



Harmony GTO

Standard and stainless HMI panels
with 3.5" to 12.1" screen



Harmony

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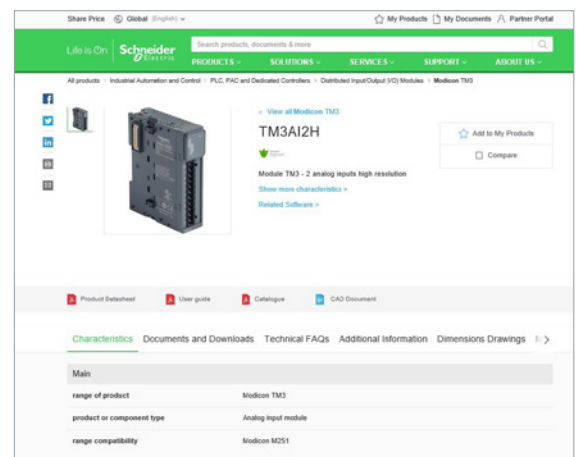
References

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 block (V)	Reference	Weight (g)
2 refrigerant inputs	-10...+10 VDC 0...20 mA, 4...20 mA	10 bits or 10 bits + sign	0.001 °C 0.001 mA	Terminal 2 Terminal 3	TM3AI2H	0.110
4 refrigerant inputs	-10...+10 VDC 0...20 mA, 4...20 mA	10 bits or 10 bits + sign	0.001 °C 0.001 mA	Terminal 2 Terminal 3	TM3AI4H	0.110
4 refrigerant or temperature inputs	-10...+10 VDC 0...20 mA, 4...20 mA	10 bits or 10 bits + sign	0.001 °C 0.001 mA	Terminal 2 Terminal 3	TM3AI4H	0.110
4 differential temperature inputs	-10...+10 VDC 0...20 mA, 4...20 mA	10 bits or 10 bits + sign	0.001 °C 0.001 mA	Terminal 2 Terminal 3	TM3AI4H	0.110

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

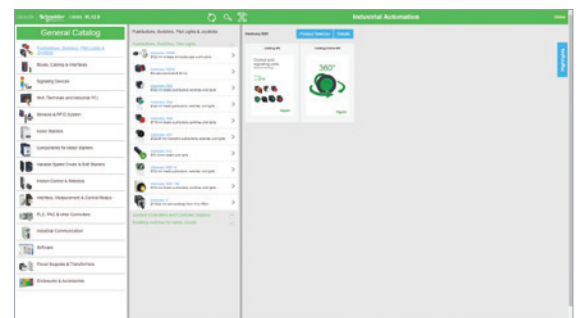
- Characteristics, Dimensions and drawings, Mounting and clearance, Connections and schemas, Performance curves
- Product image, Instruction sheet, User guide, Product certifications, End of life manual



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General contents

Harmony GTO Standard and Stainless HMI panels

Selection guide [page 2](#)

■ Presentation

□ Operation.....	page 4
□ Environment	page 4
□ Configuration	page 5
□ Communication	page 5
□ USB accessories for HMI panels	page 5
□ Functions.....	page 6
□ Architectures and communication.....	page 6
□ Panel operating modes	page 7
□ Description	page 8

■ References

□ Separate components	page 13
□ Spare parts	page 14
□ Cables for application transfer - Panel to PC.....	page 14
□ Adaptors and isolation boxes for HMIGTO panels	page 15
□ Cables for connecting Harmony panels to other Schneider Electric products	page 15
□ Cables and adaptors for connecting Harmony panels to third-party PLCs.....	page 16
□ Connection of Harmony panels via serial links and Ethernet network	page 17

■ Substitution

.....	page 19
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■ Connections

.....	page 20
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■ Product references Index.....

.....	page 24
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Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

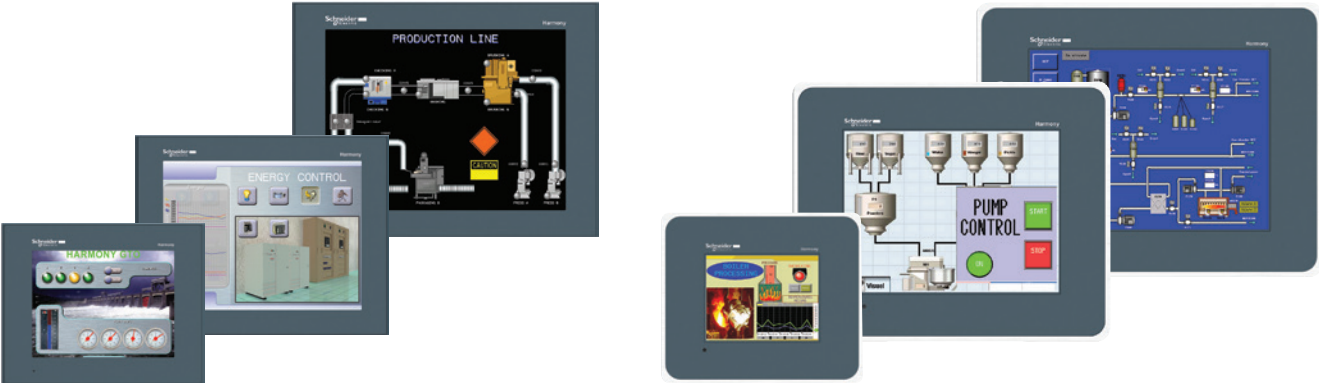
Applications	Display of text messages, graphic objects and synoptic views Control and configuration of data
Type of panel	Standard HMI Panels, touch screen
Degree of protection (according to IEC 60529)	IP 65 (IP 67 with addition of a cover)



Display	Type	Color TFT LCD, backlit 320 x 240 pixels (QVGA)		Color TFT LCD, backlit 800 x 480 pixels (WVGA)
	Capacity	3.5"	5.7"	7.0 Wide
Data entry		Via touch screen	Via touch screen	Via touch screen
	Static function keys	6 function keys (static or dynamic)	—	8 function keys (static or dynamic)
	Dynamic function keys	—	—	—
	Service keys	—	—	—
	Alphanumeric keys	—	—	—
Memory capacity	Applications	64/96 MB Flash EPROM (1)		96 MB Flash EPROM
	Expansion	—	By 4 GB SD card (except HMIGTO2300)	
Functions	Maximum number of pages	Limited by internal Flash EPROM memory capacity	Limited by capacity of internal Flash EPROM memory or of SD card	
	Variables per page	Unlimited (8000 variables max.)		
	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, tank, tank level indicator, curves, polygon, button, LED		
	Recipes	32 groups of 64 recipes comprising 1024 ingredients max.		
	Curves	Yes, with log		
	Alarm logs	Yes		
	Real-time clock	Built-in		
	Discrete I/O	—		
	Multimedia I/O	—		
Communication	Downloadable protocols	Uni-TE (2), Modbus, Modbus TCP/IP (1) and for PLC brands: Mitsubishi, Omron, Allen-Bradley and Siemens		
	Asynchronous serial link	RS 232C (COM1) and RS 485 (COM2) except HMIGTO1310: RS 232C/485 (COM1)		
	USB ports	1 type A host connector + 1 mini-B connector		
	Buses and networks	Ethernet TCP/IP (10BASE-T/100BASE-TX) (3), Modbus Plus and Fipway via USB gateway		
	Printer link	RS 232C (COM1) serial link (4) and USB port for parallel printer		
Development software		Vijeo Designer (on Windows XP and Windows 7)		
Operating system		Harmony (333 MHz RISC CPU)		
Type of panel		HMIGTO1300 HMIGTO1310	HMIGTO2300 HMIGTO2310	HMIGTO3510
Page		13		

(1) Depending on model.
(2) Uni-TE version V2 for Twido controller and TSX Micro/Premium platform.
(3) Except HMIGTO1300 and GTO2300 (Modbus Plus and Fipway via USB gateway only).
(4) Except HMIGTO1310 (USB port for parallel printer only).

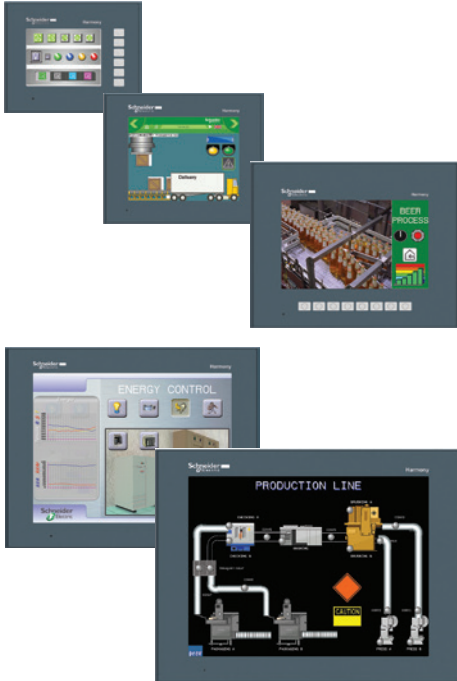
Display of text messages, graphic objects and synoptic views Control and configuration of data	
Standard HMI Panels, touch screen	Standard HMI Panels, touch screen, “Stainless Steel” version
IP 65 (IP 67 with addition of a cover)	IP 66K (Front panel with stainless steel frame) for food & beverage environment



Color TFT LCD, backlit 640 x 480 pixels (VGA)	Color TFT LCD, backlit 640 x 480 pixels (VGA)	Color TFT LCD, backlit 800 x 600 pixels (SVGA)	Color TFT LCD, backlit 320 x 240 pixels (QVGA)	Color TFT LCD, backlit 640 x 480 pixels (VGA)	Color TFT LCD, backlit 800 x 600 pixels (SVGA)
7.5"	10.4"	12.1"	5.7"	10.4"	12.1"
Via touch screen					
—					
—					
—					
—					
96 MB Flash EPROM					
By 4 GB SD card					
Limited by capacity of internal Flash EPROM memory or of SD card					
Unlimited (8000 variables max.)					
Alphanumeric, bitmap, bargraph, gauge, tank, tank level indicator, curves, polygon, button, LED					
32 groups of 64 recipes comprising 1024 ingredients max.					
Yes, with log					
Yes					
Built-in					
—					
—					
Uni-TE (2), Modbus, Modbus TCP/IP (1) and for PLC brands: Mitsubishi, Omron, Allen-Bradley and Siemens					
RS 232C (COM1) and RS 485 (COM2)					
1 type A host connector + 1 mini-B connector					
Ethernet TCP/IP (10BASE-T/100BASE-TX), Modbus Plus and Fipway via USB gateway					
RS 232C (COM1) serial link and USB port for parallel printer					
Vijeo Designer (on Windows XP and Windows 7)					
Harmony (333 MHz RISC CPU)					
HMIGTO4310	HMIGTO5310	HMIGTO6310	HMIGTO2315	HMIGTO5315	HMIGTO6315
13					

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen



Harmony color touch screen panels HMIGTO●●●0 in 5 sizes from 3.5" to 12.1" (standard version)



Harmony color touch screen panels HMIGTO●●●5 in 3 sizes from 5.7" to 12.1" ("Stainless Steel" version)

Presentation

The Standard HMI touch screen panels Harmony GTO offer includes:

- A range of 8 color touch screen panels (TFT technology), available in a choice of 5 sizes
 - 3.5"
 - 5.7"
 - 7": 7 Wide and 7.5" (front identical in size)
 - 10.4"
 - 12.1"
 - A range of 3 color TFT touch screens available in 3 sizes:
 - 5.7"
 - 10.4"
 - 12.1"
- with front featuring a Stainless Steel frame, dedicated to applications in harsh environments (food & beverage and pharmaceutical).

Operation

Harmony GTO Standard HMI panels feature optimized information and communication technologies, which, depending on the model, include:

- High level of communication (embedded Ethernet, multilink, Web server and FTP, e-mail)
- External storage of data (SD memory card and USB memory stick) for storing production data and backing up applications
- Management of peripherals: printers, etc.

These panels offer an excellent level of technical performance designed principally for use by OEM customers.

Environment

The Harmony GTO range has been designed in accordance with numerous standards, certifications and requirements:

- Standards: EN 61131-2, 61000-6-2 and UL508.
- Certifications:
 - CE, C-tick, GOST-R, KCC
 - Atex and UL Hazardous location (pending)
 - Marine certifications (pending).
- Operating temperature: up to 55°C
- Degree of protection (according to IEC 60529):
 - IP 65 for standard version products
 - IP 67 for standard version products fitted with a cover for harsh environments (see accessories [page 14](#))
 - IP 66K for "Stainless Steel" version products
- Resistance to high-pressure cleaning (conforming to DIN 40050-9): up to 10 bar for "Stainless Steel" version products.

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen



Display of a video sequence

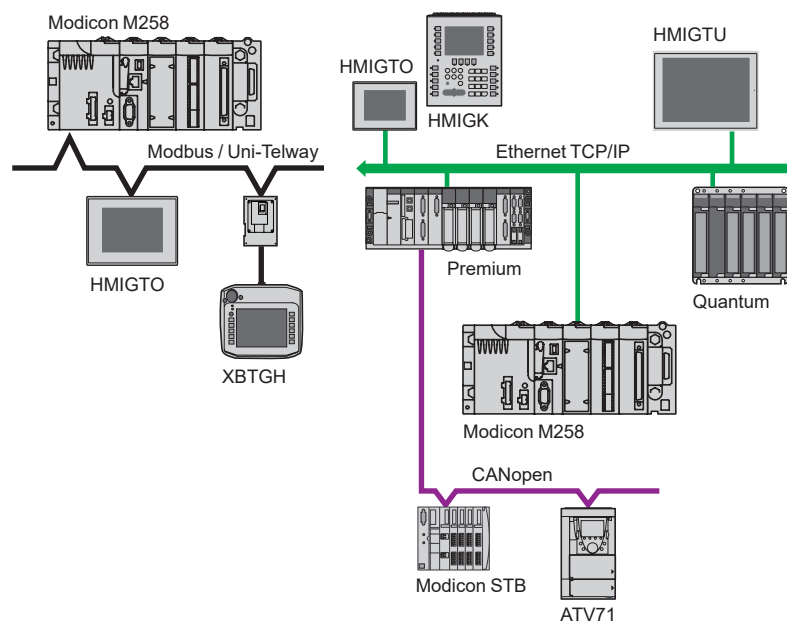
Configuration

Harmony GTO Standard HMI panels can be configured using Vijeo Designer software in a Windows 7, Windows 8.1 and Windows 10 Pro environment.

Vijeo Designer software boasts an advanced user interface with many configurable windows, enabling projects to be developed quickly and easily.

The Harmony GTO range is compatible with Vijeo Designer version V6.1 or later. For more information, please refer to Vijeo Designer catalog [DIA5ED2130614EN](#).

Communication



Standard HMI panels communicate with PLCs via one or two integrated serial links, using communication protocols:

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

Depending on the model, they can be connected to Ethernet TCP/IP networks using:

- A Modbus TCP protocol
- An Ethernet TCP/IP protocol
- or a third party protocol

USB accessories for HMI panels

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 be easily installed and operated with HMI panels.

The Harmony USB accessories supported by Mageis GTO include:

- Harmony XVGU USB tower light
- Harmony HMIZ illuminated USB switch

For more information, please refer to HMI USB Accessories catalog [DIA5ED2130901EN](#).

Functions

Standard HMI 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
- Multiwindow management
- Operator-initiated page calls
- Multilingual application management (10 languages at the same time)
- Recipe management
- Data processing via Java script
- Storage of the application and logs on external application memory card in SD format or USB stick
- Management of serial printer

Architectures and communication

The Harmony GTO range is perfectly integrated in the EcoStruxure Machine (1) automation solutions offer, which helps machine manufacturers (OEMs) to quickly design optimized machines (in terms of cost and energy efficiency).

EcoStruxure Machine solutions are based on high performance control platforms and a single software package: SoMachine and EcoStruxure Machine Expert. SoMachine and EcoStruxure Machine Expert allows the development, commissioning and programming of machines. SoMachine version 3.1 allows programming of panels in the Harmony GTO range using Vijeo Designer software.

Standard HMI panels have been designed for EcoStruxure Plant (1) and EcoStruxure Machine (1) architectures as well as for Transparent Ready equipment (combination of Web and Ethernet TCP/IP technologies). Therefore, all panels with an Ethernet port feature a built-in FTP server for data file transfer and a Web Gate function for remote access to the application of the panel from a PC with an Internet browser.

Vijeo Designer also allows Harmony GTO panels to browse HTML pages and send e-mails.

(1) For more information on the EcoStruxure Plant and EcoStruxure Machine concept, please refer to our website www.schneider-electric.com/Solutions/EcoStruxure Plant and Machine.



SoMachine software platform



EcoStruxure Machine Expert

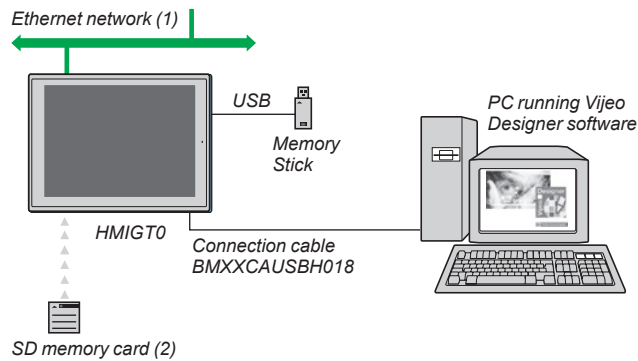


Vijeo Designer configuration software

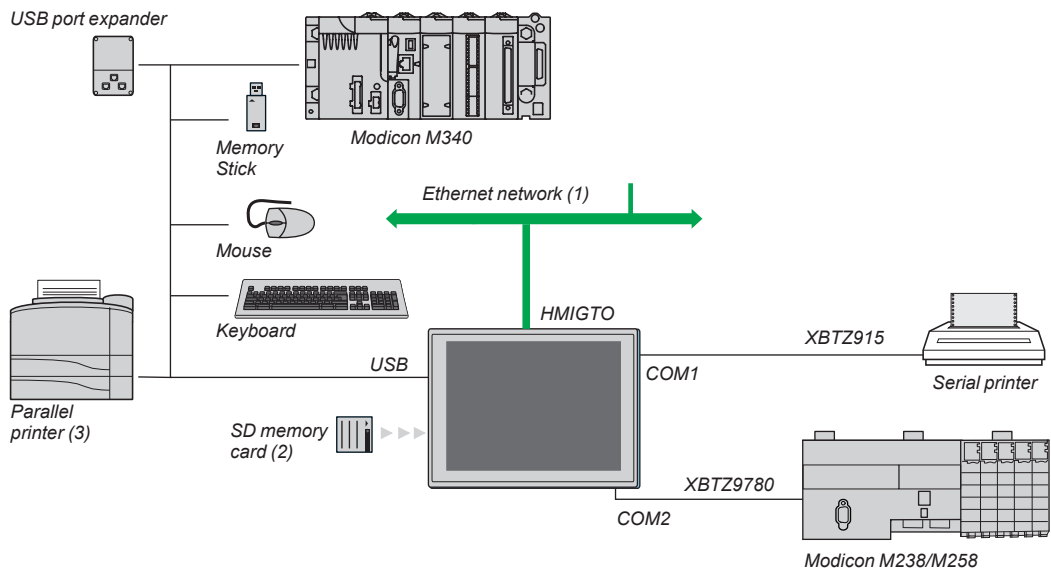
Panel operating modes

The following illustrations show the equipment that can be connected to Harmony GTO panels according to their two operating modes.

Edit mode



Operating mode



(1) With **HMIGTO●●1●**.

(2) Memory card, except HMIGTO 1300/1310/2300.

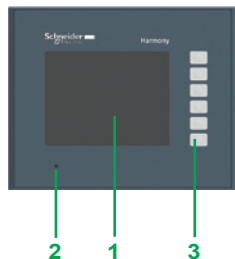
(3) Validated with Hewlett Packard printer via USB/PIO converter.

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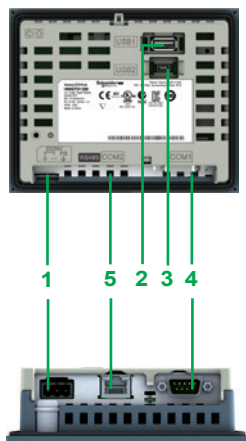
Standard and stainless HMI panels with 3.5" to 12.1" screen

Panels with 3.5" touch screen

Common front

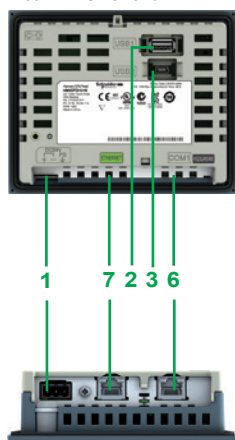


Rear HMIGTO1300



Underside HMIGTO1300

Rear HMIGTO1310



Underside HMIGTO1310

Description

Harmony HMIGTO 1300/1310 Standard HMI panels

HMIGTO1300 and HMIGTO1310 panels have the following features on the front:

- 1 A touch screen for displaying synoptic views (3.5" color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode
- 3 Six function keys (F1, F2, F3, F4, F5 and F6)

The HMIGTO1300 panel has the following features on the rear and underside:

- 1 A removable screw terminal block for 24 V $\overline{\text{---}}$ power supply
- 2 A type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication
- 3 A mini-B USB connector for application transfer
- 4 A 9-way male SUB-D connector for RS 232C serial link to PLCs (COM1)
- 5 An RJ45 connector for RS 485 serial link to PLCs (COM2)

The HMIGTO1310 panel has the following features on the rear and underside:

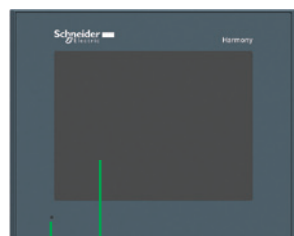
- 1 A removable screw terminal block for 24 V $\overline{\text{---}}$ power supply
- 2 A type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication
- 3 A mini-B USB connector for application transfer
- 6 An RJ45 connector for RS 232C or RS 485 serial link to PLCs (COM1)
- 7 An RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Panels with 5.7" touch screen, standard and Stainless Steel version

Front

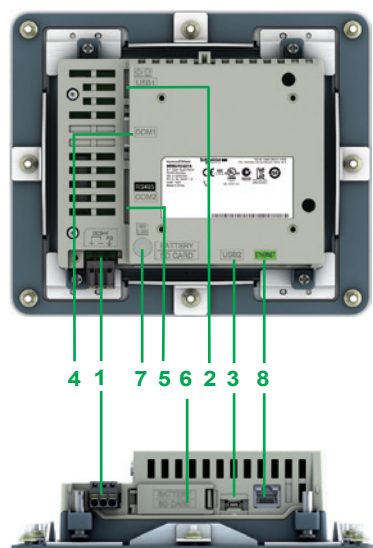


2 1



3 2 1

Rear HMIGTO2315



4 1 7 5 6 2 3 8

Underside HMIGTO2315

Description

Harmony HMIGTO 2300/2310 (standard version) and HMIGTO2315 (Stainless Steel version)

HMIGTO2300 and HMIGTO2310 panels have the following features on the front:

- 1 A touch screen for displaying synoptic views (5.7" color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode

The HMIGTO2315 panel has the following features on the front:

- 1 A touch screen for displaying synoptic views (5.7" color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode
- 3 A Stainless Steel frame, for food & beverage environments. Only this product provides IP 66K degree of protection

All 3 of these panels have the following features on the rear and underside:

- 1 A removable screw terminal block for 24 V $\square$ power supply
- 2 A type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication
- 3 A mini-B USB connector for application transfer
- 4 A 9-way male SUB-D connector for RS 232C serial link to PLCs (COM1)
- 5 An RJ45 connector for RS 485 serial link (COM2)

On HMIGTO2310 and HMIGTO2315 only:

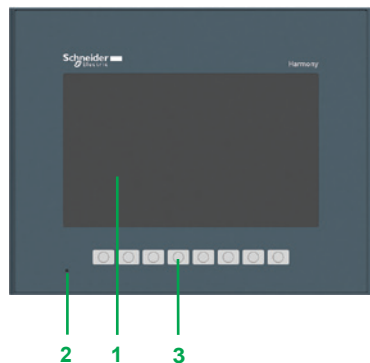
- 6 A slot for SD memory card, with hinged cover
- 7 LED indicating presence of the SD memory card
- 8 An RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX

Harmony GTO

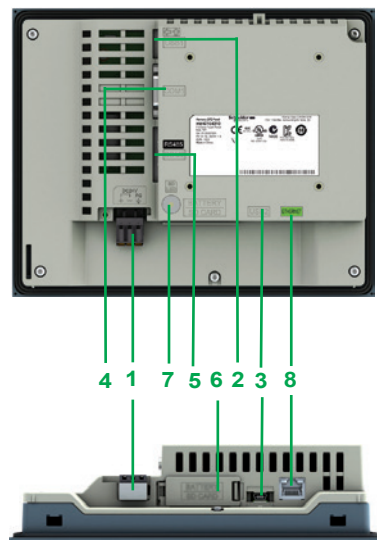
Standard and stainless HMI panels with 3.5" to 12.1" screen

Panels with 7.0" Wide and 7.5" touch screen

Front



Rear



Underside

Description

Harmony Standard HMI panels HMIGTO 3510/4310

The HMIGTO3510 panel has the following features on the front:

- 1 A touch screen for displaying synoptic views (7.0" Wide color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode
- 3 Eight function keys (F1, F2, F3, F4, F5, F6, F7 and F8)

The HMIGTO4310 panel has the following features on the front:

- 1 A touch screen for displaying synoptic views (7.5" color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode

Both panels have the following features on the rear and underside:

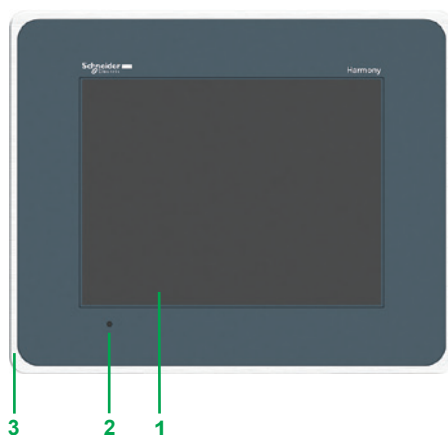
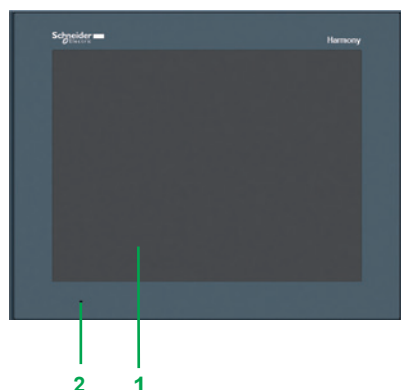
- 1 A removable screw terminal block for 24 V $\square$ power supply
- 2 A type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication
- 3 A mini-B USB connector for application transfer
- 4 A 9-way male SUB-D connector for RS 232C serial link to PLCs (COM1)
- 5 An RJ45 connector for RS 485 serial link (COM2)
- 6 A slot for SD memory card, with hinged cover
- 7 LED indicating presence of the SD memory card
- 8 An RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX with an activity LED

Harmony GTO

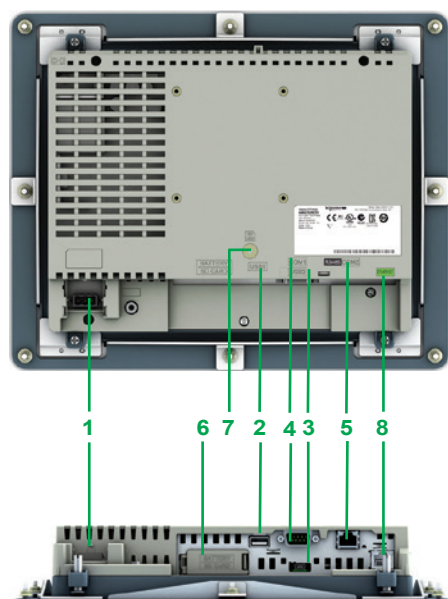
Standard and stainless HMI panels with 3.5" to 12.1" screen

Panels with 10.4" touch screen, standard and Stainless Steel version

Front



Rear



Underside

Description

Harmony panels HMIGTO5310 (standard version) and HMIGTO5315 (Stainless Steel version)

The HMIGTO5310 panel has the following features on the front:

- 1 A touch screen for displaying synoptic views (10.4" color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode

The HMIGTO5315 panel has the following features on the front:

- 1 A touch screen for displaying synoptic views (10.4" color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode
- 3 A Stainless Steel frame, for food & beverage environments. Only this product provides IP 66K degree of protection

Both panels have the following features on the rear and underside:

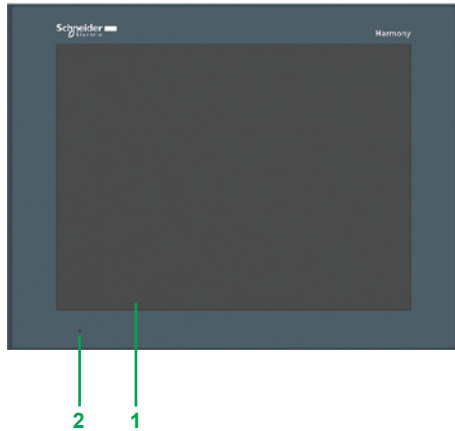
- 1 A removable screw terminal block for the 24 V $\square$ power supply
- 2 A type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication
- 3 A mini-B USB connector for application transfer
- 4 A 9-way male SUB-D connector for RS 232C serial link to PLCs (COM1)
- 5 An RJ45 connector for RS 485 serial link (COM2)
- 6 A slot for SD memory card, with hinged cover
- 7 LED indicating presence of the SD memory card
- 8 An RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX with an activity LED

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Panels with 12.1" touch screen, standard and Stainless Steel version

Front



Description

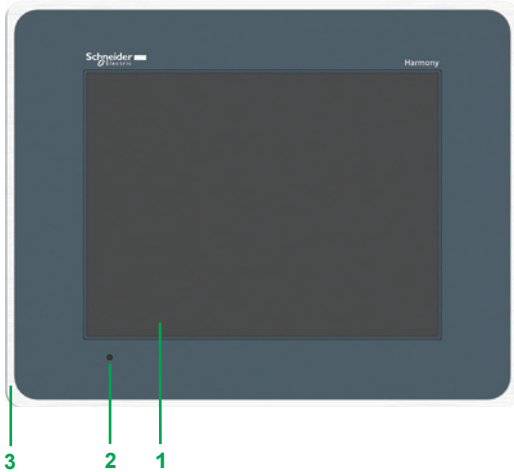
Harmony panels HMIGTO6310 (standard version) and HMIGTO6315 (Stainless Steel version)

The HMIGTO6310 panel has the following features on the front:

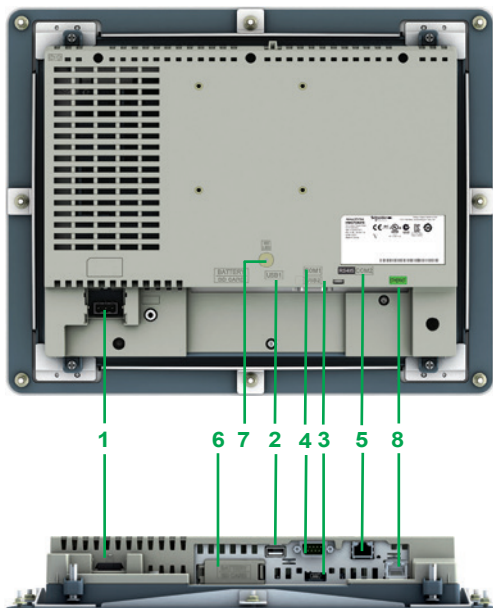
- 1 A touch screen for displaying synoptic views (12.1" color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode

The HMIGTO6315 panel has the following features on the front:

- 1 A touch screen for displaying synoptic views (12.1" color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode
- 3 A Stainless Steel frame, for food & beverage environments. Only this product provides IP 66K degree of protection



Rear



Both panels have the following features on the rear and underside:

- 1 A removable screw terminal block for the 24 V $\overline{\text{V}}$ power supply
- 2 A type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication
- 3 A mini-B USB connector for application transfer
- 4 A 9-way male SUB-D connector for RS 232C serial link to PLCs (COM1)
- 5 An RJ45 connector for RS 485 serial link (COM2)
- 6 A slot for SD memory card, with hinged cover
- 7 LED indicating presence of the SD memory card
- 8 An RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX with an activity LED

Underside

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Panels with 3.5" to 12.1" touch screen



Harmony GTO 24 V DC panels with color touch screen, standard version ⁽¹⁾							
Data entry method	Number of ports	Application memory capacity	Memory expansion by SD card	Serial link	Embedded Ethernet	Reference	Weight kg
3.5" QVGA TFT LCD screen, 320 x 240 pixels							
Via touch screen + 6 function keys	2 USB	64 MB	No	1 COM 1 1 COM 2	–	HMIGTO1300	0.400
	2 USB	96 MB	No	1 COM 1	1	HMIGTO1310	0.400



5.7" QVGA TFT LCD screen, 320 x 240 pixels							
Via touch screen	2 USB	64 MB	No	1 COM 1 1 COM 2	–	HMIGTO2300	0.800
	2 USB	96 MB	Yes (2)	1 COM 1 1 COM 2	1	HMIGTO2310	0.800



7.0" WVGA (Wide) TFT LCD screen, 800 x 480 pixels							
Via touch screen + 8 function keys	2 USB	96 MB	Yes (2)	1 COM 1 1 COM 2	1	HMIGTO3510	1.200



7.5" VGA TFT LCD screen, 640 x 480 pixels							
Via touch screen	2 USB	96 MB	Yes (2)	1 COM 1 1 COM 2	1	HMIGTO4310	1.200



10.4" VGA TFT LCD screen, 640 x 480 pixels							
Via touch screen	2 USB	96 MB	Yes (2)	1 COM 1 1 COM 2	1	HMIGTO5310	2.000



12.1" SVGA TFT LCD screen, 800 x 600 pixels							
Via touch screen	2 USB	96 MB	Yes (2)	1 COM 1 1 COM 2	1	HMIGTO6310	2.500



Harmony GTO 24 V DC panels with color touch screen, Stainless Steel version ^{(1) (3)}							
Data entry method	Number of ports	Application memory capacity	Memory expansion by SD card	Serial link	Embedded Ethernet	Reference	Weight kg
5.7" QVGA screen, 320 x 240 pixels, with Stainless Steel frame (IP 66K)							
Via touch screen	2 USB	96 MB	Yes (2)	1 COM 1 1 COM 2	1	HMIGTO2315	1.200
10.4" VGA screen, 640 x 480 pixels, with Stainless Steel frame (IP 66K)							
Via touch screen	2 USB	96 MB	Yes (2)	1 COM 1 1 COM 2	1	HMIGTO5315	2.500
12.1" SVGA screen, 800 x 600 pixels, with Stainless Steel frame (IP 66K)							
Via touch screen	2 USB	96 MB	Yes (2)	1 COM 1 1 COM 2	1	HMIGTO6315	3.000

(1) Panels supplied with fixing kit (screw clips), locking device for USB connectors and instruction sheet. Setup documentation for Harmony GTO panels is included in electronic format with Vijeo Designer configuration software. For more information, refer to Vijeo Designer catalog [DIA5ED2130614EN](#).

(2) Memory expansion possible with 4 GB SD card **HMIZSD4G**, see accessories [page 14](#).

(3) The Stainless Steel version includes a front with Stainless Steel frame. Only this version provides IP 66K degree of protection.

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Separate parts for Harmony GTO

Separate components

Description	Characteristics	Compatible with panels	Reference	Weight kg
SD memory card	4 GB, blank	HMIGTO	HMIZSD4G	—
Protective sheets (5 peel-off sheets)	—	HMIGTO1300/1310	HMIZG60	—
		HMIGTO2300/2310/2315	HMIZG62	—
		HMIGTO3510	HMIZG63	—
		HMIGTO4310	HMIZG64	—
		HMIGTO5310/5315	HMIZG65	—
		HMIGTO6310/6315	HMIZG66	—
Plastic covers for harsh environments (IP 67 protection)	—	HMIGTO1300/1310	HMIZECOV1	—
		HMIGTO2300/2310	HMIZECOV2	—
		HMIGTO3510/4310	HMIZECOV4	—
		HMIGTO5310	HMIZECOV5	—
		HMIGTO6310	HMIZECOV6	—

Description	Description	Length m.	Reference	Weight kg
Mechanical adaptors for substitution of panels of the Harmony range	From XBTGT5230 to HMIGTO5310	—	XBTZGCO4	—



XBTZGCO●

Remote USB port for HMIGTO	Enables the USB mini-B port to be located remotely on the rear of the XB or HMIGTO panel on a panel or enclosure door (Ø 21 mm fixing device)	1	XBTZGUSBB	—
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XBTZGUSB

Remote USB port for HMIGTO	Enables the USB mini-B port to be located remotely on the rear of the HMIGTO panel, on a panel or enclosure door (Ø 21 mm fixing device)	1	HMIZSUSBB	—
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Spare parts

Description	For use with panels	Reference	Weight kg
Seals	HMIGTO1300/1310	HMIZG51	—
	HMIGTO2300/2310	HMIZG52	—
	HMIGTO2315	HMIZG522	—
	HMIGTO3510/4310	HMIZG54	—
	HMIGTO5310	HMIZG55	—
	HMIGTO5315	HMIZG552	—
	HMIGTO6310	HMIZG56	—
	HMIGTO6315	HMIZG562	—
USB fastenings Sold in lots of 5	HMIGTO (USB type A)	HMIZGCLP1	—
	HMIGTO (USB type mini-B)	HMIZSCLP3	—
Fixing kit	4 clips and screws (max. tightening torque: 0.5 Nm), supplied with all HMIGTO●●●0 panels	HMIZGFIX	0.030
	8 nuts and 4 L-shaped brackets, supplied with all HMIGTO●●●5 panels	HMIZGFIX2	0.030
Power supply connector Sold in lots of 5	HMIGTO (direct connection)	HMIZGPWS	0.030
	HMIGTO (right angle connection)	HMIZGPWS2	0.030
Sheets of customizable labels for HMIGTO	HMIGTO1300/1310	HMIZLYGO1	—
	HMIGTO3510	HMIZLYGO3	—
Battery	HMIGTO except HMIGTO1300/1310/2300	HMIZGBAT	—

Cables for application transfer - Panel to PC

Type of panel (terminal end connector)	Connector (PC end)	Type	Length m	Reference (1)	Weight kg
HMIGTO	USB	USB	1.80	BMXXCAUSBH018	—

Printer connection cables

Type of printer (2)	Connector (printer end)	Type	Length m	Reference	Weight kg
HMIGTO panels (except HMIGTO1310)	SUB-D female 25-way	RS-232C (COM1)	2.5	XBTZ915	0.200
Serial printer for HMIGTO panels	USB	RS-232C (COM1)	1.80	HMIZURS	—

Adaptors and isolation boxes for HMIGTO panels

These 3 adaptors are used with the connection cables depending on the application concerned.
For example, the XBTZ968 cable is used with the XBTZG909 adaptor, to connect a Twido controller (via its terminal port) to an XBTGT2●●0 panel (via its COM1 port).

Description	Type of connector (automation product end)	Physical link (XBTor HMIGTO panel end)	Length m	Reference	Weight kg
Adaptor for HMIGTO	25-way SUB-D connector	RJ45 connector	0.2	XBTZG939	—
Adaptors for HMIGTO (COM1 port)	25-way SUB-D connector	9-way SUB-D connector, RS-232C	0.2	XBTZG919	—



XBTZGI485

Description	For use with	Link to isolate	Reference	Weight kg
Serial link isolation units for HMIGTO	- Isolated link on 9-way SUB-D connector (3) - Box power supply via USB port of terminal. 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. For more information, refer to Vijeo Designer catalog [DIA5ED2130614EN](#).

(2) Parallel printer (see [page 7](#)).

(3) Male connector with [XBTZGI232](#), female connector with [XBTZGI485](#).

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Connection accessories for Harmony GTO



TSXPCX1031

Cables for connecting Harmony panels to other Schneider Electric products								
Automation product type	Type of connector (automation product end)	Protocol	Type of panel	Link	On port	Length m	Reference	Weight kg
Modicon TSX Micro, Modicon Premium	Terminal port, 8-way female mini-DIN	Uni-TE (V1/V2), Modbus	HMIGTO	RS-485	COM1 COM2	2.5	XBTZ9780	0.180
						10	XBTZ9782	—
			HMIGTO	RS-232	COM1	2.5	TSXPCX1031	—
Modicon M340 Modicon M238 Modicon M258	RJ45	Modbus	HMIGTO	RS-485	COM1 COM2	2.5	XBTZ9980	0.230
						10	XBTZ9982	—
	USB Mini-B	Terminal port	HMIGTO	USB	USB type A	1.8 4.5	BMXXCAUSBH018 BMXXCAUSBH045	0.230 —
Modicon Quantum	9-way male SUB-D	Modbus	HMIGTO	RS-232C	COM1	2.5	XBTZ9710 + (1)	0.210
						3.7	990NAA26320	0.290
Modicon STB	HE13 (NIM, network interface module)	Modbus	HMIGTO	RS-232C	COM1	2	STBXCA4002	0.210
						2.5	XBTZ988 + (1)	0.220
Modicon Momentum M1	RJ45 (port 1 on Momentum M1)	Modbus	HMIGTO	RS-232C	COM1	2.5	XBTZ9711 + (1)	0.210
TeSys U, T starters ATV 312/61/71 variable speed drives ATS 48 starters Lexium 05 Preventa XPSMC	RJ45	Modbus	HMIGTO	RS-485	COM1 COM2	3	VW3A8306R30	0.060
						2.5	XBTZ9980	—
						10	XBTZ9982	—

(1) Adaptor [XBTZG919](#) to be used with cables with " + (1) " after the reference.

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Connection accessories for Harmony GTO



XBTZG9772



XBTZG9731



XBTZG9731

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

Mitsubishi, Melsec PLCs

Description Driver used	Type of panel	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM1)	Length m	Reference	Weight kg
Connection cable, <i>Q Link (SIO)</i>	HMIGTO	9-way SUB-D 9-way SUB-D	RS-232C	5	XBTZG9772	—
Connection cable, <i>Q CPU (SIO)</i>	HMIGTO	9-way SUB-D mini-DIN	RS-232C	5	XBTZG9774	—
Connection cable, <i>A Link (SIO)</i>	HMIGTO	9-way SUB-D 25-way SUB-D	RS-232C	5	XBTZG9731	—

Omron, Sysmac PLCs

Description Driver used	Type of panel	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM1)	Length m	Reference	Weight kg
Connection cables, <i>Link (SIO)</i>	HMIGTO	9-way SUB-D 9-way SUB-D	RS-232C	5	XBTZG9740	—
		9-way SUB-D 25-way SUB-D	RS-232C	5	XBTZG9731	—
Connecting cables <i>FINS (SIO)</i>	HMIGTO	9-way SUB-D 9-way SUB-D	RS-232C	5	XBTZG9740	—

Rockwell Automation, Allen-Bradley PLCs

Description Driver used	Type of panel	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM1)	Length m	Reference	Weight kg
Connection cables <i>DF1 Full Duplex</i>	HMIGTO	9-way SUB-D 25-way SUB-D	RS-232C	5	XBTZG9731	—
Connection cables, <i>DH485</i>	HMIGTO	9-way SUB-D	RS-485	5	XBTZ9732 + (1)	—

Siemens, Simatic PLCs

Description Driver used	Type of panel	Type of connector (fitted to cable, excluding adaptor)	Physical link	Length m	Reference	Weight kg
Connection cable, <i>PPI, S7 200</i>	HMIGTO	RJ45/9-way SUB-D	RS-485 (COM2)	2.5	XBTZG9721	—
Connection cables, <i>MPI port, S7 300/400</i>	HMIGTO	9-way SUB-D 9-way SUB-D	RS-232C (COM1)	3	XBTZG9292	—
	HMIGTO	RJ45/flying leads other end	RS-485 (2) (COM2)	3	VW3A8306D30	0.150
		RJ45/9-way SUB-D	RS-485 (2) (COM1)	2.5	XBTZG9721	—

(1) Adaptor [XBTZG939](#) to be used with cables with " + (1) " after the reference (see [page 15](#)).

(2) Non-isolated RS-485 serial link, 12 Mbps

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Connection accessories for Harmony GTO



TSXSCA62



TSXPACC01



TSXSCA64



VW3A8306TF10

Connection of Harmony panels via serial links and Ethernet network

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

Connection of Harmony panels to fieldbuses

Type of bus/ network	Connection components	Type of panel	Reference	Weight kg
FIPWAY, FIPIO	USB gateway	HMIGTO	TSXCUSBFIP	—
Modbus Plus	USB gateway	HMIGTO	XBTZGUMP	—

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Equivalent product table for Harmony GTO

Equivalent product table between XBTGT panels and HMIGTO panels

Old range XBTGT	New range HMIGTO <i>Requires Vijeo Designer ≥ V6.1</i>	Mechanical adaptor
XBTGT1100	HMIGTO1300	–
XBTGT1130	HMIGTO1310	–
XBTGT1105	HMIGTO1300	–
XBTGT1135	HMIGTO1310	–
XBTGT1335	HMIGTO1310	–
XBTGT2110	HMIGTO2300	–
XBTGT2120	HMIGTO2310	–
XBTGT2130	HMIGTO2310	–
XBTGT2220	HMIGTO2310	–
XBTGT2330	HMIGTO2310	–
XBTGT4230	HMIGTO4310	–
XBTGT4330	HMIGTO4310	–
XBTGT5230	HMIGTO5310	XBTZGC04
XBTGT5330	HMIGTO5310	–
XBTGT6330	HMIGTO6310	–

Comments: when upgrading from the Harmony XBTrange to the Harmony GTO Standard range, the following parameters must be taken into account:

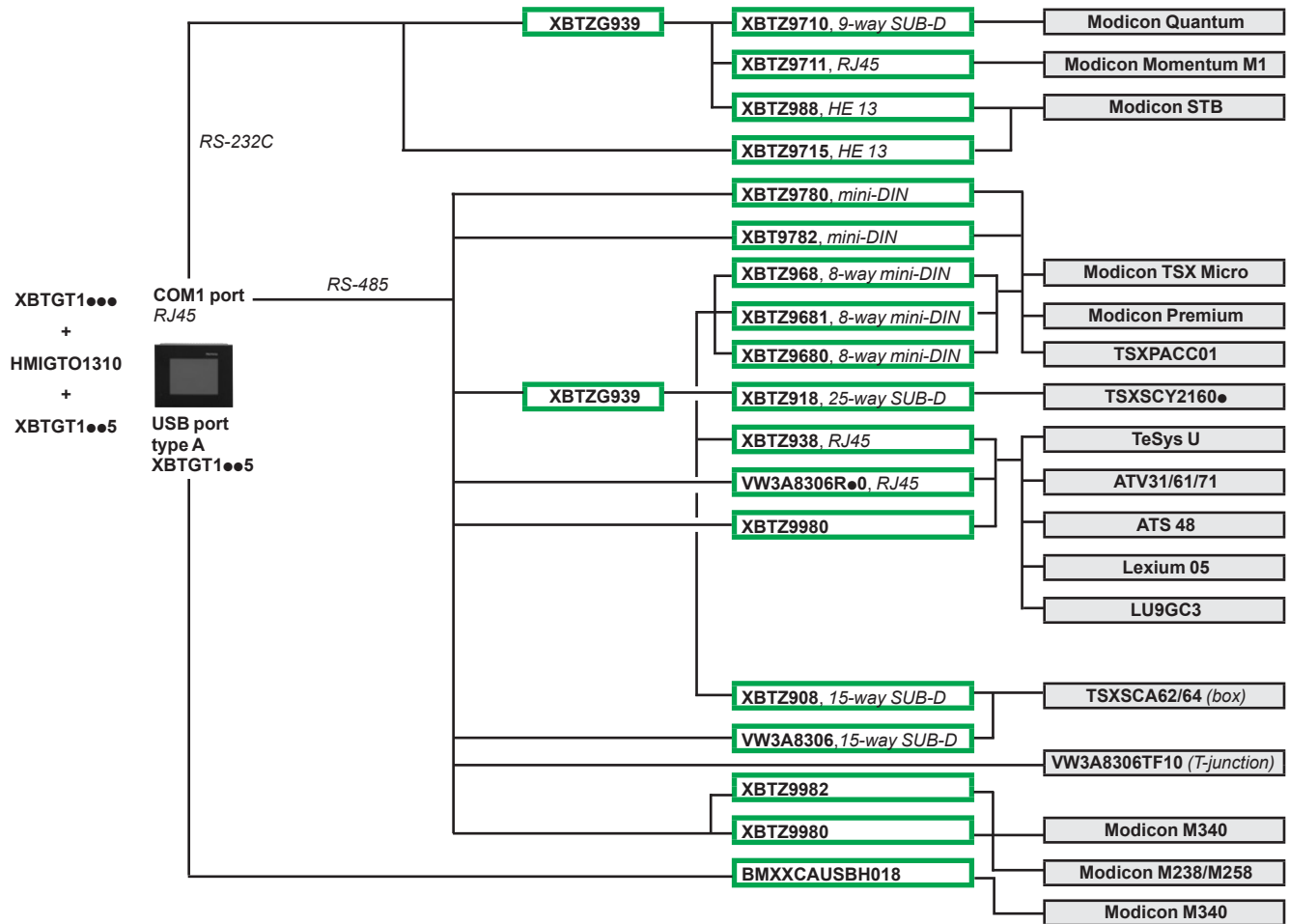
- connection to the Profibus DP and Device Net fieldbuses is not possible,
- a combined RS232/RS422 serial link is not possible with COM1,
- there is no "alarm" output or "loudspeaker" output in the current version of the Standard range.

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Connection system for Harmony GTO

XBTGT11●5 panels, HMIGTO1310 panels and Schneider Electric products

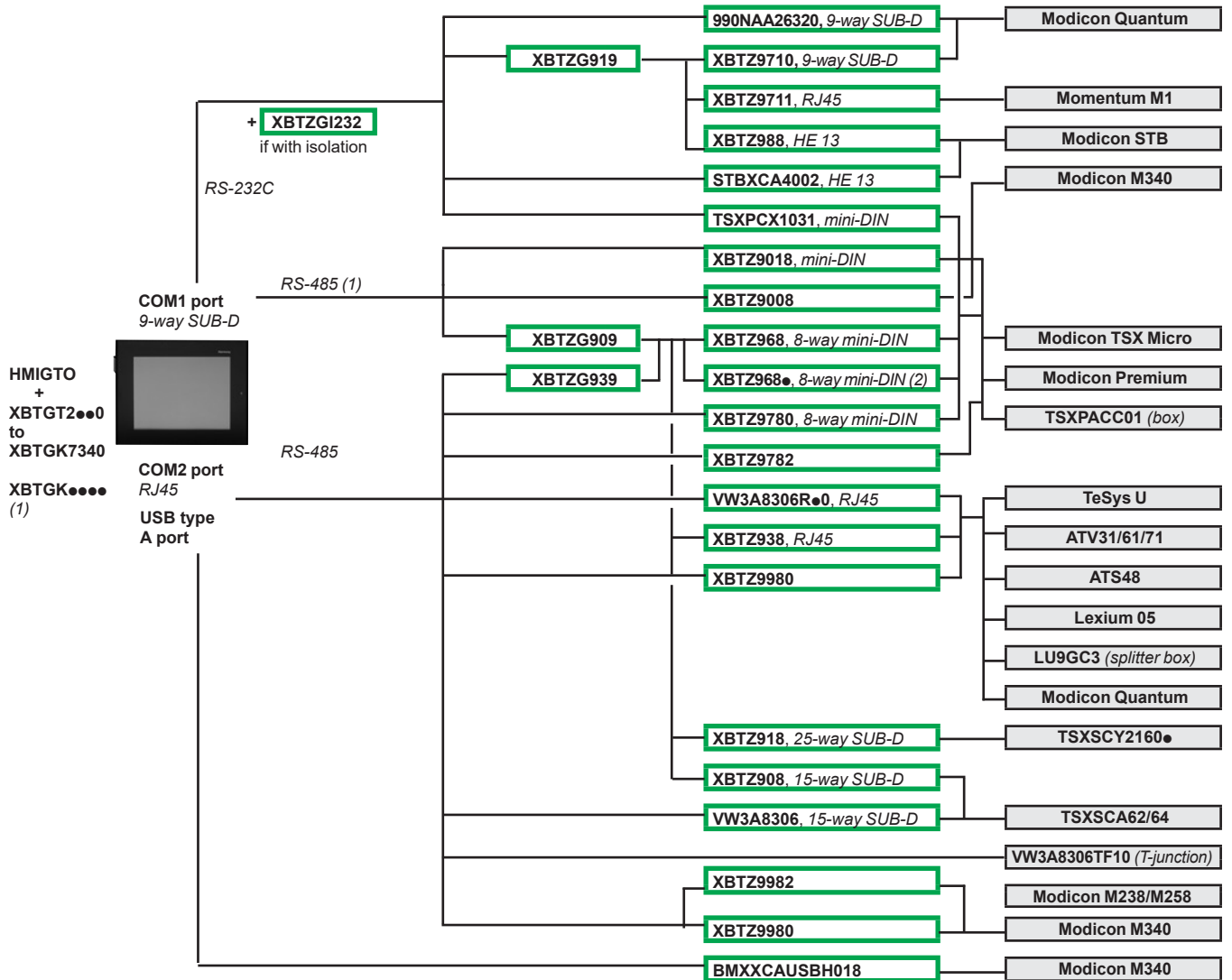


Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Connection system for Harmony GTO

XBTGT2●●0/GT7340/GK●●●● panels, HMIGTO panels (except HMIGTO1310) and Schneider Electric products



(1) RS-485 not available for HMIGTO (COM1).

(2) ● defines the length:

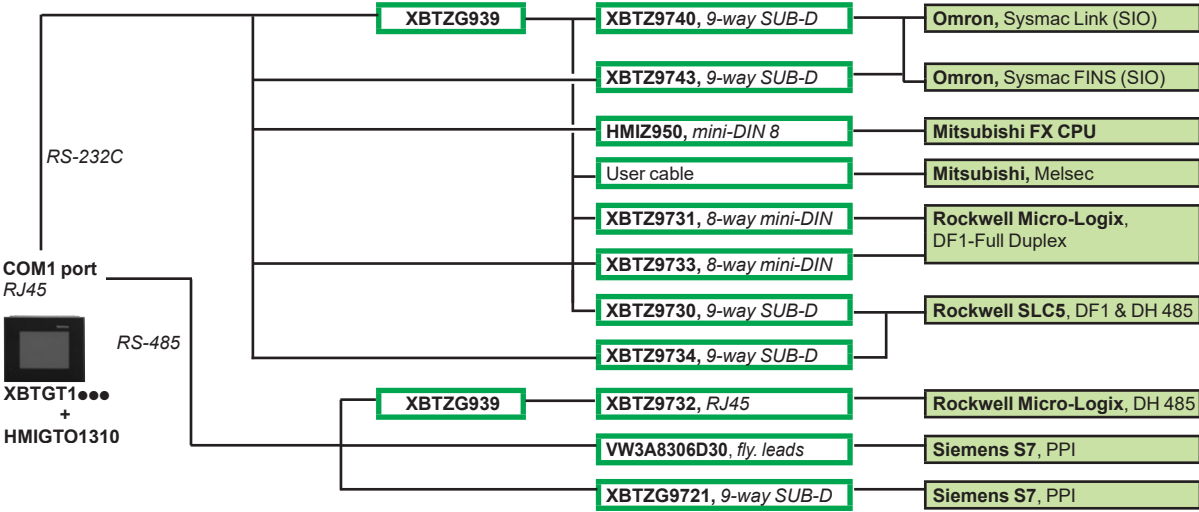
- 0, 2.5 m (elbowed connector)
- 1, 5 m
- 6, 16 m
- 7, 20 m
- 8, 25 m

Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Connection system for Harmony GTO

XBTGT11●5 panels, HMIGTO1310 panels and third party PLCs

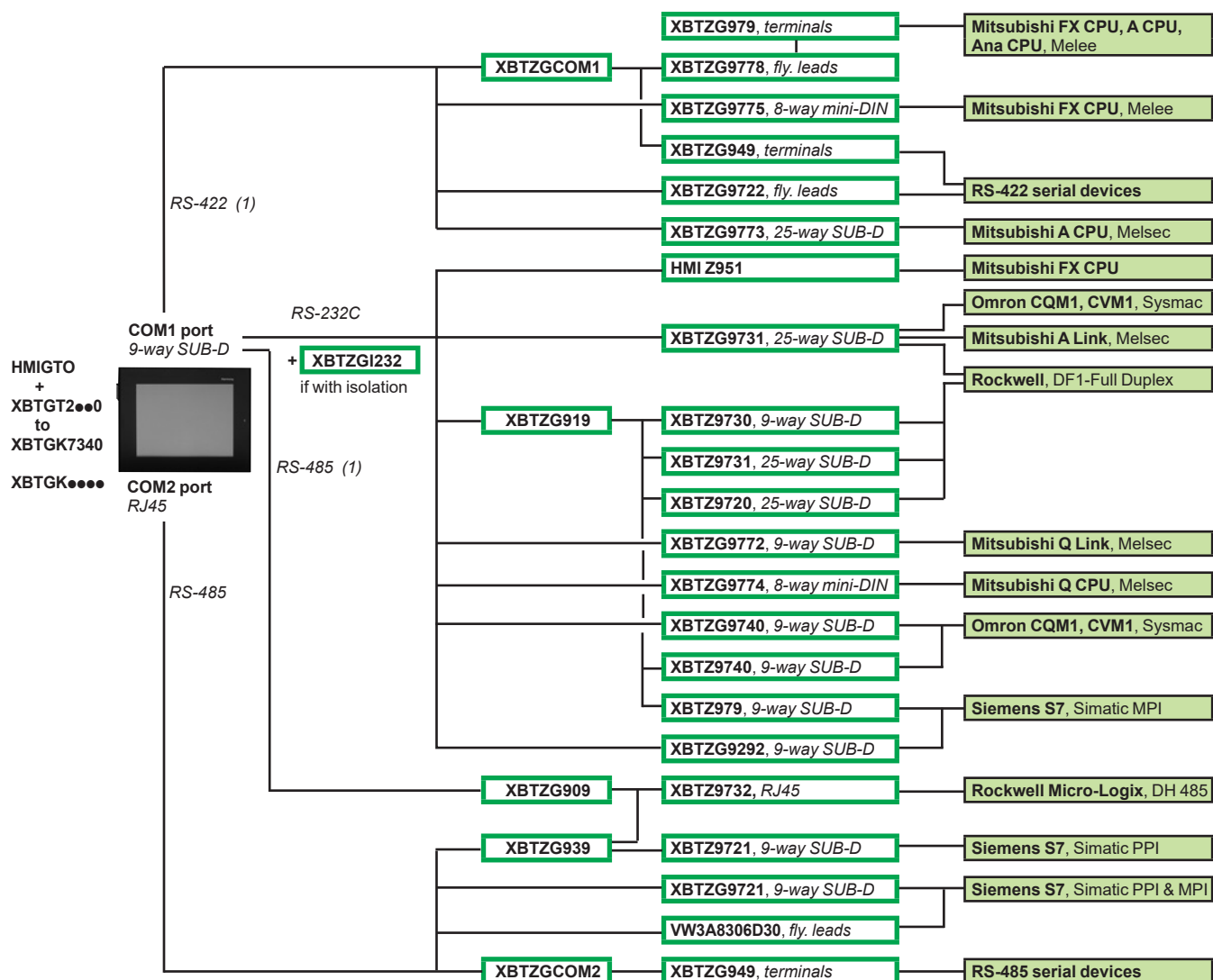


Harmony GTO

Standard and stainless HMI panels with 3.5" to 12.1" screen

Connection system for Harmony GTO

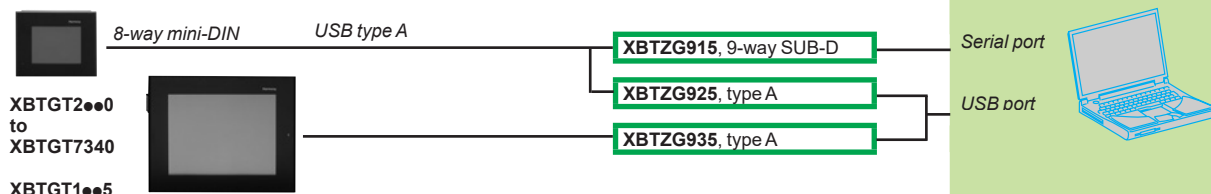
XBTGT2●●0/GT7340/GK●●●● panels, HMIGTO panels (except HMIGTO1310) and third-party PLCs



(1) RS-422 and RS-425 not available on HMIGTO (COM1).

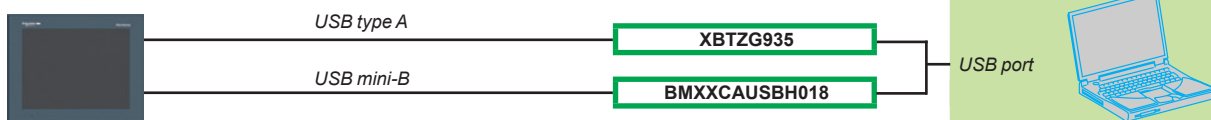
Application transfer from XBTGT panels to PC

XBTGT1100/1130



Application transfer from HMIGTO panels to PC

HMIGTO



4		V	
490NTW00002	18	VW3A8306	18
490NTW00005	18	VW3A8306D30	17
490NTW00012	18	VW3A8306R30	16
490NTW00040	18	VW3A8306TF10	18
490NTW00080	18		
990NAA26320	16	X	
		XBTZ915	15
B		XBTZ988	16
BMXXCAUSBH018	15	XBTZ9710	16
	16	XBTZ9711	16
BMXXCAUSBH045	16	XBTZ9732	17
		XBTZ9780	16
H			18
HMIGTO1300	13	XBTZ9782	16
HMIGTO1310	13	XBTZ9980	16
HMIGTO2300	13	XBTZ9982	16
HMIGTO2310	13	XBTZG919	15
HMIGTO2315	13	XBTZG939	15
HMIGTO3510	13	XBTZG9292	17
HMIGTO4310	13	XBTZG9721	17
HMIGTO5310	13	XBTZG9731	17
HMIGTO5315	13	XBTZG9740	17
HMIGTO6310	13	XBTZG9772	17
HMIGTO6315	13	XBTZG9774	17
HMIZECOV1	14	XBTZGCO4	14
HMIZECOV2	14	XBTZGI232	15
HMIZECOV4	14	XBTZGI485	15
HMIZECOV5	14	XBTZGUMP	18
HMIZECOV6	14	XBTZGUSBB	14
HMIZG51	14		
HMIZG52	14		
HMIZG54	14		
HMIZG55	14		
HMIZG56	14		
HMIZG60	14		
HMIZG62	14		
HMIZG63	14		
HMIZG64	14		
HMIZG65	14		
HMIZG66	14		
HMIZG522	14		
HMIZG552	14		
HMIZG562	14		
HMIZGBAT	14		
HMIZGCLP1	14		
HMIZGFIX	14		
HMIZGFIX2	14		
HMIZGPWS	14		
HMIZGPWS2	14		
HMIZLYGO1	14		
HMIZLYGO3	14		
HMIZSCLP3	14		
HMIZSD4G	14		
HMIZSUSBB	14		
HMIZURS	15		
S			
STBXCA4002	16		
T			
TSXCUSBFIP	18		
TSXPCX1031	16		

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