



Harmony GTU

High performance IoT-ready modular
HMI panels

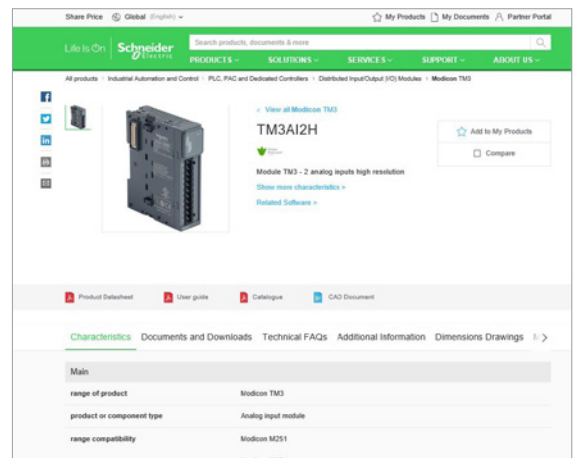
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References

Modicon TM3
I/O expansion modules for Modicon controllers
Analog I/O modules

Number and type of channels	Input range	Output range	Resolution	Input terminal (Modicon)	Reference	Weight
2 management inputs	-10...+10 VDC 0...20 mA, 4...20 mA	10 mA or 10 mA + sign	12 bits or 12 bits	Terminal 2 Terminal 3	TM3AI2H TM3AI2H	0,110 0,236
4 management inputs	-10...+10 VDC 0...20 mA, 4...20 mA	10 mA or 10 mA + sign	12 bits or 12 bits	Terminal 18 Terminal 19	TM3AI4H TM3AI4H	0,110 0,236
4 management or temperature inputs	-10...+10 VDC 0...20 mA, 4...20 mA Thermocouples (K, J, E, S, T, N, R, C, O) RTDs (Pt100, Pt500, Pt1000)	10 mA or 10 mA + sign	12 bits or 12 bits	Terminal 18 Terminal 19	TM3AI4H TM3AI4H	0,110 0,236
4 differential temperature inputs	-10...+10 VDC 0...20 mA, 4...20 mA Thermocouples (K, J, E, S, T, N, R, C, O) RTDs (Pt100, Pt500, Pt1000)	10 mA or 10 mA + sign	12 bits or 12 bits	Terminal 18 Terminal 19	TM3AI4H TM3AI4H	0,110 0,236
2 management inputs	-10...+10 VDC	10 mA or 10 mA + sign	12 bits or 12 bits	Terminal 2 Terminal 3	TM3AI2H TM3AI2H	0,110 0,236



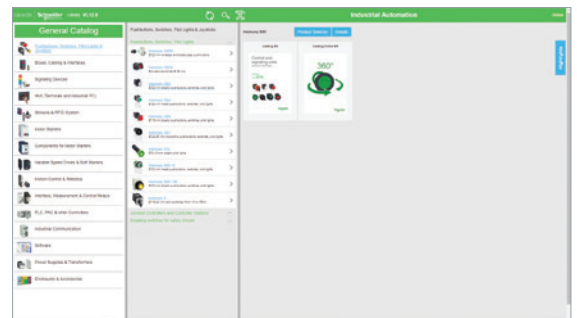
Each commercial reference presented in a catalog contains a hyperlink. Click on it to obtain the technical information of the product:

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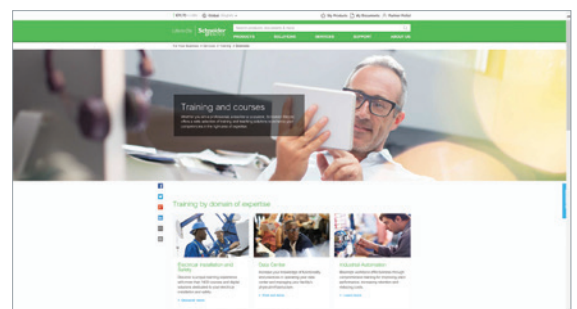


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Harmony GTU

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



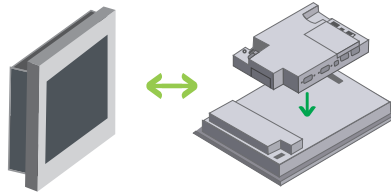
Smart display + Open box

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

Unique HMI flexibility

Modular and scalable

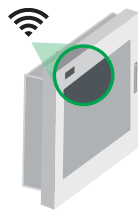
- > Choice of screen size, format, image quality, and processing levels enable Harmony GTU to be used in wide range of applications
- > Universal panels are available in various combinations by simply assembling display modules and box modules



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 Gestures



Harmony GTU → Multiple combinations with easy assembly

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



Push the box LOCK backward

Insert protruding points on box into holes on the display

Pull the box LOCK forward

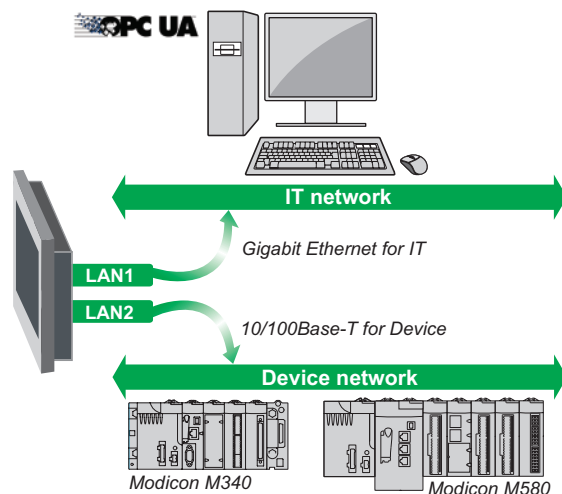
Harmony GTU panel box units have SD or CFast card slots for huge external data storage.



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		Display of text messages, graphic objects, and synoptic views Control and configuration of data		
Type of display module		Advanced Display		
				
Display	Touchscreen, size Resolution (pixels) Type	7" Wide 800 x 480 262 K colors, TFT	10" Wide 1,280 x 800	12" Wide 1,280 x 800
Gesture support		Single touch: sliding, scrolling		
Functions	Brightness control Front USB ports Wireless antenna Backlight service life	0...100 (Adjusted with touch panel or software) Optional with XBTZGUSB (Type A port) or HMIZSUSBB (Type mini-B port) -		
Dimensions	External W x H x D mm/in. Cut-out W x H mm/in.	204 x 149 x 67/ 8.03 x 5.86 x 2.64	269 x 199 x 67/ 10.59 x 7.83 x 2.64	309 x 231 x 67/ 12.17 x 9.09 x 2.64
Supply voltage		12...24 V ---		
Environment		Operating temperature 0-60 °C, Front face protection IP67		
Conformity to standards		EN, IEC, UL 508, CSA, ATEX, Marine		
Compatible box models		Standard, Premium and Open box models		
Display module reference		HMIDT351	HMIDT551	HMIDT651
Pages		17		

Type of box module		Standard Box		
				
CPU		RISC, 600 MHz		
Operating system		Real Time		
Memory	RAM Backup memory Main storage: OS with HMI application Memory storage extension	256 MB 512 KB (FRAM/MRAM) 1 GB internal flash EPROM SD card (up to 4 GB)		
Functions	Real-time clock Max. variables	Yes, built-in 8,000 (in Vijeo Designer)		
Video interface		No		
Sound input interface		-		
Sound output interface	Speaker output LINE output	-		
Alarm output/Buzzer output		-		
Communication	Ethernet port Serial line Expansion unit USB	x2 RJ45 (independent) RS-232C (COM1) + RS-485 (COM2) - 2x USB 2.0 (Type A), 1x USB 2.0 (Type mini-B)		
Optional battery		Yes (HMIZGBAT)		
Third-party protocols supported		Siemens, Omron, Mitsubishi, Allen-Bradley (Rockwell Automation), ABB		
Compatible display units		HMIDT351, HMIDT551, HMIDT651, HMIDT542, HMIDT642, HMIDT732		
Box module reference		HMIG2U (3)		
Pages		17		

(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.

Applications					Display of text messages, graphic objects, and synoptic views Control and configuration of data					
Type of display module					Smart Display					
										
Display		10.4"	12.1"	15"	15" Wide	19"				
	Resolution (pixels)	800 x 600	1,024 x 768	1,024 x 768	1,366 x 768					
	Type	16 M colors, TFT								
Gesture support		Single touch: sliding, scrolling; Multi-touch: zooming, double touch								
Functions	Brightness control Front USB ports Wireless antenna Backlight service life	0...100 (Adjusted with embedded sensor, touch panel or software) 1x Embedded USB 2.0 (Type A), 1x USB 2.0 (Type mini-B) - Yes -								
Dimensions	External W x H x D mm/in. Cut-out W x H mm/in.	273 x 215 x 67/ 10.74 x 8.46 x 2.64	315 x 241 x 67/ 12.40 x 9.50 x 2.64	397 x 296 x 67/ 15.63 x 11.65 x 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				
Supply voltage		12...24 V ---								
Environment		Operating temperature 0-60 °C, Front face protection IP67				Operating temperature 0-55 °C, IP67				
Conformity to standards		EN, IEC, UL 508, CSA, ATEX, Marine								
Compatible box models		Standard, Premium and Open box models		Open box model	Standard, Premium and Open box models		Premium and Open box models			
Display module reference		HMIDT542	HMIDT642	HMIDT643	HMIDT732	HMIDT752	HMIDT952			
Pages		17								

Type of box module				Premium Box		Open Box	
							
CPU		RISC, 600 MHz		x86, 1.33 GHz			
Operating system		Real Time		Windows 7 Embedded			
Memory	RAM Backup memory Main storage: OS with HMI application Memory storage extension	256 MB 512 KB (FRAM/MRAM) 1 GB SD card SD card (up to 4 GB)		2 GB 32 GB CFAST card SD card (up to 4 GB) and CFAST card (up to 32 GB)			
Functions	Real-time clock Max. variables	Yes, built-in 8,000 (in Vijeo Designer)		Yes, built-in 12,000 (in Vijeo Designer)			
Video interface		No		1x DVI-D OUT			
Sound input interface		-		MIC or LINE input (software switch)			
Sound output interface	Speaker output LINE output	-		300 mW (rated load: 8 Ω, frequency: 1 KHz) Rated load: 10 KΩ or more Yes (24 V ---/50 mA or less)			
Alarm output/Buzzer output		-					
Communication	Ethernet port Serial line Expansion unit USB	x2 RJ45 (independent) RS-485 (Isolated) (COM1) + RS-232C/RS-422/RS-485 (COM2)		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)	
Optional battery		Yes (HMIZGBAT)		Yes (HMIZGBAT)			
Third-party protocols supported		Siemens, Omron, Mitsubishi, Allen-Bradley (Rockwell Automation), ABB					
Compatible display units		HMIDT351, HMIDT551, HMIDT651, HMIDT542, HMIDT642, HMIDT732, HMIDT752, HMIDT952		HMIDT351, HMIDT551, HMIDT651, HMIDT542, HMIDT642, HMIDT643, HMIDT732, HMIDT752, HMIDT952			
Box module reference		HMIG3U (1)		HMIG5U2 (2) (3), HMIG5UL8A and HMIG5UL8B (4)			
Pages		17					

(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.



Harmony HMI GTU color display modules



Harmony HMI GTU Box modules

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 $\overline{\text{DC}}$
- **Brightness sensor on Smart Display** for automatic brightness adjustment to environment

(1) Supported by HMIDT643 only.

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 www.schneider-electric.com/HMI Configuration Software.

Communication

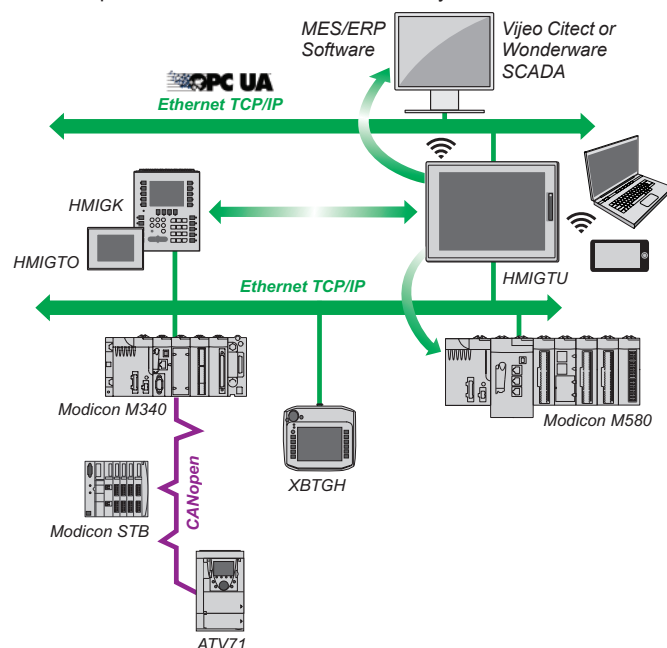
The following illustrations show the equipments that Universal panels can communicate via Ethernet and Modbus protocols, and also via USB, wireless and fieldbus interfaces.

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.



EcoStruxure Operator Terminal Expert



Vijeo Designer

Harmony GTU

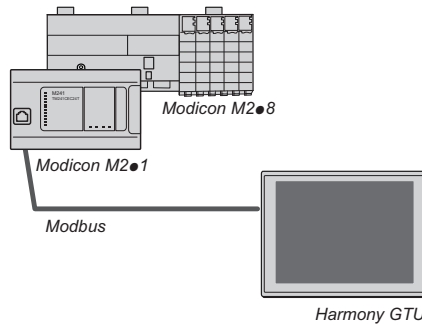
High performance IoT-ready modular HMI panels

Communication (continued)

Via Modbus protocol

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

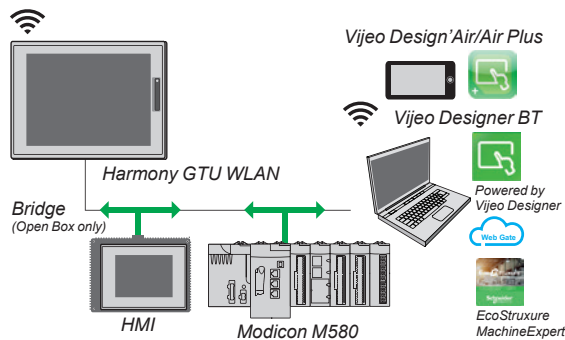
- Schneider Electric (Uni-TE, Modbus)
- Third-party: Mitsubishi Electric, Omron, Allen-Bradley, and Siemens



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:

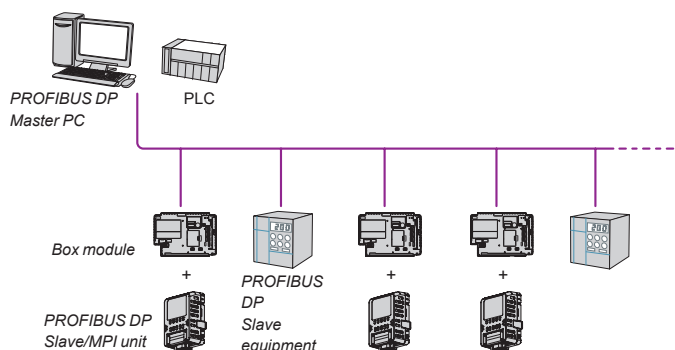
- Access point mode: The Smart WLAN HMI application display can be accessed wirelessly with a smartphone and Vijeo Designer Air software or with a PC that has an Internet browser and Web Gate function. All HMI applications connected to one of the Harmony GTU Open Box (Bridge function) Ethernet networks 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.

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](http://www.schneider-electric.com/USB_accessories_for_Harmony_panels).



EcoStruxure Operator
Terminal Expert



Vijeo Designer



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:
 - 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:
 - 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.)

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



Vijeo Design'Air



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 Hardware and Software compatibility table

GTU Hardware		HMI software (Minimum version required)		
Display	Box	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

(1) Harmony GTU is integrated into MachineStruxure with Vijeo Designer version V6.2 SP3 or later.

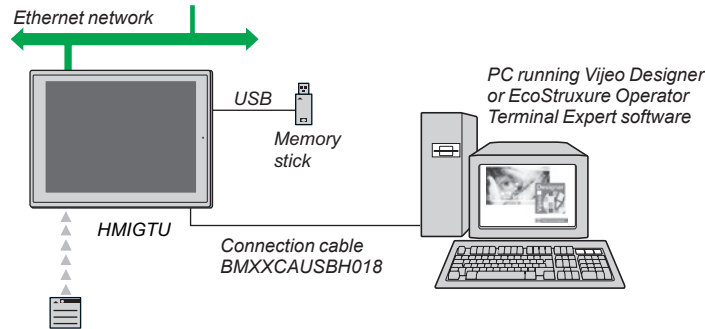
(2) For more information on the MachineStruxure and PlantStruxure concept, please refer to our website www.schneider-electric.com.

(3) Not supported by HMIG5U2.

Panel operating modes

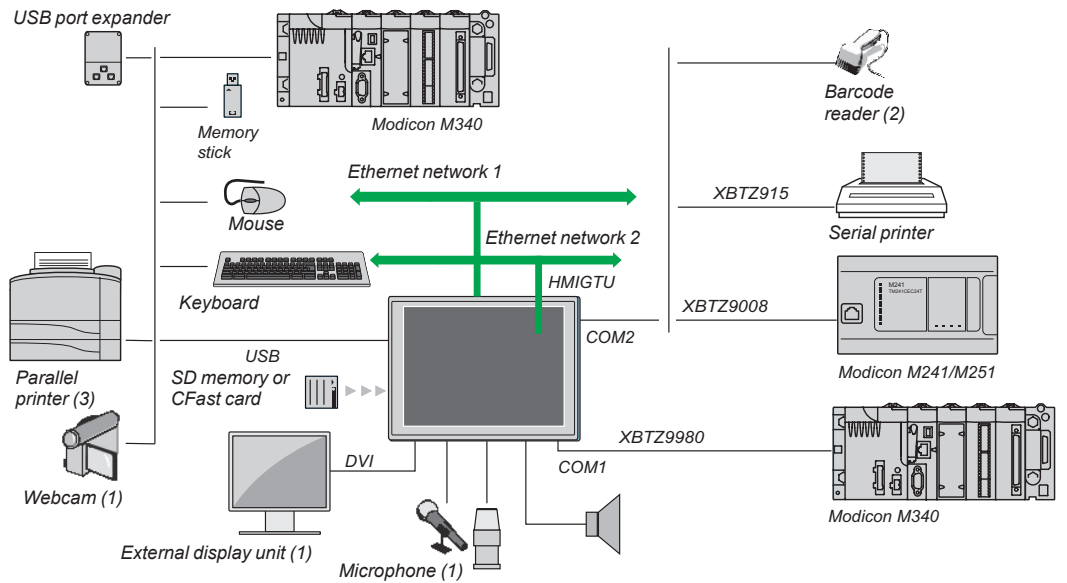
The following illustrations show the equipment that can be connected to Universal panels depending on their two operating modes.

Edit mode



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

Operating mode



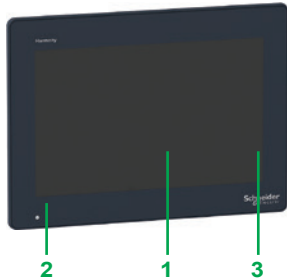
Conformal coating for improved environmental resistance

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.

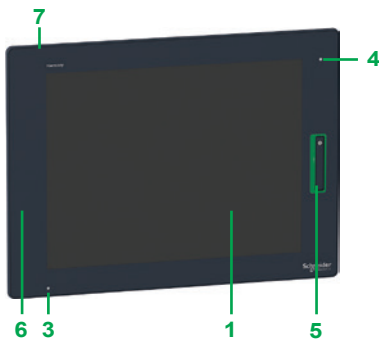
(1) With Open Box unit.
 (2) Validated with DataLogic Gryphon barcode reader.
 (3) Validated with Hewlett Packard printer via USB/PIO converter.

Harmony GTU

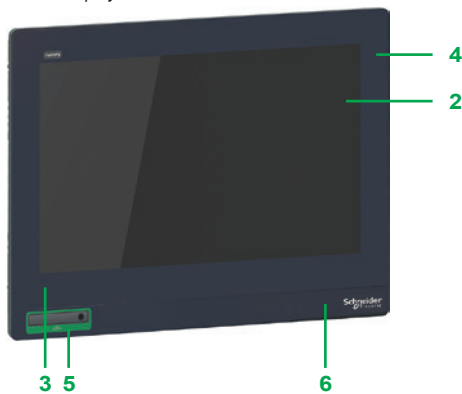
High performance IoT-ready modular HMI panels
Advanced and Smart Display modules



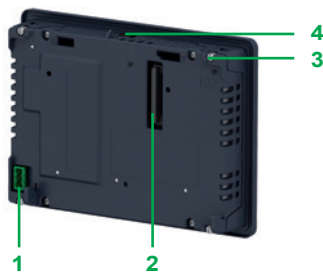
Advanced Display front view



Smart Display front view



Smart XL display front view



Advanced and Smart display rear view

Description

Harmony HMIDT 351/551/651 Advanced Display modules

Front view

- 1 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
- 2 Multi-color status indicator (green, orange, and red) showing the panel's operating mode
- 3 Aluminum alloy front panel providing IP 66/67 protection when mounted on panel or enclosure door

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

Front view

- 1 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" standard format
- 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
- 3 Multi-color indicator (green, orange, and red) showing the panel's operating mode
- 4 Brightness sensor to automatically adjust the level of brightness to the environment
- 5 Front USB ports 2.0 Host & Device with screw protective cover
- 6 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 IEEE802.11 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

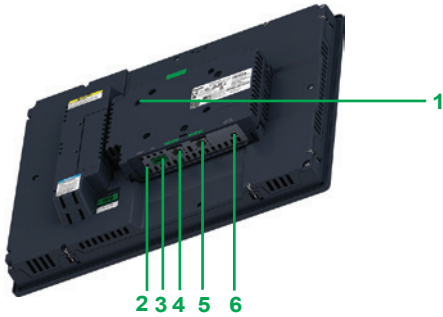
Advanced and Smart Display rear view

- 1 Removable screw terminal block for 12...24 V $\bar{\text{DC}}$ power supply
- 2 Box interface
- 3 4x retractable embedded screw fasteners
- 4 Anti-Drop lock

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

Harmony GTU

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



Rear view of the mounted Multi-display adapter HMIZMDARX



VESA mounted Multi-display adapter

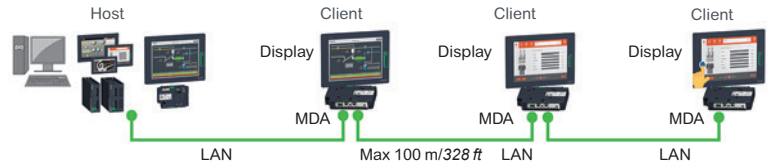
Description

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



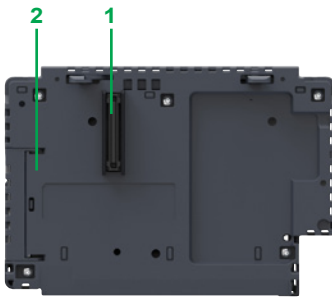
The multi-display adapter is mounted on the rear of Harmony GTU Display to extend up to 3 remote displays for one host station. The host station (1) can be a Harmony GTU Open, a Harmony iPC, or a general PC.

- 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.

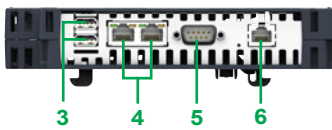
(1) Operating System supported: Microsoft Windows 7 32-bit/64-bit, Windows 8 32-bit/64-bit, Windows Embedded Standard 7 32-bit/64-bit and Windows Embedded 8.1 Industry Pro 64-bit for Harmony products only.

Harmony GTU

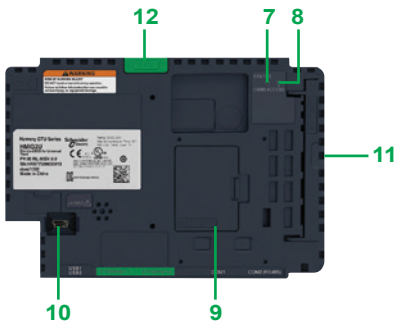
High performance IoT-ready modular HMI panels
Standard Box module



Standard Box Rear view



Standard Box Underside view



Standard Box Front view

Description

Harmony HMIG2U Standard Box module

Rear view

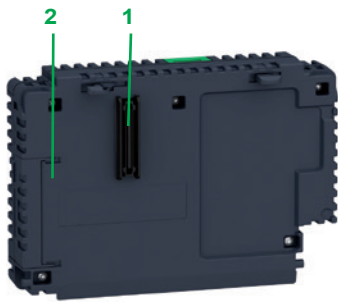
- 1 Display interface
- 2 Internal Flash Memory (1 GB) with
 - Real Time operating system
 - Vijeo Designer Run Time

Underside view

- 3 2 Type A USB host connectors for connecting peripherals, transferring applications, and Modicon M340 terminal port communication
- 4 RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX with an activity LED
- 5 9-way male SUB-D connector for RS-232C serial link to PLCs (COM1)
- 6 RJ45 connector for RS-485 serial link (COM2)

Front view

- 7 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



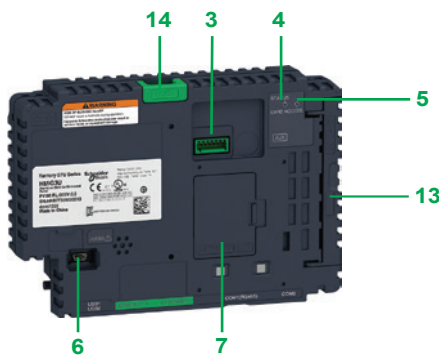
Premium Box rear view

Description

Harmony HMIG3U Premium Box module

Rear view

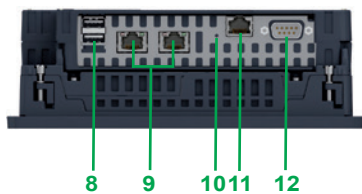
- 1 Display interface
- 2 Storage unit Cover 1 with an SD card (1 GB) and pre-installed:
 - Real Time operating system
 - Vijeo Designer Run Time or EcoStruxure Operator Terminal Expert Run Time



Premium Box front view

Front and underside views

- 3 Auxiliary interface for alarm, buzzer, and speaker outputs
- 4 Status LED indicating the operating mode of the terminal
- 5 LED indicating access to the SD memory card
- 6 Type mini-B USB connector for application transfer
- 7 Expansion unit cover for optional battery or optional FieldBus card
- 8 2 Type A USB host connectors for connecting peripherals, transferring applications, and Modicon M340 terminal port communication
- 9 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

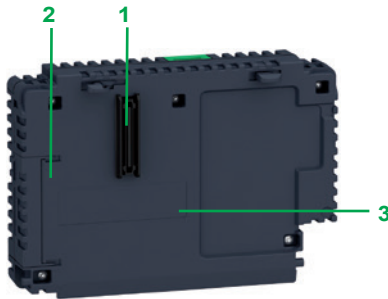


Premium Box underside view

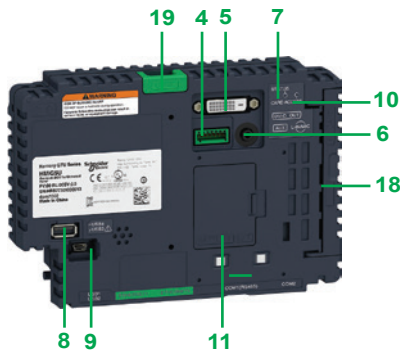
Harmony GTU

High performance IoT-ready modular HMI panels

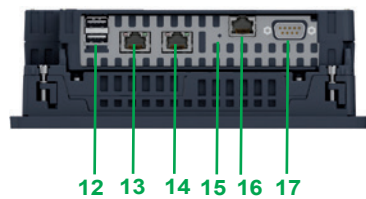
Open Box module



Open Box rear view



Open Box front view



Open Box underside view

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)

Front and underside views

- 4 Auxiliary interface for alarm, buzzer, and speaker outputs
- 5 DVI-D interface to connect Harmony iDisplay 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



Harmony GTU Universal Display modules

Data entry method	Size	Resolution (pixels)	Colors	Touch type	Options	Reference	Weight kg/lb
Advanced 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
Smart Display							
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
					Front USB (Type A + Type mini-B), Brightness sensor, Scaler	HMIDT642	3.000/ 6.600
	12.1", format 4/3 Standard	1024 × 768	16 M	Multi resistive	Front USB (Type A + Type mini-B), Brightness sensor, Scaler	HMIDT643 (1)	3.000/ 6.600
					Front USB (Type A + Type mini-B) Brightness sensor, Scaler, Wireless antenna		
	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
					Front USB (Type A + Type mini-B) Brightness sensor, Scaler	HMIDT752 (2)	5.000/ 11.023
19", format 16/9	1366 × 768	16 M	Multi-touch Projected-capacitive technology	Front USB (Type A + Type mini-B) Brightness sensor, Scaler	HMIDT952 (2)	6.800/ 14.991	
				Front USB (Type A + Type mini-B) Brightness sensor, Scaler			

Harmony GTU Universal Box modules

Operating system	RAM memory	Storage units	USB ports	Communication	Multimedia interface	Reference	Weight kg/lb
Standard Box							
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 Box							
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)	0.900/ 1.980
						HMIG5UL8A (3)	
						HMIG5UL8B (3)	

Note: 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 EcoStruxure Machine SCADA Expert V8.1 SP2.
- (3) Each Open Box reference is dedicated to run a HMI Runtime application.

GTU_61881_CPMIGU18001



HMIZMDARX

Accessories				
Description	Host type compatible	Display compatible	Reference	Weight kg/lb
Harmony GTU Universal Smart System Adapter	HMIG5U2 Harmony iPC General PC	HMIDT●●●	HMIZMDARX	–

Separate parts				
Description	Characteristics	Compatible with panels	Reference	Weight kg/lb

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/HMIG5U2	HMIZSD4G	–
Protective sheets against dirt and moisture (5 peel-off sheets)	–	HMIDT351	HMIZG63	–
		HMIDT551	HMIZD65W	–
		HMIDT651	HMIZD66W	–
		HMIDT542	HMIZG65	–
		HMIDT642/HMIDT643	HMIZG66	–
Protective sheet against ultraviolet light (1 peel-off sheet)	–	HMIDT732	MPCYK50SPSKIT	–
		HMIDT351	HMIZUV3W	–
		HMIDT551	HMIZUV5W	–
		HMIDT651	HMIZUV6W	–
Anti-glare protective sheets (5 peel-off sheets)	Help prevent reflections with dirt resistance	HMIDT542	HMIZUV5	–
		HMIDT642/HMIDT643	HMIZUV6	–
		HMIDT732	HMIZUV7	–
Plastic covers for harsh environments (IP 67 protection)	–	HMIDT752	HMIZDAG7W	–
		HMIDT952	HMIZDAG9W	–
		HMIDT542	HMIZDCOV5	–
VESA mount adapter	–	HMIDT642/HMIDT643	HMIZDCOV6	–
		HMIDT732	HMIZDCOV7	–
VESA mount adapter	–	HMIZMDARX	HMIZMDRVS	–

105950-35M



XBTZGCO●

GTU_61881_CPMIGU18003



HMIZMDRVS

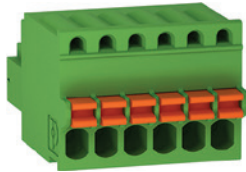
Description	Characteristics	Length m/ft	Reference	Weight kg/lb
Mechanical adapters for substitution of Harmony range panels	From XBTGT5230 to HMIDT542 From XBTGT4●●● to HMIDT351	– –	XBTZGCO4 HMIZGCO1	– –
Remote USB port for HMI panels	Enables the USB Type A port to be located remotely on the rear of the XBT or HMIGTU terminal, on a panel, or an enclosure door (Ø 21 mm fixing device)	1/3.28	XBTZGUSB	–
Remote USB port for HMI panel	Enables the USB mini-B port to be located remotely on the rear of the HMIGTU panel, on a panel, or an enclosure door (Ø 21 mm fixing device)	1/3.28	HMIZSUSBB	–
DVI-D cable	For connecting an external Harmony iDisplay 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	–

105872-35M



XBTZGUSB

GTU_61981_CPMGJ18002



HMIZMDIO

Spare parts

Description	For use with panels	Reference	Weight kg/lb
Seals	HMIDT351	HMIZD53W	—
	HMIDT551	HMIZD55W	—
	HMIDT651	HMIZD56W	—
	HMIDT542	HMIZD55	—
	HMIDT642/HMIDT643	HMIZD56	—
	HMIDT732	HMIZD57	—
	HMIDT752	HMIZD57W	—
	HMIDT952	HMIZD59W	—
USB fastenings Sold in lots of 5	HMIGTU (USB Type A)	HMIZGCLP1	—
	HMIGTU (USB Type mini-B)	HMIZGCLP3	—
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 application transfer - Terminal to PC

Type of terminal (terminal end connector)	Connector (PC end)	Type	Length m/ft	Reference (1)	Weight kg/lb
HMIGTU	USB	USB Type mini-B	1.80/ 5.91	BMXXCAUSBH018	—
		USB Type A		XBTZG935	—

Printer connection cables

Type of printer (2)	Connector (printer end)	Type	Length m/ft	Reference	Weight kg/lb
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	—

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/lb
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/lb
Serial link isolation units for HMIGTU	- Isolated link on 9-way SUB-D connector (3) - Box power supply via terminal USB port Incorporates a USB port expander	RS-232C/RS-485 (COM1)	XBTZGI232	—
		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](#).

105874-35M



XBTZGI485

PF600286



TSXPCX1031

Cables for connecting Harmony panels to other Schneider Electric products								
Automation product type	Type of connector (automation product end)	Protocol	Type of terminal	Link	On port	Length m/ft	Reference	Weight kg/lb
Nano, Modicon TSX Micro, Modicon Premium	Terminal port, 8-way female mini-DIN	Uni-TE (V1/V2), Modbus	HMIGTU	RS-485	COM1	2.5/8.20	XBTZ9780	0.180/0.397
						10/32.80	XBTZ9782	–
			HMIGTU	RS-232	COM2	2.5/8.20	TSXPCX1031	–
Modicon M340 Modicon M241 Modicon M258 Modicon M2•1	RJ45	Modbus	HMIGTU	RS-485	COM1	2.5/8.20	XBTZ9980	0.230/0.507
						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
						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 interface module)	Modbus	HMIGTU	RS-232C	COM2	2/6.56	STBXCA4002	0.210/0.463
						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 variable speed drives ATS 48 starters Lexium 05 Preventa XPSMC	RJ45	Modbus	HMIGTU	RS-485	COM1	3/9.84	VW3A8306R30	0.060/0.132
						1/3.28	VW3A8306R10	–
						2.5/8.20	XBTZ9980	–
						10/32.80	XBTZ9982	–
					COM2	2.5/8.20	XBTZ9008	–

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

Cables and adapters for connecting Harmony panels to third-party PLCs

Mitsubishi, Melsec PLCs

Description Driver used	Type of terminal	Type of connector (fitted to cable, excluding adapter)	Physical link (COM2)	Length m/ft	Reference	Weight kg/lb
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	–



XBTZG9772



XBTZG9731

Omron, Sysmac PLCs

Description 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, 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	–

Rockwell Automation, Allen-Bradley PLCs

Description 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, DH485	HMIGTU	9-way SUB-D	RS-485	5/16.40	XBTZ9732 + (1)	–

Siemens, Simatic PLCs

Description 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
			RJ45/9-way SUB-D	RS-485 (2) (COM1)	2.5/ 8.20	XBTZG9721

(1) 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.

Connection of Harmony panels via serial links and Ethernet network

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 TSXSACA62	15-way female SUB-D	HMIGTU	3/9.84	VW3A8306	0.150/ 0.331
	Connection box TSXPACC01	8-way female mini-DIN	HMIGTU	2.5/8.20	XBTZ9780	0.180/ 0.396
Modbus serial link	Subscriber socket TSXSACA64	15-way female SUB-D	HMIGTU	3/9.84	VW3A8306	0.150/ 0.331
	T-junction box	With integrated cable, RJ45 fitted	HMIGTU	1/6.56	VW3A8306TF10	–
Ethernet TCP/IP network	Hubs 499 NEH/NOH Switches 499 NES, 499 NMS, 499 NSS and 499 NOS	RJ45	HMIGTU	2/6.56	490NTW00002	–
				5/16.40	490NTW00005	–
				12/39.37	490NTW00012	–
				40/131.23	490NTW00040	–
				80/262.47	490NTW00080	–

PF900266

**TSXSACA62**

822807C_1

**TSXPACC01**

822829C_1

**TSXSACA64**

DA577123

**VW3A8306TF10**

Connection of Harmony 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	–

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 release
- 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

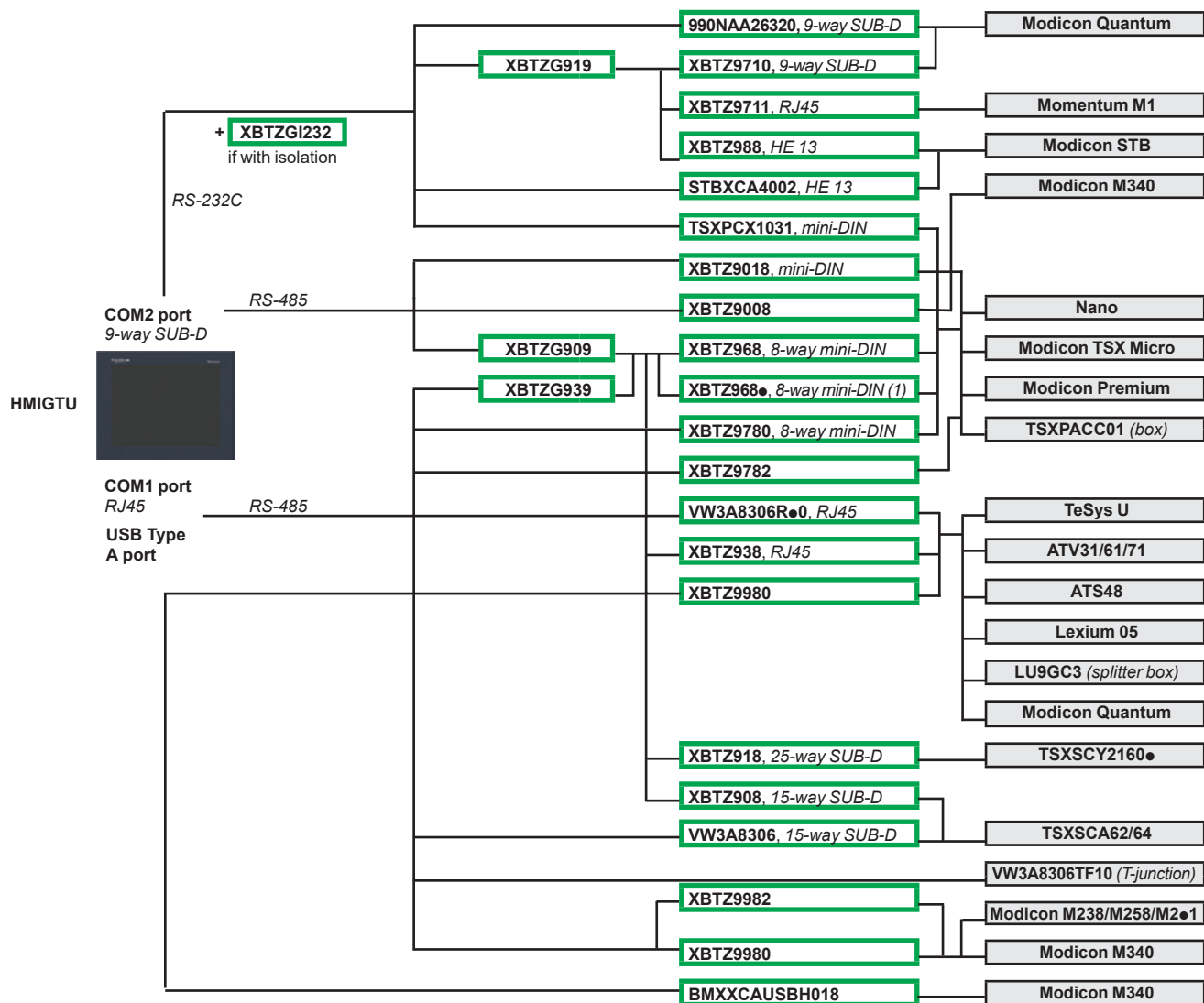
Equivalent product table between HMIGTW panels and HMIGTU panels

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:

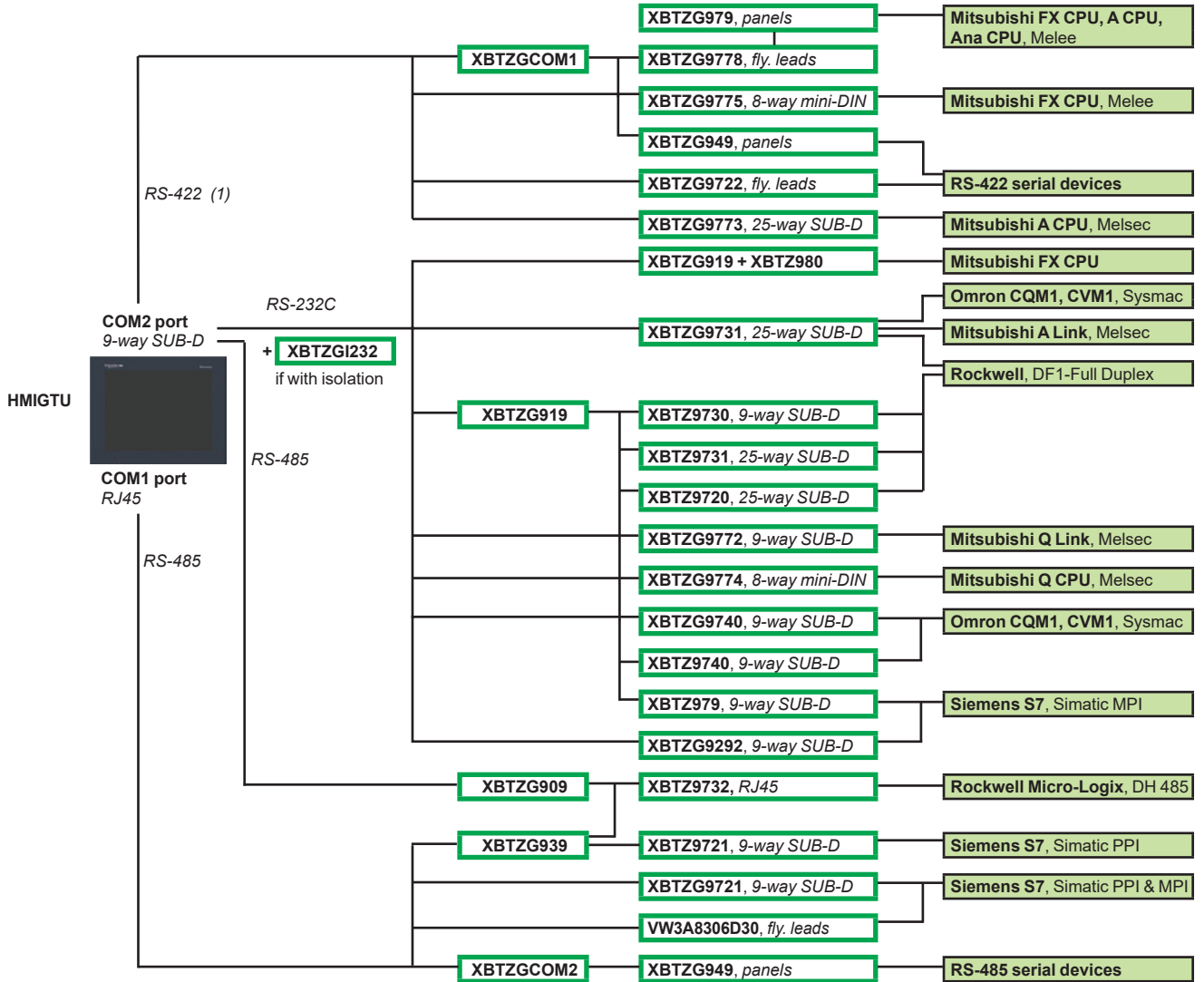
- no CF card but CFast card provided as optional storage unit
- no Windows XP Embedded but Windows 7 Embedded is provided for operating system

HMIGTU panels and Schneider Electric products

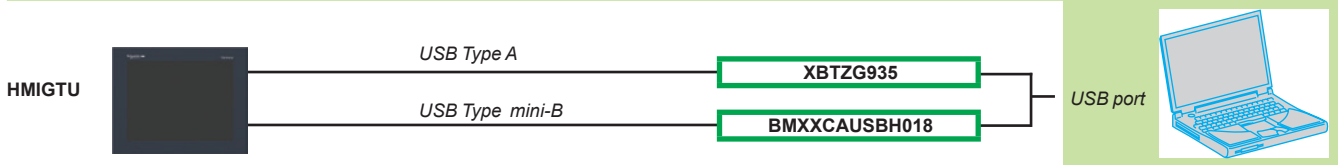


(1) ● defines the length:
 - 0 m/0 ft, 2.5 m/8.20 ft (elbowed connector)
 - 1 m/3.28 ft, 5 m/16.40 ft
 - 6 m/19.68 ft, 16 m/52.49 ft
 - 7 m/22.96 ft, 20 m/65.61 ft
 - 8 m/26.24 ft, 25 m/82.02 ft

HMIGTU panels and third-party PLCs



Application transfer from HMIGTU panels to PC



#		HMIZUV3W	18
490NTW00002	22	HMIZUV5	18
490NTW00005	22	HMIZUV5W	18
490NTW00012	22	HMIZUV6	18
490NTW00040	22	HMIZUV6W	18
490NTW00080	22	HMIZUV7	18
990NAA26320	20		
		M	
B		MPCYK50SPSKIT	18
BMXXCAUSBH018	19		
	20	S	
BMXXCAUSBH045	20	STBXCA4002	20
		T	
H		TSXCUSBFIP	22
HMIDT351	17	TSXCUSBMBP	22
HMIDT542	17	TSXPCX1031	20
HMIDT551	17		
HMIDT642	17	V	
HMIDT643	17	VW3A8306	22
HMIDT651	17	VW3A8306D30	21
HMIDT732	17	VW3A8306R10	20
HMIDT752	17	VW3A8306R30	20
HMIDT952	17	VW3A8306TF10	22
HMIG2U	17		
HMIG3U	17	X	
HMIG5U2	17	XBTZ915	19
HMIG5UL8A	17	XBTZ980	21
HMIG5UL8B	17	XBTZ988	20
HMIYCABDV11011	18	XBTZ9008	20
HMIZCFA32	18	XBTZ9710	20
HMIZCFA32S	18	XBTZ9711	20
HMIZD53W	19	XBTZ9732	21
HMIZD55	19	XBTZ9780	20
HMIZD55W	19		22
HMIZD56	19	XBTZ9782	20
HMIZD56W	19	XBTZ9980	20
HMIZD57	19	XBTZ9982	20
HMIZD57W	19	XBTZG919	19
HMIZD59W	19		21
HMIZD65W	18	XBTZG935	19
HMIZD66W	18	XBTZG939	19
HMIZDAG7W	18	XBTZG9292	21
HMIZDAG9W	18	XBTZG9721	21
HMIZDCOV5	18	XBTZG9731	21
HMIZDCOV6	18	XBTZG9740	21
HMIZDCOV7	18	XBTZG9772	21
HMIZG63	18	XBTZG9774	21
HMIZG65	18	XBTZGCO4	18
HMIZG66	18	XBTZGI232	19
HMIZGAUX	18	XBTZGI485	19
HMIZGBAT	18	XBTZGPEN	18
HMIZGCAN	22	XBTZGUMP	22
HMIZGCLP1	19	XBTZGUSB	18
HMIZGCO1	18		
HMIZGPDP	22		
HMIZGPWS	19		
HMIZGPWS2	19		
HMIZMDARX	18		
HMIZMDIO	19		
HMIZMDRVS	18		
HMIZSCLP3	19		
HMIZSD1GS	18		
HMIZSD4G	18		
HMIZSUSBB	18		
HMIZURS	19		

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