIs built on an innovative concept of modularity. This offers you a choice of options to find the most suitable Universal panels for your application. Harmony GTU panels comprise a front panel display and a processing box module.

The display modules are available in two versions:

- Advanced Display: compact wide screens in 3 sizes
- □ 7" W
- □ 10" W
- □ 12" W
- Smart Display: large multi-touch screens in 5 sizes
- □ 10.4"
- □ 12.1" (with or without wireless Ethernet)
- □ 15"
- □ 15" W
- □ 19" W

The box modules are available in three versions:

- Standard Box: with Real Time operating system
- Premium Box: with Real Time operating system
- Open Box: with Windows 7 Embedded operating system and large storage

### Operation

Harmony GTU Universal panels feature powerful information and communication technologies with maximum operator efficiency in terms of viewing which, depending on the model, include:

- Clear display with standard or wide-format, single or multi-touch technology
- High level of communication with all embedded dual interfaces: 2 serial ports, up to 4 USB host ports, and 2 Gigabit Ethernet ports (Multi-link, Webserver and FTP, E-mail, Remote services)
- Embedded wireless Ethernet function (1) in Access point mode or Station mode
- Removable storage units for operating system easy save/restore, HMI application, and user data (SD memory cards, CFast cards, and USB memory stick management)
- Management of many peripherals: printers, barcode readers, external monitor display, external keyboard/mouse, and Schneider Electric smart USB accessories (tower light, illuminated switch, keyboard, biometric switch, USB keyboard)
- View and record video for USB and IP cameras on Open Box
- Duplicate the image on a large monitor display up to WUXGA resolution (1920x1200) with DVI output, ideal for the Andon application to show production in manufacturing plants
- Multi-operation with up to 3 additional external Harmony GTU displays on Ethernet network in either duplicate or extended modes.

### **Environment**

The high-end Harmony GTU Universal panels have been designed in accordance with numerous standards, certifications, and requirements:

- Standards: IEC/EN 61131-2, IEC 61000-6-2, and IEC 61000-6-4
- Certifications:
- □ RCM (Australia), EAC (Eurasia), KC (Korea)
- □ cULus Industrial Control Equipment (UL508 and CSA 22.2 No.142)
- □ cULus Hazardous Locations (ANSI/ISA 12.12.01 and CSA 22.2 No. 213)
- □ Atex zone 2/22
- ☐ Marine certifications : BV, CCS, DNV, GL, LR, RINA, ABS
- Operating temperature: up to 60 °C
- Degree of protection on front face IP 66/67 (according to IEC 60529)
- Extended power supply voltage 12...24 V ==
- Brightness sensor on Smart Display for automatic brightness adjustment to environment

(1) Supported by HMIDT643 only.

### High performance IoT-ready modular HMI panels

### **Presentation** (continued)

#### Maintenance

Harmony GTU panels supports the following features for ease of maintenance:

- Easy installation with anti-drop retractable embedded fasteners
- Front USB ports to access all data without opening the cabinet
- Scaler function to manage unique application files with any display size and resolution
- Isolation on RJ45-RS-485 port for more reliable communication in complex grounding applications
- Robust panel with complete aluminum housing
- Dual removable storage units in Harmony GTU boxes for storing application and data, thus enabling zero downtime while changing panels
- Easy migration of Harmony GTU panels with Smart display as they have cut-outs similar to old range of HMI







### Configuration

Like all other Harmony panels, Harmony GTU Universal panels can be configured using Vijeo Designer software in a Windows environment (1). This software has an advanced user interface with many configurable windows enabling projects to be developed quickly and easily.

Harmony GTU is also configurable with EcoStruxure Operator Terminal Expert software. This software with the user interface brings greater ease to project development and online updates. EcoStruxure Operator Terminal Expert allows you to create an innovative HMI project that can be operated on Harmony GTU like a smartphone (2).

For more information on Vijeo Designer and EcoStruxure Operator Terminal Expert, please refer to our website <a href="https://www.schneider-electric.com/HMI Configuration Software">www.schneider-electric.com/HMI Configuration Software</a>.

### Communication

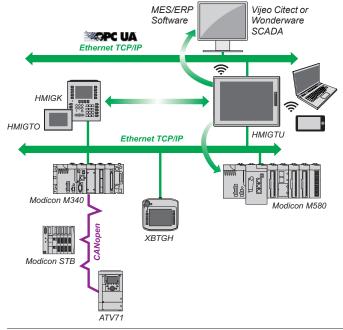
The following illustrations show the equipments that Universal panels can communicate via Ethernet and Modbus protocols, and also via USB, wireless and fieldbus interfaces.

### Via Ethernet protocol

Harmony GTU with two Ethernet ports can share data with other Harmony HMIs, browse the PLC's Webserver and SCADA server, and also communicate with PLCs using:

- Modbus TCP protocol
- Third-party Ethernet protocol

OPC-UA protocol is also available on Harmony GTU for IIoT connectivity.



(1) Harmony HMIG5U2 is compatible with Vijeo Designer V6.2 SP1 or later.

(2) Harmony HMIG3U is compatible with EcoStruxure Operator Terminal Expert V3.1 or later.

Description: page 12 References:

page 15

Connections:

Substitution:

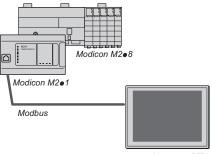
High performance IoT-ready modular HMI panels

### **Communication** (continued)

### Via Modbus protocol

Harmony GTU communicates with PLCs via one or two integrated serial links, using the following communication protocols:

- Schneider Electric (Uni-TE, Modbus)
- Third-party: Mitsubishi Electric, Omron, Allen-Bradley, and Siemens

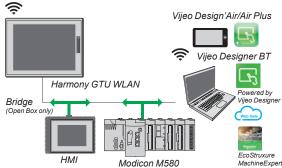


Harmony GTU

### Via wireless connectivity with Smart WLAN display (1)

The 12" Smart WLAN display when configured with Open Box meets setup and maintenance requirements in the following modes:

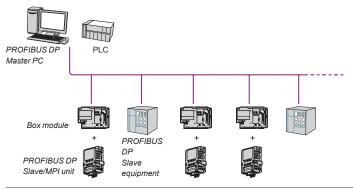
- Access point mode: The Smart WLAN HMI application display can be accessed wirelessly with a smartphone and Vijeo Designer Air software or with a PC that has an Internet browser and Web Gate function. All HMI applications connected to one of the Harmony GTU Open Box (Bridge function) Ethernet networks can also be accessed wirelessly.
- Station mode: PLCs and other Harmony HMIs can be communicated wirelessly via an existing access point with Smart WLAN display in the Ethernet architecture to be used in flexible production lines for data sharing.



Smart WLAN display in Access point mode

### Via fieldbus modules

By attaching the fieldbus module to the Box unit, you can join a PROFIBUS DP network or MPI network to communicate with PROFIBUS DP master or MPI equipment. You can also join a CANopen network to communicate with a CANopen master.



(1) Depending on the environment, location (distance and angle), and application used and displayed on the Harmony GTU screen.

Description: page 12

References:

Connections: page 24

Substitution: page 23

### High performance IoT-ready modular HMI panels

### Communication (continued)

### Via USB for HMI accessories

The Harmony USB accessories are designed to expand the selection range of user applications by offering value-added/differentiated HMI solutions. These innovative USB accessories can easily be installed and operated with HMI panels.

The Harmony USB accessories supported by Harmony GTU include:

- Harmony XVGU USB tower light (only on Standard and Premium Boxes)
- Harmony XB5S biometric USB switch
- Harmony HMIZ illuminated USB switch
- Harmony HMIZ USB keyboard (only on Standard and Premium Boxes)

For more information on HMI USB accessories, please refer to our website www.schneider-electric.com/USB accessories for Harmony panels.







Vijeo Designe



Description:

page 12

EcoStruxure Machine SCADA Expert

### **Functions**

### Software functions

Harmony GTU panels offer the following functions:

- Display of animated synoptic views with 8 types of animation (pressing the touch panel, color changes, filling, movement, rotation, size, visibility, and value display)
- Control, modification of numeric and alphanumeric values
- Display of current date and time
- Real-time and trending curves with log
- Alarm display, alarm log, and management of alarm groups
- Multi-window and recipe management
- Operator-initiated page calls
- Multilingual application management (10 languages at the same time)
- Data processing via Java script
- Storage of the application and logs on external application memory card in SD format, USB stick, or CFast card
- Management of serial printers and barcode readers
- Sound Message management

In addition, the Harmony GTU display units offer a multi-touch screen feature with EcoStruxure Operator Terminal Expert or EcoStruxure Machine SCADA Expert software. These features, such as drag, click, and dual-press gestures are similar to those of smartphones.

The flexibility of Windows 7 Embedded on Harmony GTU Open Box allows:

- Running a Vijeo Designer application
- Dual-screen support and cloning function on external monitor with DVI port connected to Open Box
- Multi-operation with up to 3 external Harmony GTU displays connected on Ethernet to the Open Box host in either duplicate or extended modes with touch exclusive control function that is configurable on each display.
- Web video support with view and record functions on Open Box
- Navigate HTML pages and send e-mails
- Simultaneous functions such as:

Connections: page 24

- □ Use of Internet Explorer, Windows Media Player, Office Viewer, and Adobe Reader (pdf, doc, xls documents)
- Advanced Line management functions, running EcoStruxure Machine SCADA Expert software application to:
- $\hfill \square$  Automatically generate reports compliant with CFR21
- ☐ Track your data and understand your performance with the embedded EcoStruxure Machine SCADA Expert historian and OEE templates
- □ Benefit from the power of the IoT with IT and OT driver library and data management capabilities (Native OPC interface including OPC UA, etc.)

Substitution:

(1) Depending on the environment, location (distance and angle), and application used and displayed on the Harmony GTU screen.

References

### High performance IoT-ready modular HMI panels





Vijeo Design'Air Plus



EcoStruxure Secure Connect Advisor remote maintenance



EcoStruxure Machine SCADA Expert

### **Functions**

### Software functions (continued)

The following programs enable you to connect remotely to HMI panels and access processes at any time from anywhere:

- Vijeo Design'Air enables you to connect remotely to the Harmony GTU terminal and have a remote view of the terminal on your tablet and smartphone (mirror function).
- Vijeo Design'Air Plus enables you to create a tablet/smartphone project for a specific display size of the tablet/smartphone. During runtime, an operator can access the Harmony GTU user application to display data and control automation processes on the tablet/smartphone.

### **Companion Products**

With EcoStruxure Secure Connect Advisor, all Harmony GTUs serve as a service enabler and access point for remote maintenance to your machine. EcoStruxure Secure Connect Advisor provides a more secure way to access existing Schneider Electric tools (for example: Vijeo Designer, Unity, EcoStruxure Machine Expert) to program or monitor machines remotely. The maintenance personnel can also 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.

For more information, please refer to "EcoStruxure Secure Connect Advisor catalog" available on our website www.schneider-electric.com.

#### Industrial automation solutions

The Harmony GTU integrated (1) in MachineStruxure™(2) automation solutions offer will help machine manufacturers (OEMs) to quickly design optimized machines (in terms of cost and energy efficiency).

MachineStruxure solutions are based on high-performance control platforms and EcoStruxure Machine Expert single software package. EcoStruxure Machine Expert allows the development, commissioning, and programming of machines. With Vijeo Designer software, this software allows programming of panels in the Harmony range.

Harmony GTUs have been designed for PlantStruxure ™ (2) architecture, MachineStruxure (2) architecture, and for Transparent Ready equipment (combination of Web and Ethernet TCP/IP technologies). Therefore, all panels with an Ethernet port have a built-in FTP server for data file transfer and a Web Gate function for remote access to the panel application from a PC with an Internet browser.

Harmony GTU H	Harmony GTU Hardware and Software compatibility table						
GTU Hardware		HMI software (Minimum version required)					
Display	Вох	Vijeo Designer	EcoStruxure Operator Terminal Expert	EcoStruxure Machine SCADA Expert			
HMIDT●51/●42/●32	HMIG2U	V6.2 SP8	No	No			
HMIDT•51/•42/•32	HMIG3U	V6.2 SP1	V3.1	No			
HMIDT•51/•42/•32	HMIG5U2	V6.2 SP5.1	No	No			
	HMI G5UL8A/G5UL8B	No	No	V8.0 SP2/ V8.1 SP2			
HMIDT∙52	HMIG2U	No	No	No			
HMIDT∙52	HMIG3U	V6.2 SP9	V3.1	No			
HMIDT∙52	HMIG5U2	V6.2 SP7	No	No			
	HMI G5UL8A/G5UL8B	No	No	V8.0 SP2/ V8.1 SP2			
HMIDT643	HMI G2U/G3U	No	No	No			
	HMIG5U2	V6.2 SP5.1	No	No			
	HMI G5UL8A/G5UL8B	No	No	No			
HMIDT•••	HMI G3U/G5U2 + Fieldbus modules	No	V3.1 (3)	No			

<sup>(1)</sup> Harmony GTU is integrated into MachineStruxure with Vijeo Designer version V6.2 SP3 or later. (2) For more information on the MachineStruxure and PlantStruxure concept, please refer to our

<sup>(2)</sup> For more information on the MachineStruxure and PlantStruxure concept, please refer to our website www.schneider-electric.com.

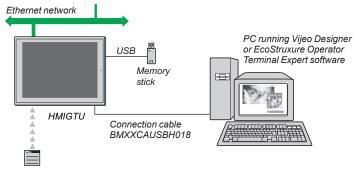
<sup>(3)</sup> Not supported by HMIG5U2.

High performance IoT-ready modular HMI panels

### Panel operating modes

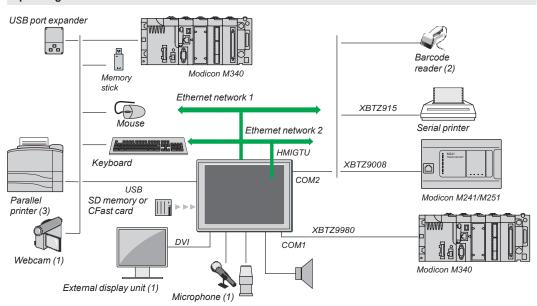
The following illustrations show the equipment that can be connected to Universal panels depending on their two operating modes.

### Edit mode



SD memory card for Premium Box and CFast card for Open Box

### Operating mode



### Conformal coating for improved environmental resistance

The Conformal coating service offers varnishing of electronic cards to prolong the service life of the panels and enable them to be used in corrosive environments. The varnishing increases resistance to condensation, dusty atmospheres and chemical corrosion (sulfurous and halogenous atmospheres). This coating service is applicable to all display and box modules of Harmony GTU. For more information on this service offer, please contact our Customer Care Centre.

- (1) With Open Box unit.
- (2) Validated with DataLogic Gryphon barcode reader.
- (3) Validated with Hewlett Packard printer via USB/PIO converter.

### High performance IoT-ready modular HMI panels Advanced and Smart Display modules



### Harmony HMIDT 351/551/651 Advanced Display modules

- Single-touch resistive screen for displaying synoptic views (262 K colors LCD TFT LED with brightness adjustable to 100 levels) in sizes 7", 10", and 12" wide
- Multi-color status indicator (green, orange, and red) showing the panel's operating mode
- Aluminum alloy front panel providing IP 66/67 protection when mounted on panel or enclosure door



Smart Display front view

Smart XL display front view

# 6 3 5

2 6



Advanced and Smart display rear view

### Harmony HMIDT 542/642/643/732/752/952 Smart Display modules

#### Front view

- Multi-touch resistive screen for displaying synoptic views (16 M colors, LCD TFT LED with brightness adjustable to 100 levels) in sizes 10.4", 12.1", and 15"
- 2 Multi-touch Projected-Capacitive screen with glass top cover for displaying synoptic view (16 M colors, LCD TFT LED with brightness adjustable up to 100 levels) in sizes 15" and 19" Wide format
- Multi-color indicator (green, orange, and red) showing the panel's operating
- Brightness sensor to automatically adjust the level of brightness to the environment
- 5 Front USB ports 2.0 Host & Device with screw protective cover
- Aluminum alloy front panel providing IP 66/67 protection when mounted on panel or enclosure door
- 7 For HMIDT643 GTU display (1), a wireless antenna is embedded in the front bezel with:
  - 2.4 GHz bandwidth
  - Maximum speed: 72.2 Mbps(in IEEE 802.11n mode), 54 Mbps(in IEEE 802.11g mode), 11 Mbps(in IEEE 802.11b mode)
  - Standard IEE802.11 b/g/n
  - Distance 30 m max. according to the environment
  - Access point or station modes
  - Communication mode for infrastructure only
  - WEP/WPA/WPA2 security
  - Radio frequency certifications for Europe, USA, Canada, China, Taiwan, South Korea, Japan

### **Advanced and Smart Display rear view**

- 1 Removable screw terminal block for 12...24 V == power supply
- 2 Box interface
- 3 4x retractable embedded screw fasteners
- 4 Anti-Drop lock

Schneider

<sup>(1)</sup> Depending on the environment, location (distance and angle), and application used and displayed on the Harmony GTU screen.

High performance IoT-ready modular HMI panels Display modules with Multi-display adapter



Rear view of the mounted Multi-display adapter HMIZMDARX

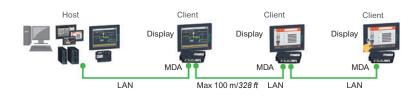
### **Description**

Harmony GTU Display with Multi-display adapter HMIZMDARX

#### Rear view

- 1 Screw hole for VESA accessory
- 2 Reset switch (Factory Reset)
- 3 Direct IOs interface
- 4 Ethernet 1
- 5 Ethernet 2 (Embedded Hub)
- 6 ON/OFF switch for DHCP Server

### Operating mode



The multi-display adapter is mounted on the rear of Harmony GTU Display to extend up to 3 remote displays for one host station. The host station (1) can be a Harmony GTU Open, a Harmony *i*PC, or a general PC.

- A standard Ethernet cable (up to 100 m/328 ft) can be used between adapters for transmission of images and touch signals. The display adapters can be wired in either Line or Star connection modes.
- A Configuration software is provided with the adapter (MDA configuration tool) to install on the host station for complete architecture configuration.
- □ Allows selection of Duplicate or Extended modes for each display's visualization.
   □ Touch operation exclusive control can be managed either by "first touch priority"
- mode using a configurable temporisation or "Excluded" mode using the direct inputs/ outputs with external push buttons and lights.
- A VESA mounting accessory is available for the Multi-display adapter.

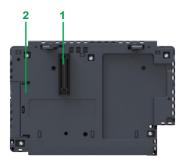


VESA mounted Multi-display adapter

Schneider

<sup>(1)</sup> Operating System supported: Microsoft Windows 7 32-bit/64-bit, Windows 8 32-bit/64-bit, Windows Embedded Standard 7 32-bit/64-bit and Windows Embedded 8.1 Industry Pro 64-bit for Harmony products only.

High performance IoT-ready modular HMI panels Standard Box module



Standard Box Rear view



Standard Box Underside view



Standard Box Front view

### **Description**

### Harmony HMIG2U Standard Box module

#### Rear view

- 1 Display interface
- 2 Internal Flash Memory (1 GB) with
  - Real Time operating system
  - Vijeo Designer Run Time

### Underside view

- 3 2 Type A USB host connectors for connecting peripherals, transferring applications, and Modicon M340 terminal port communication
- RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX with an activity LED
- 9-way male SUB-D connector for RS-232C serial link to PLCs (COM1)
- 6 RJ45 connector for RS-485 serial link (COM2)

- Status LED indicating the operating mode of the terminal
- 8 LED indicating access to the SD memory card
- 9 Expansion unit cover for optional battery
- 10 Type mini-B USB connector for application transfer
- 11 Storage unit Cover for SD slot memory card dedicated to user data
- 12 LOCK button for attaching the box module to the display module

High performance IoT-ready modular HMI panels Premium Box module

### **Description**

### Harmony HMIG3U Premium Box module

#### Rear view

- Display interface
- Storage unit Cover 1 with an SD card (1 GB) and pre-installed:
  - Real Time operating system
  - Vijeo Designer Run Time or EcoStruxure Operator Terminal Expert Run Time



Premium Box rear view



Premium Box front view

12

8 1011 Premium Box underside view

### Front and underside views

- Auxiliary interface for alarm, buzzer, and speaker outputs
- Status LED indicating the operating mode of the terminal
- LED indicating access to the SD memory card
- Type mini-B USB connector for application transfer
- Expansion unit cover for optional battery or optional FieldBus card
- 2 Type A USB host connectors for connecting peripherals, transferring applications, and Modicon M340 terminal port communication
- RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX/ 1000BASE-T with an activity LED
- 10 COM1 LED indicating data transmission
- 11 RJ45 connector for RS-485 serial link with isolation (COM1)
- 12 9-way male SUB-D connector for RS-232C or RS-422/RS-485 serial link to PLCs (COM2)
- 13 Storage unit Cover 2 for SD slot memory card dedicated to user data
- 14 LOCK button for attaching the box module to the display module

Schneider

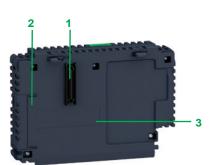
High performance IoT-ready modular HMI panels Open Box module

### **Description**

### Harmony HMIG5U2/HMIG5UL8A/HMIG5UL8B Open Box

### Rear view

- 1 Display interface
- 2 Storage unit Cover 1 that has a CFast card (32 GB) with pre-installed Windows® Embedded 7 supplied in 9 languages (English, French, German, Italian, Portuguese, Spanish, Swedish, Chinese, Russian) and also:
  - Internet Explorer Version 11.0 as Web browser
  - Notepad
  - Windows Media Player 12
  - PDF Reader, Microsoft Word/Excel Viewer
  - Framework.Net 4.6.2
  - VNC Client/Server (Virtual Network Computing) for remote connection
  - Vijeo Citect Web Client
- 3 Each Open Box reference is dedicated to a different HMI Runtime as explained below:
  - HMIG5U2: Run time Vijeo Designer and registered with Open Box
  - HMIG5UL8A: Run Time EcoStruxure Machine SCADA Expert Trial version 8.0 SP2 installed in Box, need to order HMIVXLRT•• KLV•• license for registration (1)
  - HMIG5UL8B: RunTime EcoStruxure Machine SCADA Expert Trial version 8.1 SP2 installed in Box, need to order HMIVXLRT •• KLV •• license for registration (1)



19 4 5

11

Open Box rear view

8 9

Open Box front view

Open Box underside view

### Front and underside views

- 4 Auxiliary interface for alarm, buzzer, and speaker outputs
- 5 DVI-D interface to connect Harmony i Display or LCD monitor display
- 6 Mini-jack connector for microphone input
- 7 Status LED indicating the operating mode of the terminal
- 8 Type A USB connector for application transfer
- 9 Type mini-B USB connector for application transfer
- 10 LED indicating access to SD or CFast cards
- 11 Expansion unit cover for optional battery or optional fieldbus card
- 12 2 Type A USB host connectors for connecting peripherals, transferring applications, and Modicon M340 terminal port communication
- 13 RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX/1000BASE-T with an activity LED
- 14 RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX/1000BASE-T with an activity LED
- 15 COM1 LED indicating data transmission
- 16 RJ45 connector for RS-485 serial link with isolation (COM1)
- 17 9-way male SUB-D connector for RS-232C or RS-422/RS-485 serial link to PLCs (COM2)
- 18 Storage Cover 2 for SD slot and CFast slot card dedicated to user data
- 19 LOCK button for attaching the box module to the display module



(1) To complete the reference, replace the first pair of dots with Number of Tags and second pair of dots with version

# **Harmony GTU**High performance IoT-ready modular HMI panels Display and Box modules











HMIG3U



Data entry method	Size	Resolution (pixels)	Colors	Touch type	Options	Reference	Weight kg/ <i>lb</i>
Advanced l	Display						
Via touch screen	7", format 16/9	800 × 480	262 K	Single resistive	No	HMIDT351	1.200/ 2.600
	10", format 16/9	1280 × 800	262 K	Single resistive	No	HMIDT551	2.500/ 5.500
	12", format 16/9	1280 × 800	262 K	Single resistive	No	HMIDT651	3.000/ 6.600
<b>Smart Disp</b>	lay						
Via touch screen	10.4", format 4/3 Standard	800 × 600	16 M	Multi resistive	Front USB (Type A + Type mini-B), Brightness sensor, Scaler	HMIDT542	2.700/ 5.900
	12.1", format 4/3 Standard	1024 × 768	16 M	Multi resistive	Front USB (Type A + Type mini-B), Brightness sensor, Scaler	HMIDT642	3.000 <i>i</i> 6.600
					Front USB (Type A + Type mini-B) Brightness sensor, Scaler, Wireless antenna	HMIDT643 (1)	3.000/ 6.600
	15", format 4/3 Standard	1024 × 768	16 M	Multi resistive	Front USB (Type A + Type mini-B) Brightness sensor, Scaler	HMIDT732	4.500/ 9.900
	15", format 16/9	1366 x 768	16 M	Multi-touch Projected- capacitive technology	Front USB (Type A + Type mini-B) Brightness sensor, Scaler	HMIDT752 (2)	5.000/ 11.023
	19", format 16/9	1366 x 768	16 M	Multi-touch Projected- capacitive technology	Front USB (Type A + Type mini-B) Brightness sensor, Scaler	HMIDT952 (2)	6.800 <i>i</i> 14.991

Harmony	Harmony GTU Universal Box modules							
Operating system	RAM memory	Storage units	USB ports	Communi- cation	Multimedia interface	Reference	Weight kg/lb	
Standard B	ох							
Real Time	256 MB	1x Internal Flash and 1x SD card	2x Hosts (Type A), 1x Device (Type mini-B)	2x Serial, 2x Fast Ethernet	No	HMIG2U	0.900/ 1.980	
Premium B	ох							
Real Time	256 MB	2x SD cards	2x Hosts (Type A), 1x Device (Type mini-B)	2x Serial, 2x Gigabit Ethernet	Sound output	HMIG3U	0.900/ 1.980	
Open Box								
Windows® 7 Embedded	2 GB	2x CFast cards 1x SD card	3x Hosts (Type A), 1x Device (Type mini-B)	2x Serial, 2x Gigabit Ethernet	Sound output, Microphone input, External display output (DVI)	HMIG5U2 (3) HMIG5UL8A (3) HMIG5UL8B (3)	0.900/ - 1.980 -	

 $\textbf{Note:} \ \textit{All display modules except HMIDT643 are compatible with all box modules}.$ 

- (1) HMIDT643 is only compatible with HMIG5U2 box modules and requires Vijeo Designer V6.2 SP3 or later. For HMIDT643 specific characteristics, see page 12.
- (2) HMTDT•52 is only compatible with Box HMIG3U requiring EcoStruxure Operator Terminal Expert V3.1, or with Box HMIG3U requiring Vijeo Designer V6.2 SP9, or with Box HMIG5U2 requiring Vijeo Designer V6.2 SP7, or with Box HMIG5UL8A requiring Vijeo Designer V6.2 SP7. EcoStruxure Machine SCADA Expert V8.1 SP2.
- (3) Each Open Box reference is dedicated to run a HMI Runtime application.

Substitution: Presentation: Description: Connections: page 6 page 12 page 24 page 23

Harmony GTU
High performance IoT-ready modular HMI panels
Accessories, Separate parts



Accessories					
Description	Host type compatible	Display compat	ible	Reference	Weight kg/lb
Harmony GTU Universal Smart System Adapter	HMIG5U2 Harmony iPC General PC	HMIDT●●●		HMIZMDARX	- Kg/12
Separate parts					
Description	Characteristics	Compatible with panels	h	Reference	Weight kg/ <i>lb</i>
SD memory card system	1 GB, blank	HMIG3U		HMIZSD1GS	-
CFast card system	32 GB, blank	HMIG5U2		HMIZCFA32S	_
CFast card	32 GB, blank	HMIG5U2		HMIZCFA32	_
SD card	4 GB, blank	HMIG3U/HMIG5	iU2	HMIZSD4G	_
		HMIDT351		HMIZG63	_
		HMIDT551		HMIZD65W	_
Protective sheets		HMIDT651		HMIZD66W	_
against dirt and moisture (5 peel-off sheets)	-	HMIDT542		HMIZG65	_
		HMIDT642/HMI	DT643	HMIZG66	_
		HMIDT732		MPCYK50SPSKIT	_
	-	HMIDT351		HMIZUV3W	_
		HMIDT551		HMIZUV5W	_
Protective sheet		HMIDT651		HMIZUV6W	_
against ultraviolet light (1 peel-off sheet)		HMIDT542		HMIZUV5	_
		HMIDT642/HMI	DT643	HMIZUV6	_
		HMIDT732		HMIZUV7	_
Anti-glare protective sheets	Help prevent reflections	HMIDT752		HMIZDAG7W	_
(5 peel-off sheets)	with dirt resistance	HMIDT952		HMIZDAG9W	_
Plastic covers for		HMIDT542		HMIZDCOV5	_
harsh environments (IP 67 protection)	_	HMIDT642/HMIDT643 HMIDT732		HMIZDCOV6	_
(iii or protoction)				HMIZDCOV7	_
VESA mount adapter	_	HMIZMDARX		HMIZMDRVS	_
Description	Characteristics		Length m/ft	Reference	Weight kg/lb
Mechanical adapters for	From XBTGT5230 to HMID	_	_	XBTZGCO4	_
substitution of Harmony range panels	From XBTGT4••• to HMID	)T351	-	HMIZGCO1	
Remote USB port for HMI panel	s Enables the USB Type A por remotely on the rear of the 2 terminal, on a panel, or an e	XBT or HMIGTU	1/3.28	XBTZGUSB	_
D ( . HOD 4.5	(Ø 21 mm fixing device)		1/0.00	LIMITOLIOPP	
Remote USB port for HMI panel	Enables the USB mini-B po remotely on the rear of the I on a panel, or an enclosure (Ø 21 mm fixing device)	HMIGTU panel,	1/3.28	HMIZSUSBB	_
DVI-D cable	For connecting an external to the HMIG5U2 Open Box		10/32.81	HMIYCABDVI1011	-
Battery	HMIGTU		_	HMIZGBAT	
Auxiliary connector Sold in sets of 5 units	HMIGTU		_	HMIZGAUX	_
Stylus Sold in lots of 5	-		_	XBTZGPEN	_





**HMIZMDRVS** 



Presentation:	Description:	Connections:	Substitution:
page 6	page 12	page 24	page 23

# **Harmony GTU**High performance IoT-ready modular HMI panels Replacement parts



Spare parts				
Description	For use with panels	Reference	Weight kg/ <i>lb</i>	
Seals	HMIDT351	HMIZD53W	_	
	HMIDT551	HMIZD55W	_	
	HMIDT651	HMIZD56W	_	
	HMIDT542	HMIZD55	_	
	HMIDT642/HMIDT643	HMIZD56		
	HMIDT732	HMIZD57 -		
	HMIDT752	HMIZD57W	_	
	HMIDT952	HMIZD59W	_	
USB fastenings	HMIGTU (USB Type A)	HMIZGCLP1		
Sold in lots of 5	HMIGTU (USB Type mini-B)	HMIZSCLP3	_	
Power supply connector Sold in lots of 5	HMIGTU (direct connection)	HMIZGPWS	0.030/ 0.066	
	HMIGTU (right-angle connection)	HMIZGPWS2	0.030/ 0.066	
Direct IO connector	HMIZMDARX	HMIZMDIO		

Cables for applica	Cables for application transfer - Terminal to PC						
Type of terminal (terminal end connector)	Connector (PC end)	Туре	Length m/ft	Reference (1)	Weight kg/lb		
нмісти	USB	USB Type mini-B	1.80/ 5.91	BMXXCAUSBH018	-		
		USB Type A		XBTZG935	-		

Printer connecti	ion cables				
Type of printer (2)	Connector (printer end)	Туре	Length m/ft	Reference	Weight kg/ <i>lb</i>
HMIGTU	25-way female SUB-D	RS-232C (COM2)	2.5/ 8.20	XBTZ915	0.200/ 0.441
Serial printer for HMIGTU	9-way female SUB-D	USB Type A/RS-232C	1.80/ 5.91	HMIZURS	_



### XBTZGI485

### Adapters and isolation boxes for HMIGTU panels

These 3 adapters are used with the connection cables according to the application concerned.

Description	Type of connector (automation product end)	Physical link (HMIGTU terminal end)	Length m/ft	Reference	Weight kg/ <i>lb</i>
Adapter for HMIGTU	25-way SUB-D connector	RJ45 connector	0.2/ 0.66	XBTZG939	_
Adapter for HMIGTU (COM2 port)	25-way SUB-D connector	9-way SUB-D connector, RS-232C	0.2/ 0.66	XBTZG919	_

Description	For use with	Link to isolate	Reference	Weight kg/ <i>lb</i>
Serial link isolation units for HMIGTU	<ul> <li>Isolated link on 9-way</li> <li>SUB-D connector (3)</li> <li>Box power supply via termial USB port</li> </ul>	RS-232C/RS-485 (COM1)	XBTZGI232	_
	Incorporates a USB port expander	RS-485 (COM2)	XBTZGI485	-

- (1) Cable included (depending on model) with Vijeo Designer software packages (refer to HMI Configuration Software catalog). (2) Parallel printer (see page 11). (3) Male connector with XBTZGI232.

Presentation:	Description:	Connections:	Substitution:
page 6	page 12	page 24	page 23

# **Harmony GTU**High performance IoT-ready modular HMI panels Connection accessories



Cables for con	necting H	armony	panels to oth	er Schn	eider E	Electric p	roducts	
Automation product type	Type of connector (automation product end)		Type of terminal	Link	On port	Length m/ft	Reference	Weight kg/lb
Nano, Modicon TSX Micro, Modicon Premium	Terminal port, 8-way	Uni-TE (V1/V2), Modbus	HMIGTU	RS-485	COM1	2.5/8.20	XBTZ9780	0.180/ <i>0.</i> 397
	female mini-DIN					10/32.80	XBTZ9782	_
			HMIGTU	RS-232	COM2	2.5/8.20	TSXPCX1031	
Modicon M340 Modicon M241 Modicon M258	RJ45	Modbus	HMIGTU	RS-485	COM1	2.5/8.20	XBTZ9980	0.230/ 0.507
Modicon M2●1						10/32.80	XBTZ9982	_
					COM2	2.5/8.20	XBTZ9008	
Modicon M340	USB Type mini-B	Terminal port	HMIGTU	USB	USB type A	1.8/5.91	BMXXCAUSBH018	0.230/ 0.507
	2					4.5/ 14.76	BMXXCAUSBH045	_
Modicon Quantum	9-way male SUB-D	Modbus	HMIGTU	RS-232C	COM2	2.5/8.20	XBTZ9710 + (1)	0.210/ 0.463
						3.7/ 12.14	990NAA26320	0.290/ 0.639
Modicon STB	HE13 (NIM, network	Modbus	HMIGTU	RS-232C	COM2	2/6.56	STBXCA4002	0.210/ 0.463
	interface module)					2.5/8.20	XBTZ988 + (1)	0.220/ 0.485
Modicon Momentum M1	RJ45 (port 1 on Momentum M1)	Modbus	HMIGTU	RS-232C	COM2	2.5/8.20	XBTZ9711 + (1)	0.210/ 0.463
TeSys U, T starters ATV 312/61/71	RJ45	Modbus	HMIGTU	RS-485	COM1	3/9.84	VW3A8306R30	0.060/ 0.132
variable speed drives ATS 48 starters						1/3.28	VW3A8306R10	_
Lexium 05 Preventa XPSMC						2.5/8.20	XBTZ9980	
						10/32.80	XBTZ9982	
					COM2	2.5/8.20	XBTZ9008	

<sup>(1)</sup> XBTZG919 adapter should be used with cables with "+ (1)" after the reference.

Schneider Electric

**Harmony GTU**High performance IoT-ready modular HMI panels
Connection accessories





Mitsubishi, Melsec	pters for connecti	ig manniony pane		a party		
Description Driver used	Type of terminal	Type of connector (fitted to cable, excluding adapter)	Physical link (COM2)	Length m/ft	Reference	Weight kg/ <i>lb</i>
Connection cable, Q Link (SIO)	HMIGTU	9-way SUB-D 9-way SUB-D	RS-232C	5/16.40	XBTZG9772	-
Connection cable, Q CPU (SIO)	HMIGTU	9-way SUB-D mini-DIN	RS-232C	5/16.40	XBTZG9774	_
Connection cable, A Link (SIO)	HMIGTU	9-way SUB-D 25-way SUB-D	RS-232C	5/16.40	XBTZG9731	-
Connection cable, FX (CPU)	HMIGTU	9-way SUB-D mini-DIN	RS-232/ RS-422	5/16.40	XBTZG919 + XBTZ980	_

Omron, Sysmac PLC	s					
<b>Description</b> Driver used	Type of terminal	Type of connector (fitted to cable, excluding adapter)	Physical link (COM2)	Length m/ft	Reference	Weight kg/ <i>lb</i>
Connection cables, Link (SIO)	HMIGTU	9-way SUB-D 9-way SUB-D	RS-232C	5/16.40	XBTZG9740	_
		9-way SUB-D 25-way SUB-D	RS-232C	5/16.40	XBTZG9731	_
Connection cables, FINS (SIO)	HMIGTU	9-way SUB-D/ 9-way SUB-D	RS-232C	5/16.40	XBTZG9740	_

<b>Rockwell Automatio</b>	n, Allen-Bradley PLC	S				
<b>Description</b> Driver used	Type of terminal	Type of connector (fitted to cable, excluding adapter)	Physical link (COM2)	Length m/ft	Reference	Weight kg/lb
Connection cables, DF1 Full Duplex	HMIGTU	9-way SUB-D/ 25-way SUB-D	RS-232C	5/16.40	XBTZG9731	_
Connection cables,	HMIGTU	9-way SUB-D	RS-485	5/16.40	XBTZ9732 + (1)	_

Siemens, Simatic PL	Cs					
<b>Description</b> Driver used	Type of terminal	Type of connector (fitted to cable, excluding adapter)	Physical link	Length m/ft	Reference	Weight kg/lb
Connection cable, PPI, S7 200	HMIGTU (3)	RJ45/9-way SUB-D	RS-485 (COM1)	2.5/ 8.20	XBTZG9721	-
Connection cables, MPI port, S7 300/400	HMIGTU	9-way SUB-D/ 9-way SUB-D	RS-232C (COM2)	3/ 9.84	XBTZG9292	-
	HMIGTU (3)	RJ45/flying leads at other end	RS-485 (2) (COM1)	3/ 9.84	VW3A8306D30	0.150/ 0.331
		RJ45/9-way SUB-D	RS-485 (2) (COM1)	2.5/ 8.20	XBTZG9721	

<sup>(1)</sup> XBTZG939 adapter should be used with cables with "+ (1)" after the reference (see page 19). (2) Non-isolated RS-485 serial link, 12 Mbps. (3) Available only with Premium Box HMIG3U.

# **Harmony GTU**High performance IoT-ready modular HMI panels Connection accessories









Type of bus/ network	Tap-off units	Connector (tap-off unit end)	Panel type	Length m/ft	Reference	Weight kg/lb
Uni-Telway serial link	Subscriber socket TSXSCA62	15-way female SUB-D	HMIGTU	3/9.84	VW3A8306	0.150 <i>i</i> 0.331
	Connection box TSXPACC01	8-way female mini-DIN	HMIGTU	2.5/8.20	XBTZ9780	0.180/ 0.396
Modbus	Subscriber	15-way female	HMIGTU	3/9.84	VW3A8306	0.150/
serial link	socket TSXSCA64	SUB-D				0.331
	T-junction box	With integrated cable, RJ45 fitted	HMIGTU	1/6.56	VW3A8306TF10	
Ethernet TCP/IP network	Hubs 499 NEH/NOH Switches	RJ45	HMIGTU	2/6.56	490NTW00002	
	499 NES, 499 NMS, 499 NSS and 499 NOS			5/16.40	490NTW00005	_
				12/39.37	490NTW00012	_
				40/131.23	490NTW00040	
				80/262.47	490NTW00080	

<b>Connection of Har</b>	mony panels to fieldbuses	;		
Type of bus/network	Connection components	Type of terminal	Reference	Weight kg/lb
FIPWAY, FIPIO	USB gateway	HMIGTU (only on Premium Box)	TSXCUSBFIP	_
Modbus Plus	USB gateway	HMIGTU (only on Premium Box)	XBTZGUMP	_
		HMIGTU (only on Open Box)	TSXCUSBMBP	
CANopen (Slave)	Copla Harmony module	HMIGTU	HMIZGCAN	_
Profibus DP (Slave)	Copla Harmony module	HMIGTU	HMIZGPDP	

22

**Harmony GTU**High performance IoT-ready modular HMI panels Equivalent product table

Equivalent product table between XBTGT panels and HMIGTU panels				
Old range XBTGT	New range HMIGTU	Comments		
XBTGT2120/2220/2330/2430	HMIDT351 + HMIG3U	Different cut-out, no adapter		
XBTGT4230/4330	HMIDT351 + HMIG3U	Different cut-out, HMIZGC01 adapter		
XBTGT4340	HMIDT351 + HMIG3U	Different cut-out, HMIZGC01 adapter, no video support		
XBTGT5230	HMIDT542 + HMIG3U	Different cut-out, XBTZGCO4 adapter		
XBTGT5330/5430	HMIDT542 + HMIG3U	_		
XBTGT5340	HMIDT542 + HMIG3U	No video support		
XBTGT6330	HMIDT642 + HMIG3U	_		
XBTGT6340	HMIDT642 + HMIG3U	No video support		
XBTGT7340	HMIDT732 + HMIG3U	No video support		

Notes: When upgrading from the Harmony XBT range to the Harmony GTU range, the following points should be taken into account:
- connection to the Profibus DP and Device Net fieldbuses will be possible in the next software

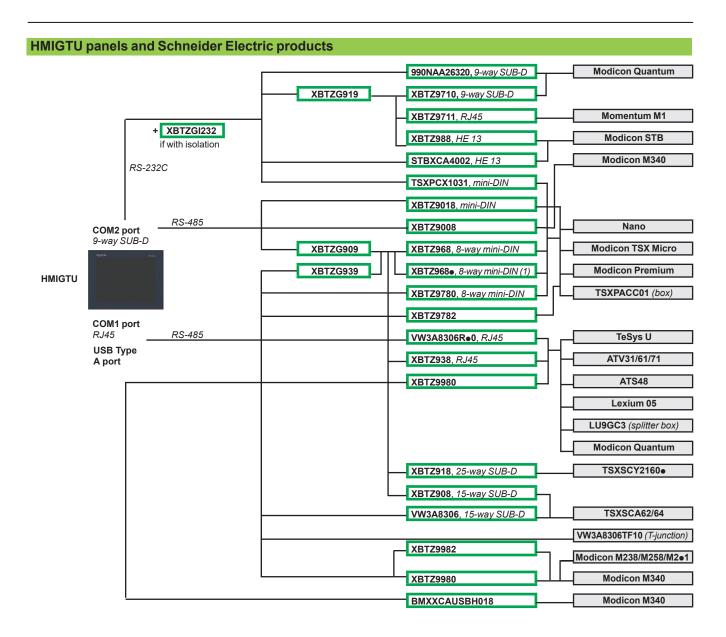
Equivalent product table between HMIGTW panels and HMIGTU panels				
Old range XBTGTW/HMIGTW	New range HMIGTU	Comments		
HMIGTW5354	HMIDT542 + HMIG5U2	Different cut-out, no adapter		
HMIGTW7354	HMIDT732 + HMIG5U2	3 USB hosts, no jack output but auxiliary output for speakers		
XBTGTW652	HMIDT642 + HMIG5U2	_		

Notes: When upgrading from the Harmony XBTGTW/HMIGTW range to the Harmony GTU range, the following points should be taken into account:

- no CF card but CFast card provided as optional storage unit
- no Windows XP Embedded but Windows 7 Embedded is provided for operating system

serial ports COM1 and COM2 are identical but inverted
 no CF card but SD card provided as optional storage unit
 no CANopen Master connection on Harmony GTU

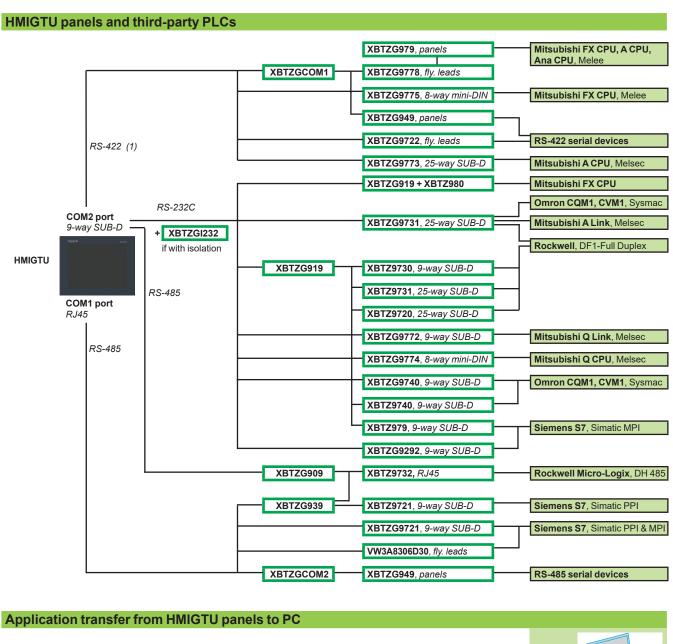
High performance IoT-ready modular HMI panels Connection system

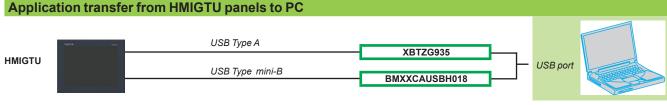


(1) • defines the length:

- 0 m/0 ft, 2.5 m/8.20 ft (elbowed connector)
- 1 m/3.28 ft, 5 m/16.40 ft
- 6 m/19.68 ft, 16 m/52.49 ft 7 m/22.96 ft, 20 m/65.61 ft
- 8 m/26.24 ft, 25 m/82.02 ft

High performance IoT-ready modular HMI panels Connection system





 Presentation:
 Description:
 References:
 Substitution:

 page 6
 page 12
 page 13
 page 23

**Harmony GTU**High performance IoT-ready modular HMI panels Product reference index

#	
490NTW00002	22
490NTW00005	22
490NTW00012	22
490NTW00040	22
490NTW00080	22
990NAA26320	20
990NAA20320	20
В	
BMXXCAUSBH018	19
	20
BMXXCAUSBH045	20
Н	
HMIDT351	17
HMIDT542	17
HMIDT551	17
HMIDT642	17
HMIDT643	17
HMIDT651	17
HMIDT732	17
HMIDT752	17
HMIDT952	17
HMIG2U	17
HMIG3U	17
HMIG5U2	17
HMIG5UL8A	17
HMIG5UL8B	17
HMIYCABDVI1011	18
HMIZCFA32	18
HMIZCFA32S	18
HMIZD53W	19
HMIZD55	19
HMIZD55W	19
HMIZD56	19
HMIZD56W	19
HMIZD57	19
HMIZD57W	19
HMIZD59W	19
HMIZD65W	18
HMIZD66W	18
HMIZDAG7W	18
HMIZDAG9W	18
HMIZDCOV5	18
HMIZDCOV6	18
HMIZDCOV7	18
HMIZG63	18
HMIZG65	18
HMIZG66	18
HMIZGAUX	18
HMIZGBAT	18
HMIZGCAN	22
HMIZGCLP1	19
HMIZGCO1	18
HMIZGPDP	22
HMIZGPWS	19
HMIZGPWS2	19
HMIZMDARX	18
HMIZMDIO	19
HMIZMDRVS	18
HMIZSCLP3	19
HMIZSD1GS	18
HMIZSD4G	18
HMIZSUSBB	18
HMIZURS	19

LIMIZUN/OW	10
HMIZUV3W HMIZUV5	18 18
HMIZUV5W	18
HMIZUV6	18
HMIZUV6W	18
HMIZUV7	18
THILLO V 7	70
M	
MPCYK50SPSKIT	18
S	
STBXCA4002	20
31BX0A4002	20
T	
TSXCUSBFIP	22
TSXCUSBMBP	22
TSXPCX1031	20
٧	
VW3A8306	22
VW3A8306D30	21
VW3A8306R10	20
VW3A8306R30	20
VW3A8306TF10	22
***************************************	
X	
XBTZ915	19
XBTZ980	21
XBTZ988	20
XBTZ9008	20
XBTZ9710	20
XBTZ9711	20
XBTZ9732	21
XBTZ9780	20 22
XBTZ9782	20
XBTZ9980	20
XBTZ9982	20
XBTZG919	19
	21
XBTZG935	19
XBTZG939	19
XBTZG9292	21
XBTZG9721	21
XBTZG9731	21
XBTZG9740	21
XBTZG9772	21
XBTZG9774	21
XBTZGCO4	18
XBTZGI232	19
XBTZGI485	19
XBTZGPEN	18
XBTZGUMP	22
XBTZGUSB	18

HMIZUV3W	18
HMIZUV5	18
HMIZUV5W	18
HMIZUV6	18
HMIZUV6W	18
HMIZUV7	18
М	
MPCYK50SPSKIT	18
S	
STBXCA4002	20
Т	
TSXCUSBFIP	22
TSXCUSBMBP	22
TSXPCX1031	20
TOXI OXTOOT	20
V	
VW3A8306	22
VW3A8306D30	21
VW3A8306R10	20
VW3A8306R30	20
VW3A8306TF10	22
Х	
XBTZ915	19
XBTZ980	21
XBTZ988	20
XBTZ9008	20
XBTZ9710	20
XBTZ9711	20
XBTZ9732	21
XBTZ9780	20
	22
XBTZ9782	20
XBTZ9980	20
XBTZ9982	20
XBTZG919	19
VDTTOOOF	21
XBTZG935	19
XBTZG939	19
XBTZG9292	21
XBTZG9721	21
XBTZG9731	21
XBTZG9740	21
XBTZG9772	21
XBTZG9774	21
XBTZGC04	18 19
XBTZGI232	
XBTZGI485	19
XBTZGLIMD	18
XBTZGUSP	22
XBTZGUSB	18





# Learn more about our products at www.schneider-electric.com/hmi

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Design: Schneider Electric Photos: Schneider Electric

### **Schneider Electric Industries SAS**

Head Office 35, rue Joseph Monier - CS 30323 F-92500 Rueil-Malmaison Cedex France

DIA5ED2140401EN December 2019 - V8.0