

Human/Machine Interfaces

Magelis™ GTO Advanced Optimum panels

Catalog

November 2013



How to find the “Automation and Control” products

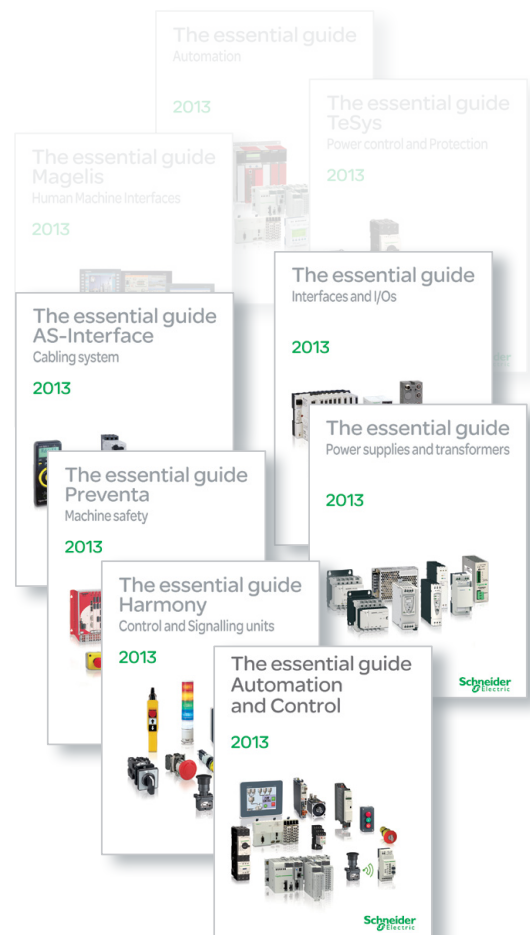
> Catalogs

Complete product ranges



> Essential guides

Selection of the top selling products



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Overview and selection guide

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Magelis™ GTO Overview

■ Presentation

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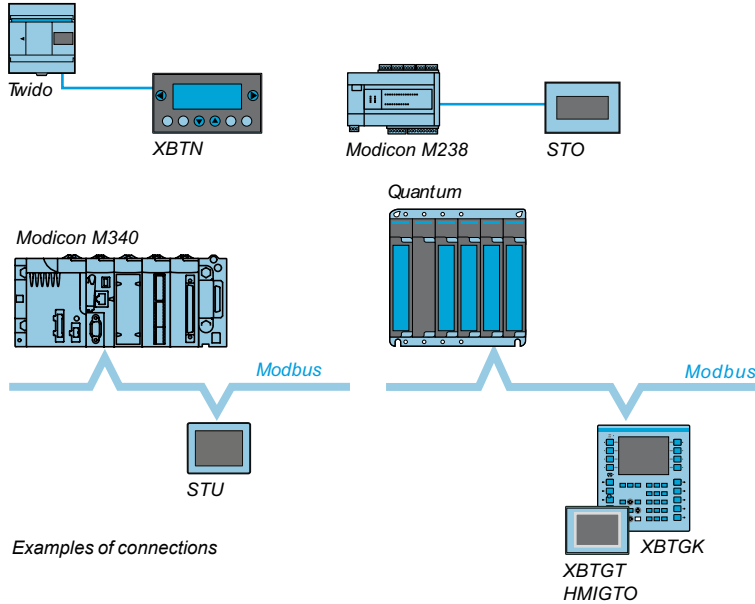


Presentation

Magelis™ operator dialogue terminals communicate with automation system equipment:

- Via serial link
- By means of integration into an Ethernet TCP/IP architecture

Communication via serial link



All Magelis terminals feature an integrated RS 232 C or RS 422/485 asynchronous serial link.

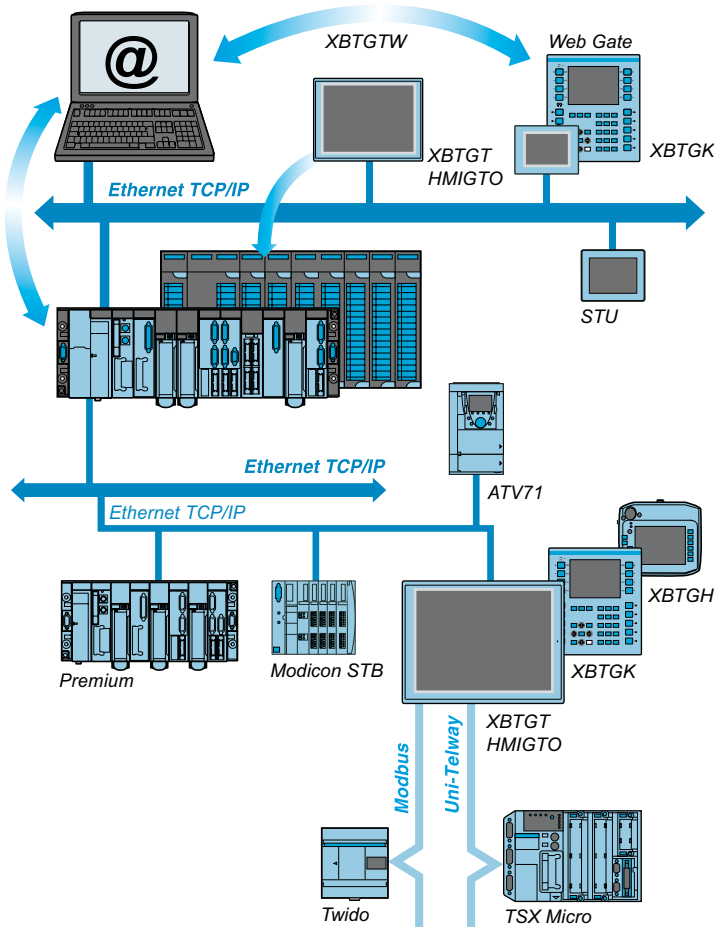
Use of the Uni-TE or Modbus protocol makes it easy to set up communication with Schneider Electric PLCs.

Third-party protocols enable connection to PLCs offered by major manufacturers on the market:

- DF1, DH485 for Allen-Bradley PLCs
- SysmacWay for Omron PLCs
- MPI/PPI for Siemens Simatic S7 PLCs
- Mitsubishi Melsec FX PLC

Presentation (continued)

Integration into an architecture with Ethernet TCP/IP network



Automation platforms provide transparent routing of Uni-TE or Modbus messages from a TCP/IP network to a Uni-TE or Modbus network and vice versa.

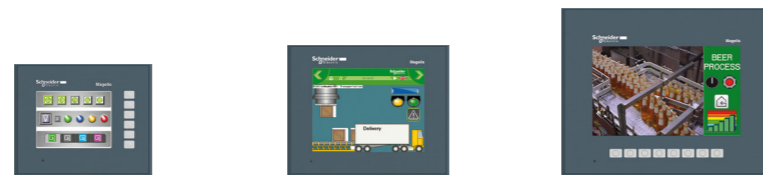
The various services offered for the terminals are:

- **Modbus TCP/IP messaging** (for XBTGK, XBTGH, XBTGTW, XBTGT and HMIGTO, access with Ethernet TCP/IP Modbus protocol)
- **Browse function** with XBTGTW or standard PC
- **Web Gate function:** Diagnostics to remotely control the application
- **FTP server:** Transfer of data files with the terminal
- **Data Sharing function:** Data exchange on Ethernet between 8 terminals (maximum)
- **E-mail function**

Operator dialogue terminals

Magelis™ GTO Optimum Advanced panels

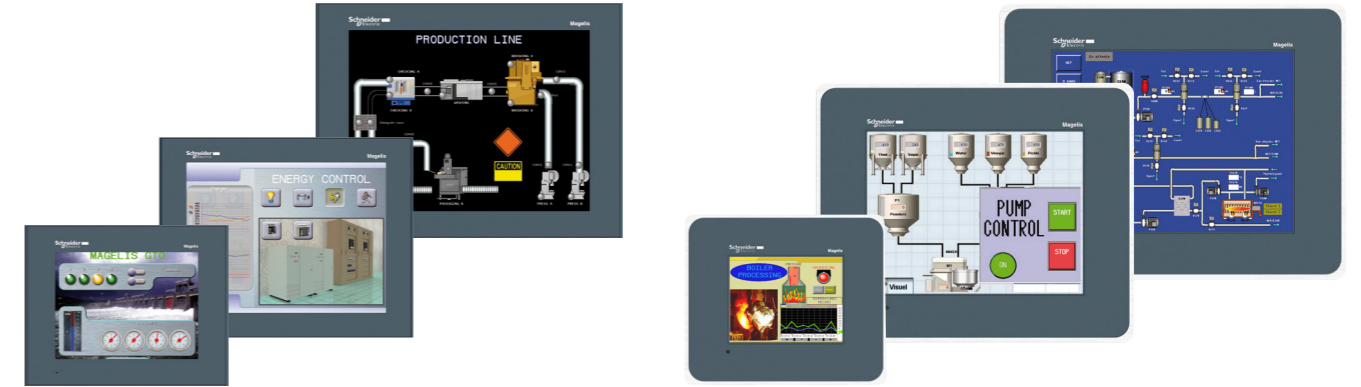
Applications	Display of text messages, graphic objects and synoptic views Control and configuration of data
Type of terminal	Optimum Advanced panels, touch screen
Degree of protection (according to IEC 60529)	IP 65 (IP 67 with addition of a cover)



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	Static function keys	Via touch screen	Via touch screen	Via touch screen
	Dynamic function keys	6 function keys (static or dynamic)	–	8 function keys (static or dynamic)
	Service keys	–	–	–
	Alphanumeric keys	–	–	–
	Applications	64/96 MB Flash EPROM (1)	96 MB Flash EPROM	
Functions	Expansion	–	By 4 GB SD card (except HMIGTO2300)	
	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) (5)			
Operating system	Magelis (333 MHz RISC CPU)			
Type of terminal	HMIGTO1300 HMIGTO1310	HMIGTO2300 HMIGTO2310	HMIGTO3510	
Page	2/11			

(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).
 (5) For more information, please refer to our website www.schneider-electric.com.

Display of text messages, graphic objects and synoptic views Control and configuration of data	Optimum Advanced panels, touch screen	Optimum Advanced 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



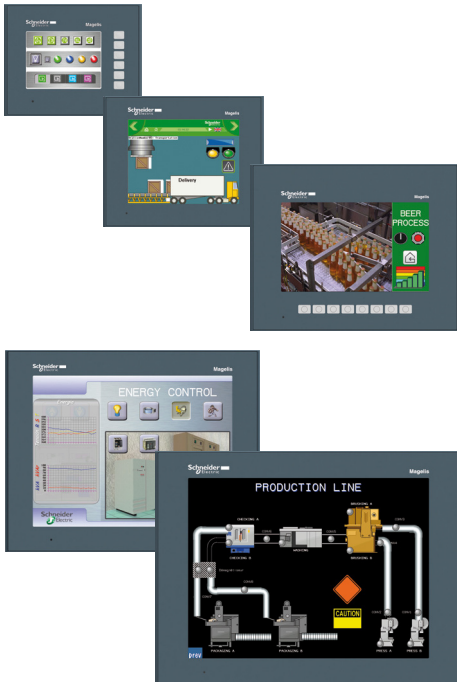
Color TFT LCD, backlit 640 x 480 pixels (VGA)	Color TFT LCD, backlit 640 x 480 pixels (VGA)	Color TFT LCD, backlit 800 x 600 pixels (SVGA)	Color TFT LCD, backlit 320 x 240 pixels (QVGA)	Color TFT LCD, backlit 640 x 480 pixels (VGA)	Color TFT LCD, backlit 800 x 600 pixels (SVGA)
7.5"	10.4"	12.1"	5.7"	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) (5)					
Magelis (333 MHz RISC CPU)					
HMIGTO4310	HMIGTO5310	HMIGTO6310	HMIGTO2315	HMIGTO5315	HMIGTO6315
2/11					

(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).
 (5) For more information, please refer to our website www.schneider-electric.com.

Magelis™ GTO Advanced Optimum panels

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2



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

Presentation

The Advanced Optimum panels (Magelis GTO) touch screen panels offer includes:

- A range of 8 color touch screen terminals (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

Magelis GTO Advanced 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, bar code readers, etc.

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

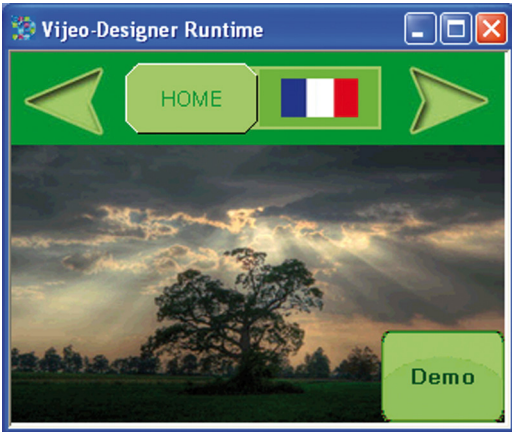
Environment

The Magelis GTO optimized 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 2/12)
 - 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.



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



Display of a video sequence

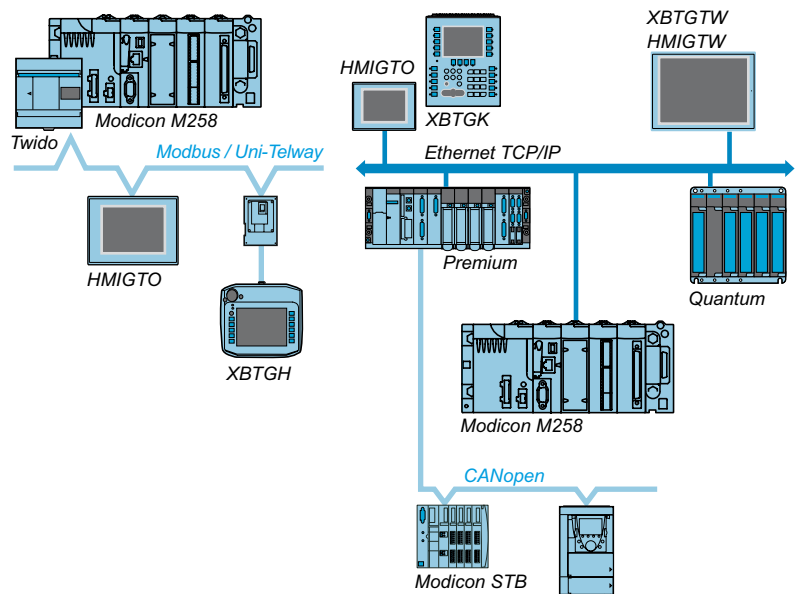
Configuration

Like all the other Magelis Advanced panels, Magelis GTO Advanced Optimum panels can be configured using Vijeo Designer software in a Windows XP and Windows 7 environment.

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

The Magelis GTO range is compatible with Vijeo Designer version V6.1 or later. For more information on Vijeo Designer, please refer to our website www.schneider-electric.com.

Communication



Advanced Optimum 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 terminals

The Magelis™ 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 terminals.

The Magelis USB accessories supported by Magelis GTO include:

- Harmony XVGU USB tower light
- Harmony XB5S biometric USB switch
- Magelis HMIZ illuminated USB switch

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

Functions

- Advanced Optimum 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 printers, barcode readers

Architectures and communication

The Magelis GTO Optimum range is perfectly integrated in the MachineStruxure™ (1) automation solutions offer, which helps 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 a single software package: SoMachine. SoMachine allows the development, commissioning and programming of machines. SoMachine version 3.1 allows programming of terminals in the Magelis GTO range using Vijeo Designer software.

Advanced Optimum panels have been designed for PlantStruxure™ (2) and MachineStruxure™ (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 Magelis Advanced panels to browse HTML pages and send e-mails.

(1) For more information on the "MachineStruxure™" concept, please refer to "Automation solutions for industrial machines" catalog.
 (2) For more information on the "PlantStruxure™" concept, please refer to our website www.schneider-electric.com/Solutions/Process and Machines Management.

MachineStruxure™



SoMachine software platform



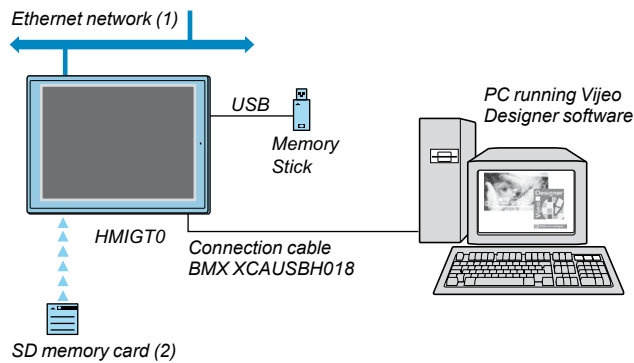
Vijeo Designer configuration software

PlantStruxure™

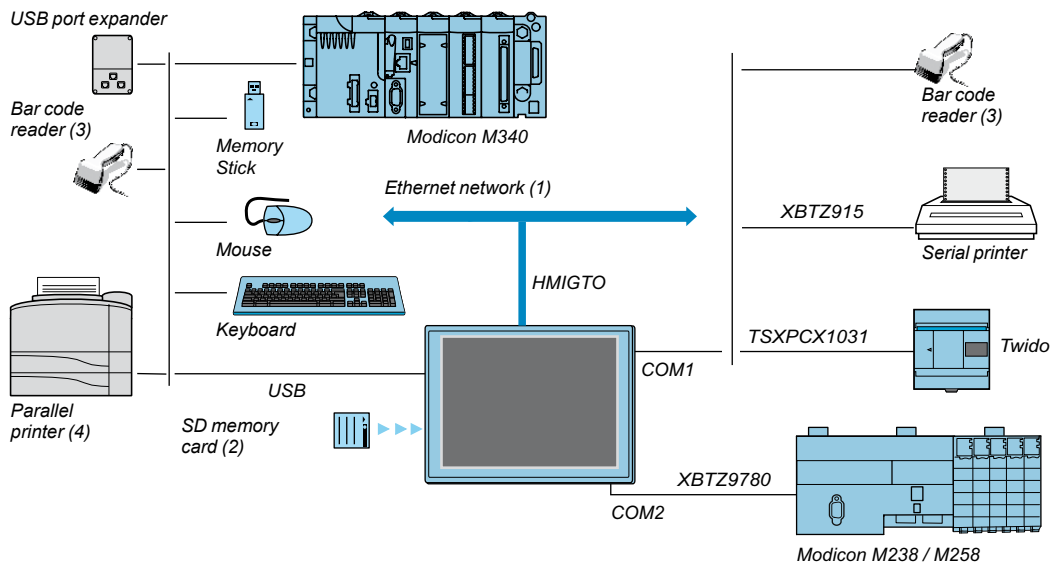
Panel operating modes

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

Edit mode



Operating mode

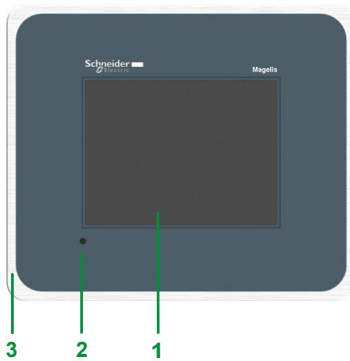
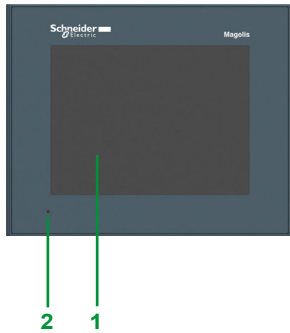


- (1) With HMIGTO●●1●.
- (2) Memory card, except HMIGTO 1300/1310/2300.
- (3) Validated with DataLogic Gryphon bar code reader.
- (4) Validated with Hewlett Packard printer via USB/PIO converter.

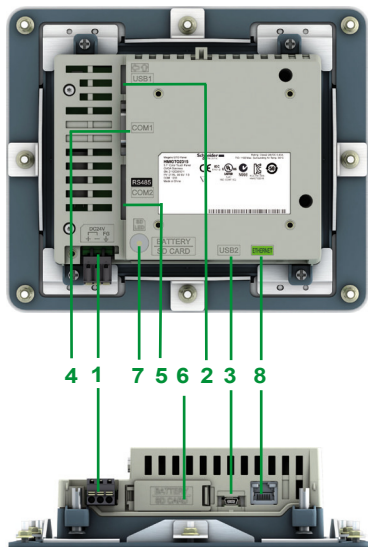
Operator dialogue terminals

Magelis™ GTO Advanced Optimum panels
Panels with 5.7" touch screen, standard and
Stainless Steel version

Front



Rear HMIGTO2315



Underside HMIGTO2315

Description

Magelis Advanced panels HMIGTO2300/2310 (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:

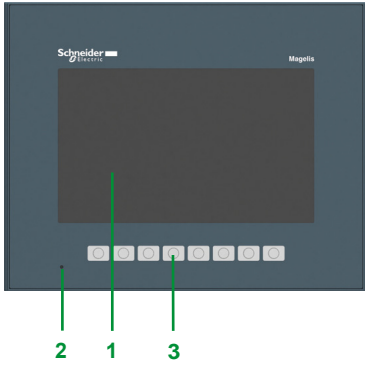
- 1 A removable screw terminal block for 24 V $\bar{\text{---}}$ power supply.
- 2 A type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication.
- 3 A mini-B USB connector for application transfer.
- 4 A 9-way male SUB-D connector for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

2

Front

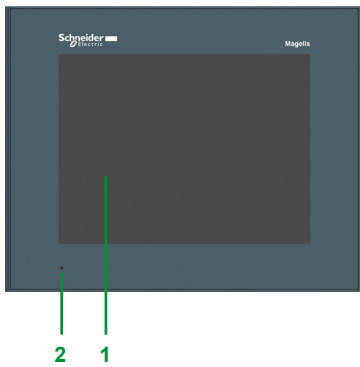


Description

Magelis Advanced panels HMIGTO3510/4310

The HMIGTO3510 panel has the following features on the front:

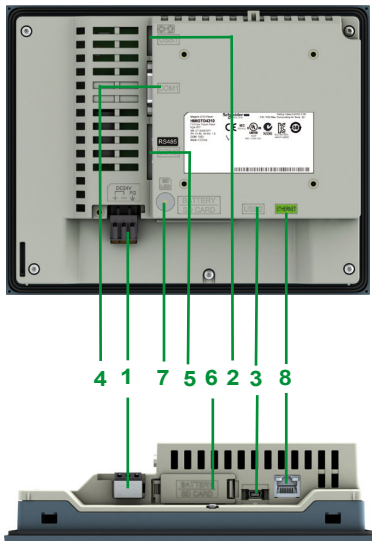
- 1 A touch screen for displaying synoptic views (7.0" Wide color TFT)
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode.
- 3 Eight function keys (F1, F2, F3, F4, F5, F6, F7 and F8).



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.

Rear



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

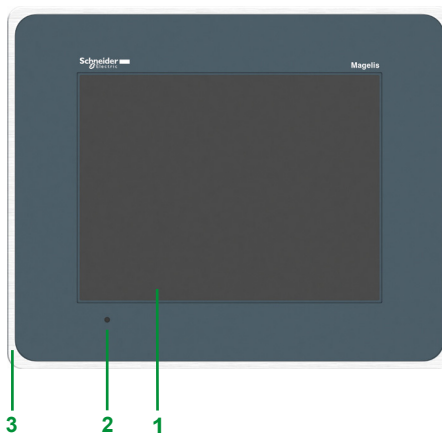
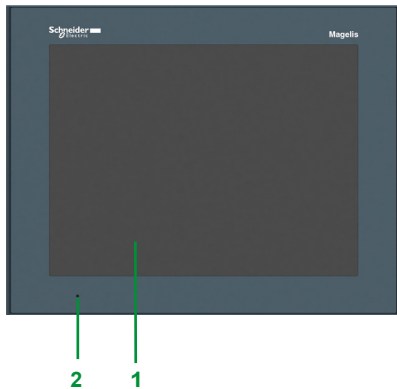
- 1 A removable screw terminal block for 24 V $\bar{\text{---}}$ power supply.
- 2 A type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication.
- 3 A mini-B USB connector for application transfer.
- 4 A 9-way male SUB-D connector for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

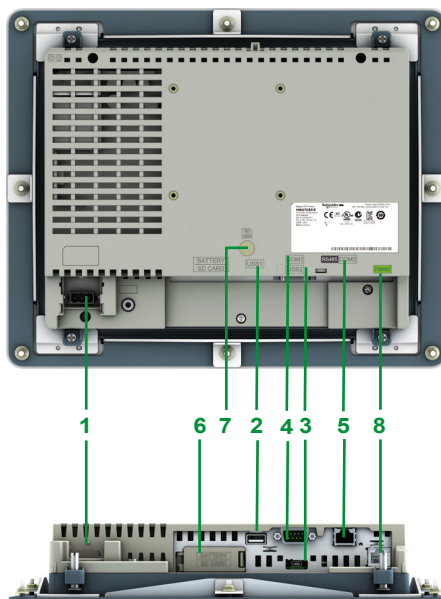
Operator dialogue terminals

Magelis™ GTO Advanced Optimum panels
Panels with 10.4" touch screen, standard and
Stainless Steel version

Front



Rear



Underside

Description

Magelis Advanced 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 terminals 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.

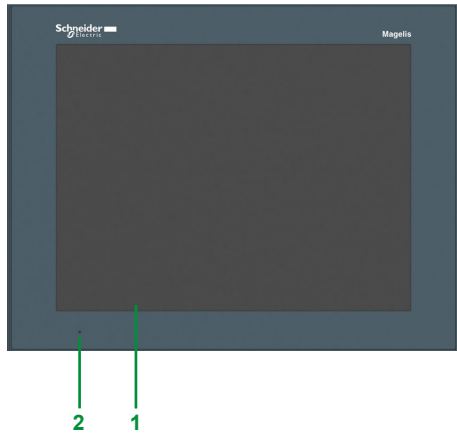
Operator dialogue terminals

Magelis™ GTO Advanced Optimum panels

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

2

Front

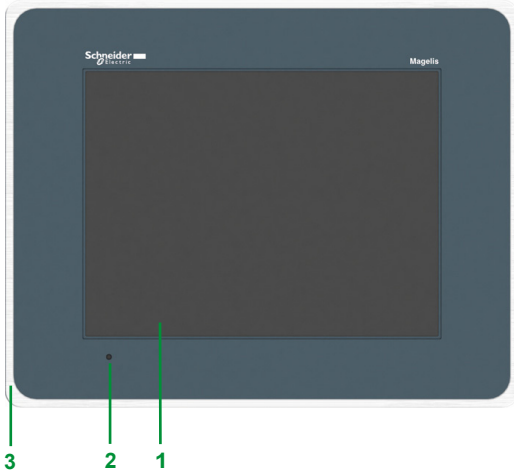


Description

Magelis Advanced panels HMIGTO6310 (standard version) and HMIGTO6315 (Stainless Steel version)

The HMIGTO6310 panel has the following features on the front:

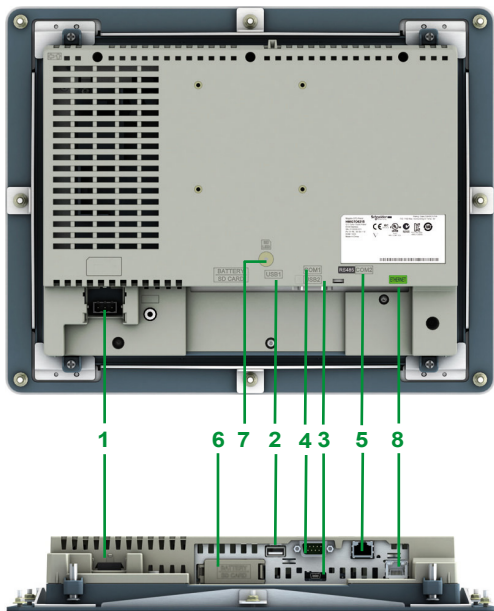
- 1 A touch screen for displaying synoptic views (12.1" color TFT).
- 2 A multicolor indicator (green, orange and red) showing the panel's operating mode.



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 terminals have the following features on the rear and underside:

- 1 A removable screw terminal block for the 24 V $\overline{\text{DC}}$ 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

Operator dialogue terminals

Magelis™ GTO Advanced Optimum panels

Panels with 3.5" to 12.1" touch screen



HMIGTO13●●



HMIGTO23●●



HMIGTO3510



HMIGTO4310



HMIGTO6310



HMIGTO2315



HMIGTO5315

Optimum 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
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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
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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
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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
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Optimum 24 V DC terminals 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
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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
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(1) Terminals supplied with fixing kit (screw clips), locking device for USB connectors and instruction sheet. Setup documentation for Magelis GTO terminals is included in electronic format with Vijeo Designer configuration software, refer to our website www.schneider-electric.com.

(2) Memory expansion possible with 4 GB SD card HMI ZSD4G, see accessories page 2/13.

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

Separate components

Description	Characteristics	Compatible with terminals	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	–
Plastic covers for harsh environments (IP 67 protection)	–	HMIGTO1300/1310	HMIZECOV1	–
		HMIGTO2300/2310	HMIZECOV2	–
		HMIGTO3510/4310	HMIZECOV4	–
		HMIGTO5310/5315	HMIZECOV5	–
		HMIGTO6310/6315	HMIZECOV6	–

Description	Description	Length m.	Reference	Weight kg
Mechanical adaptors for substitution of terminals of the Magelis range	From XBTGT5230 to HMIGTO5310	–	XBTZGCO4	–
Remote USB port for terminals HMIGTO	Enables the USB mini-B port to be located remotely on the rear of the XB Tor HMIGTO terminal on a panel or enclosure door (Ø 21 mm fixing device)	1	XBTZGUSBB	–



XBTZGCO4



XBTZGUSBB

Remote USB port for HMIGTO panel	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	HMIZUSBB	–
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Spare parts

Description	For use with terminals	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 terminals	HMIZGFIX	0.030
	8 nuts and 4 L-shaped brackets, supplied with all HMIGTO●●●5 terminals	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 terminals	HMIGTO1300/1310	HMIZLYGO1	–
	HMIGTO3510	HMIZLYGO3	–
Battery	HMIGTO except HMIGTO1300/1310/2300	HMIZGBAT	–

Cables for application transfer - Terminal to PC

Type of terminal (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 terminal (via its COM1 port).

Description	Type of connector (automation product end)	Physical link (XBTor HMIGTO terminal end)	Length m	Reference	Weight kg
Adaptor for HMIGTO	25-way SUB-D connector	RJ 45 connector	0.2	XBTZG939	–
Adaptors for HMIGTO (COM1 port)	25-way SUB-D connector	9-way SUB-D connector, RS 232C	0.2	XBTZG919	–

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	–



XBTZGI485

(1) Cable included (depending on model) with Vijeo Designer software packages (refer to HMI Software catalog).

(2) Parallel printer (see page 2/5).

(3) Male connector with XBTZGI232, female connector with XBTZGI485.



TSXPCX1031



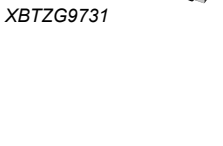

Cables for connecting Magelis terminals to other Schneider Electric products

Automation product type	Type of connector (automation product end)	Protocol	Type of terminal	Link	On port	Length m	Reference	Weight kg	
Twido, Nano, Modicon TSX Micro, Modicon Premium	Terminal port, 8-way female mini-DIN	Uni-TE (V1/V2), Modbus	HMIGTO	RS 485	COM1	2.5	XBTZ9780	0.180	
					COM2	10	XBTZ9782	–	
			HMIGTO	RS 232	COM1	2.5	TSXPCX1031	–	
Modicon M340 Modicon M238 Modicon M258	RJ45	Modbus	HMIGTO	RS 485	COM1	2.5	XBTZ9980	0.230	
					COM2	10	XBTZ9982	–	
	USB Mini-B	Terminal port	HMIGTO	USB	USB type A	1.8	BMXXCAUSBH018	0.230	
						4.5	BMXXCAUSBH045	–	
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	3	VW3A8306R30	0.060	
						COM2	2.5	XBTZ9980	–
							10	XBTZ9982	–


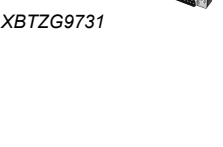
(1) Adaptor **XBTZG919** to be used with cables with “ + (1) ” after the reference.

Cables and adaptors for connecting Magelis terminals to third-party PLCs


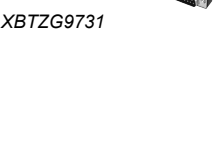
Mitsubishi, Melsec PLCs

Description Driver used	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM1)	Length m	Reference	Weight kg
 Connection cable, Q Link (SIO)	HMIGTO	9-way SUB-D 9-way SUB-D	RS 232C	5	XBTZG9772	–
 Connection cable, Q CPU (SIO)	HMIGTO	9-way SUB-D mini-DIN	RS 232C	5	XBTZG9774	–
 Connection cable, A Link (SIO)	HMIGTO	9-way SUB-D 25-way SUB-D	RS 232C	5	XBTZG9731	–
 Connection cable, FX (CPU)	HMIGTO	9-way SUB-D mini-DIN	RS 232/ RS 422	5	HMIZ951 ▲	–


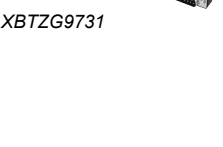
Omron, Sysmac PLCs

Description Driver used	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM1)	Length m	Reference	Weight kg
 Connection cables, Link (SIO)	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 FINS (SIO)	HMIGTO	9-way SUB-D 9-way SUB-D	RS 232C	5	XBTZG9740	–

Rockwell Automation, Allen-Bradley PLCs

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

Siemens, Simatic PLCs

Description Driver used	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link	Length m	Reference	Weight kg
 Connection cable, PPI, S7 200	HMIGTO	RJ45/9-way SUB-D	RS 485 (COM2)	2.5	XBTZG9721	–
 Connection cables, MPI port, S7 300/400	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 2/15).

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

▲ Available: 3rd quarter 2012

Presentation:
page 2/2

Description:
page 2/6

Schemes:
page 2/22

Substitution:
page 2/21

2



TSXSCA62



TSXPACC01



TSXSCA64



VW3A8306TF10

Connection of Magelis terminals via serial links and Ethernet network

Type of bus/network	Tap-off units	Connector (tap-off unit side)	Terminal 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 Magelis terminals to fieldbuses

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

Equivalent product table between XBTGT terminals and HMIGTO terminals

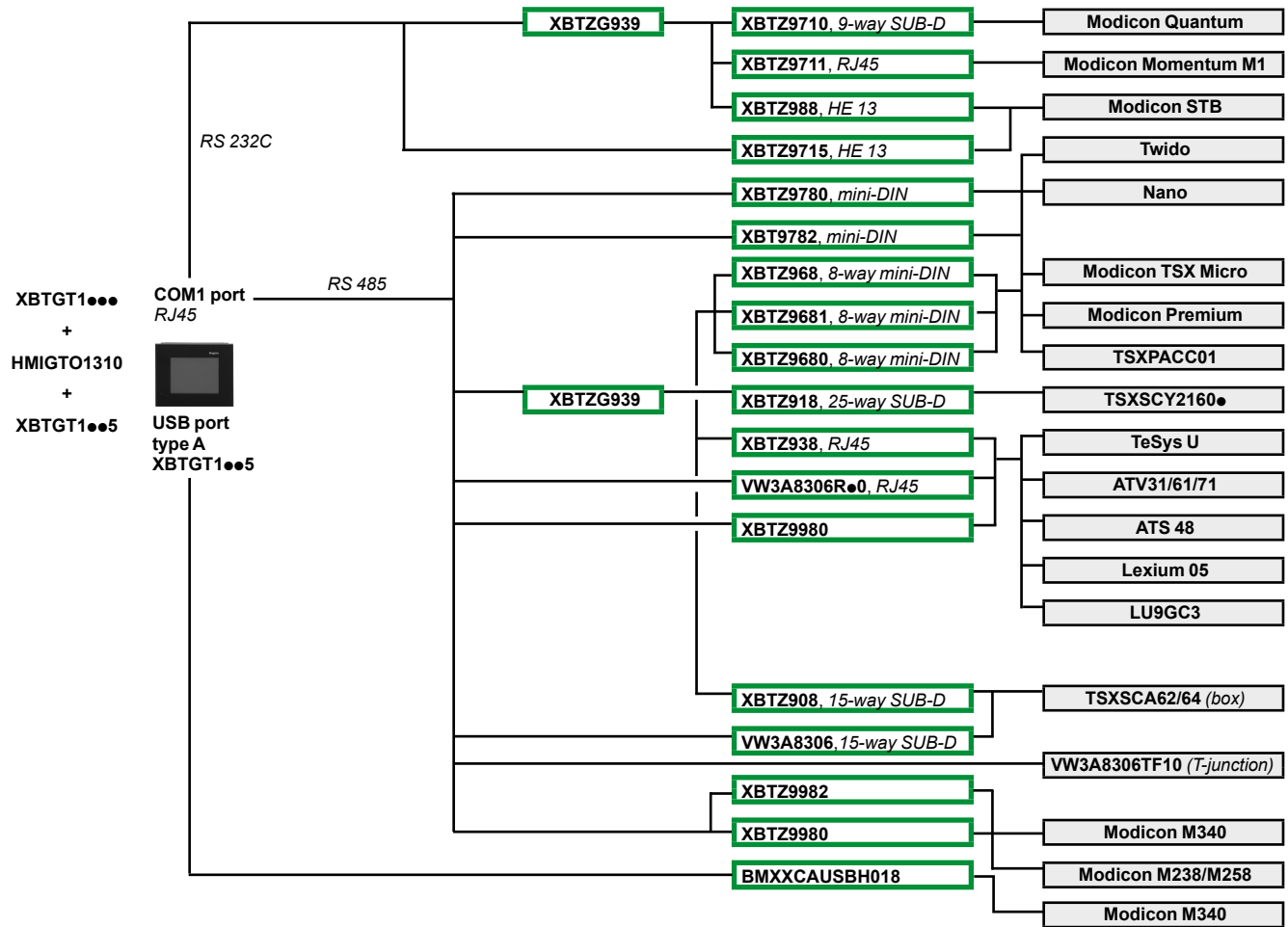
Old range XBTGT	New range HMIGTO <i>Requires Vijeo Designer ≥ V6.1</i>	Mechanical adaptor
XBTGT1100	HMIGTO1300	–
XBTGT1130	HMIGTO1310	–
XBTGT1105	HMIGTO1300	–
XBTGT1135	HMIGTO1310	–
XBTGT1335	HMIGTO1310	–
XBTGT2110	HMIGTO2300	–
XBTGT2120	HMIGTO2310	–
XBTGT2130	HMIGTO2310	–
XBTGT2220	HMIGTO2310	–
XBTGT2330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

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

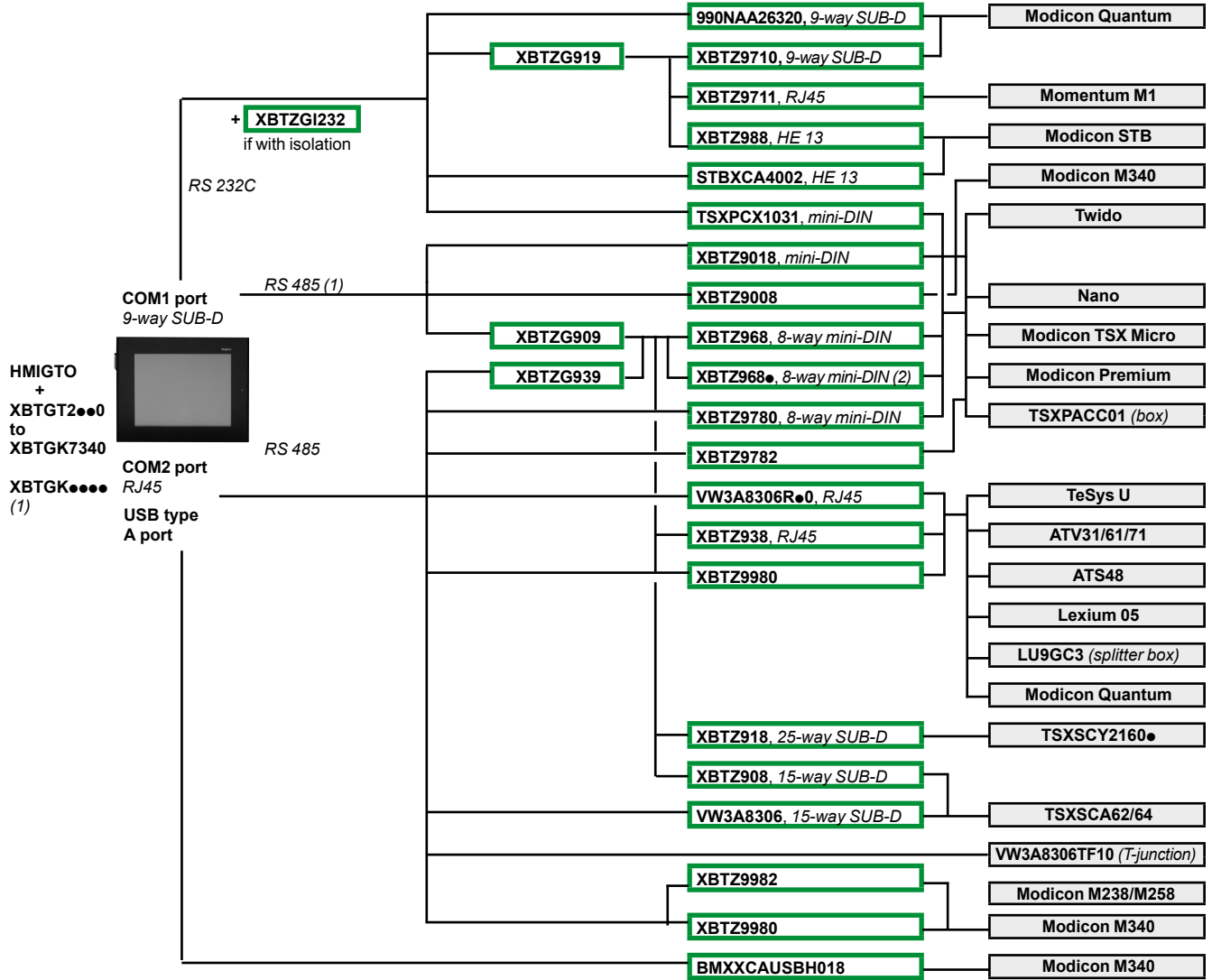
- connection to the Profibus DP and Device Net fieldbuses is not possible,
- a combined RS232/RS422 serial link is not possible with COM1,
- there is no "alarm" output or "loudspeaker" output in the current version of the Optimum range.

2

XBTGT11●5 terminals, HMIGTO1310 terminals and Schneider Electric products



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



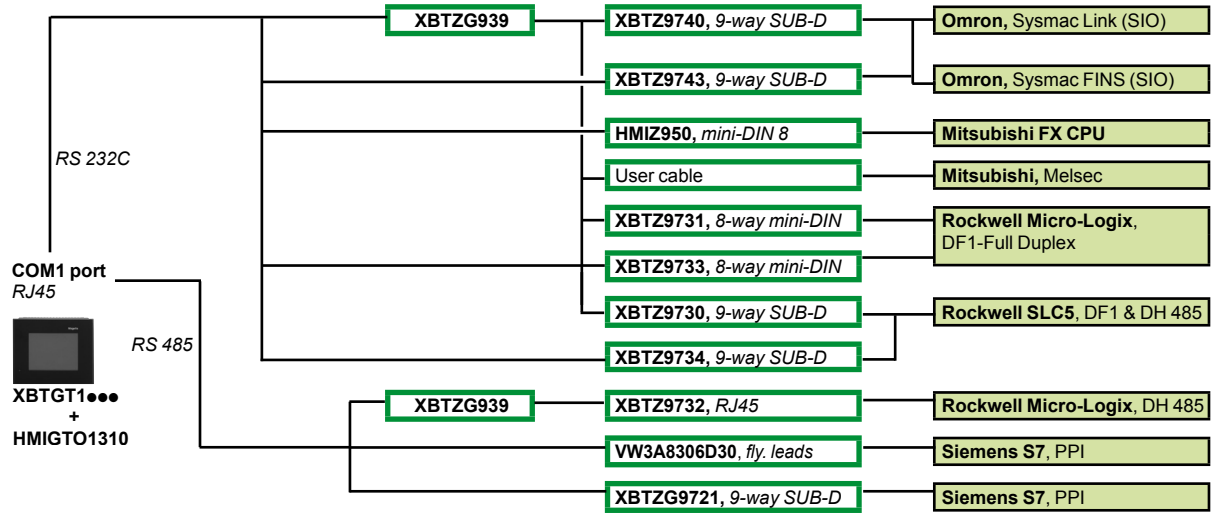
(1) RS485 not available for HMIGTO (COM1).

(2) ● defines the length:

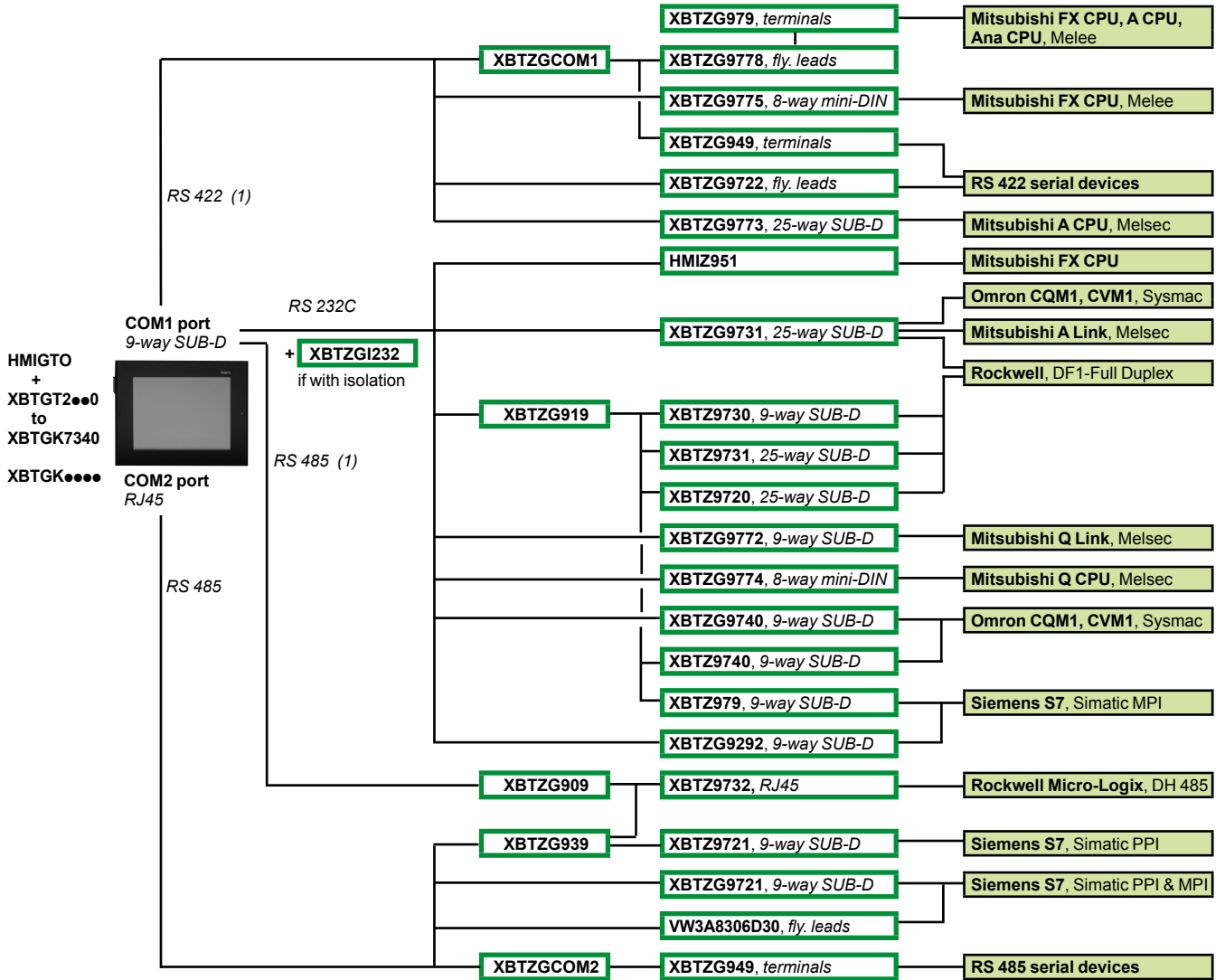
- 0, 2.5 m (elbowed connector)
- 1, 5 m
- 6, 16 m
- 7, 20 m
- 8, 25 m

2

XBTGT11●5 terminals, HMIGTO1310 terminals and third party PLCs

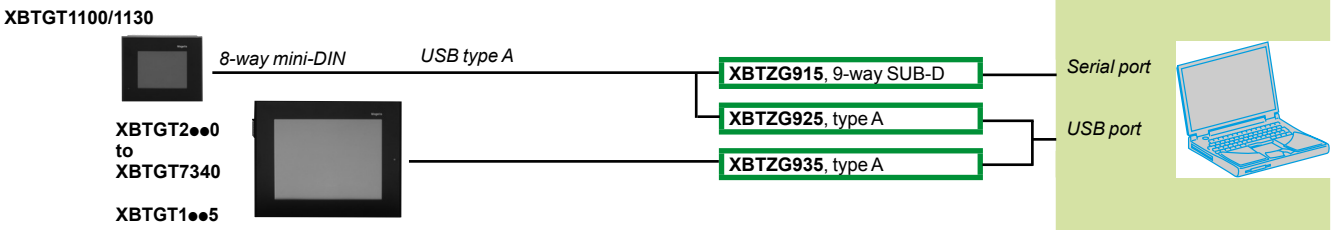


XBTGT2●●0/GT7340/GK●●●● terminals, HMIGTO terminals (except HMIGTO1310) and third-party PLCs

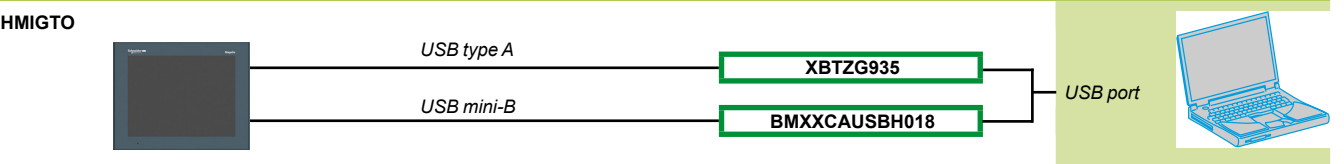


(1) RS 422 and RS 425 not available on HMIGTO (COM1).

Application transfer from XBTGT terminals to PC



Application transfer from HMIGTO terminals to PC



- **How to find products?**
 - Search, visualize, and download *page 3/2*
 - Access product references with adapted tools *page 3/4*
 - Compare, select, and compile *page 3/6*
 - Check the product status, design your equipment *page 3/7*
- **Product reference index**..... *page 3/8*

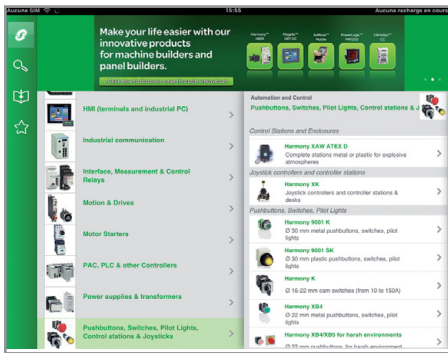
Search, visualize, and download

Use your tablet or your PC to quickly access detailed and comprehensive information on our products

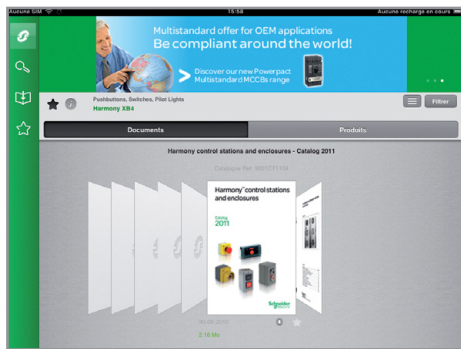


Tablets

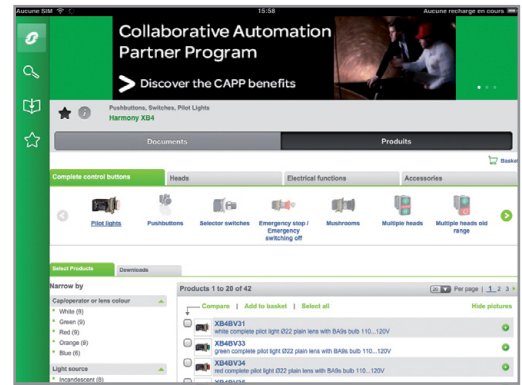
Application name: "Automation Library by Schneider Electric"



Product ranges displayed by function



Dynamic catalogs (hyperlinks, video, ...)

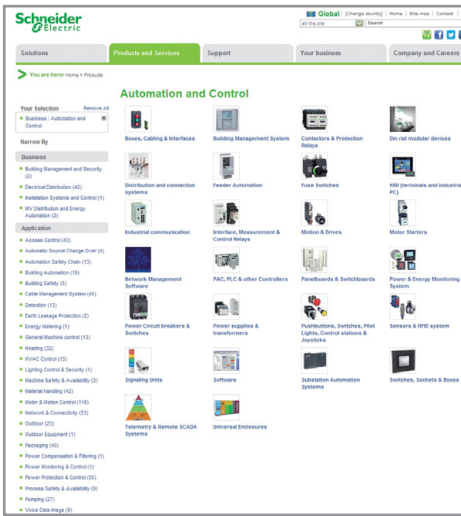


Product selector: dynamic filters to get easily your part number

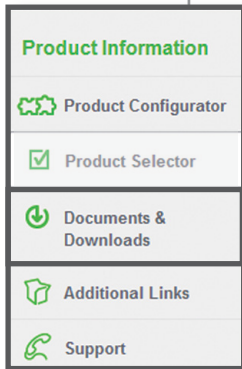
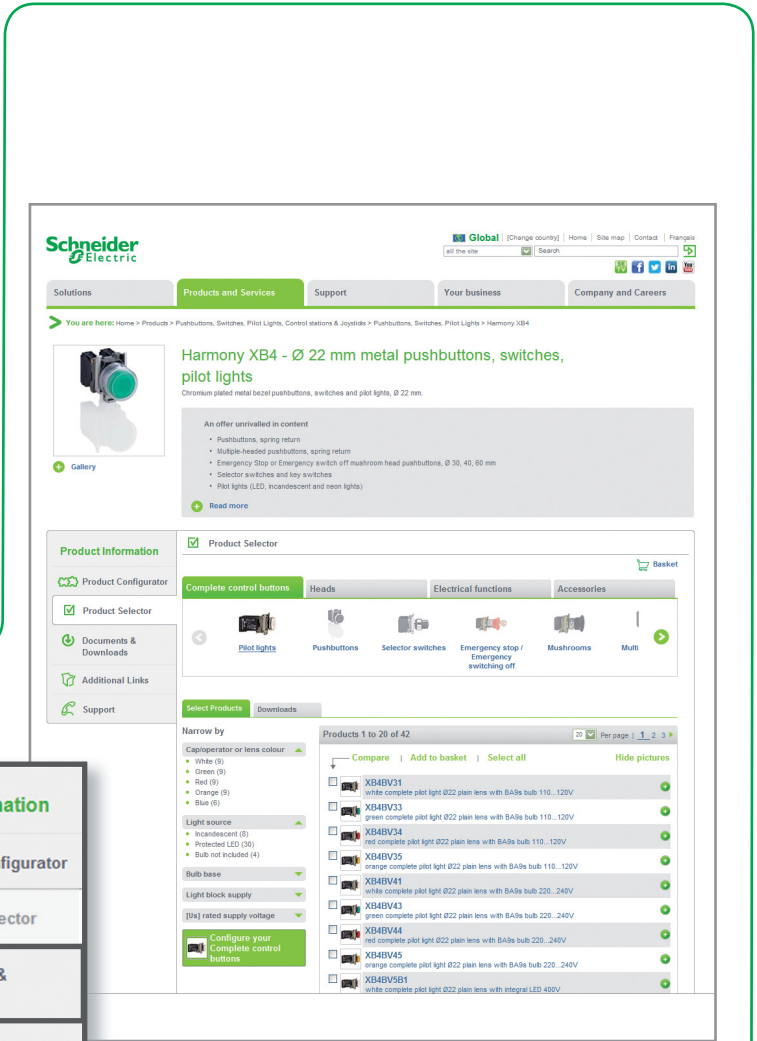


Personal computer

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Product ranges displayed by function



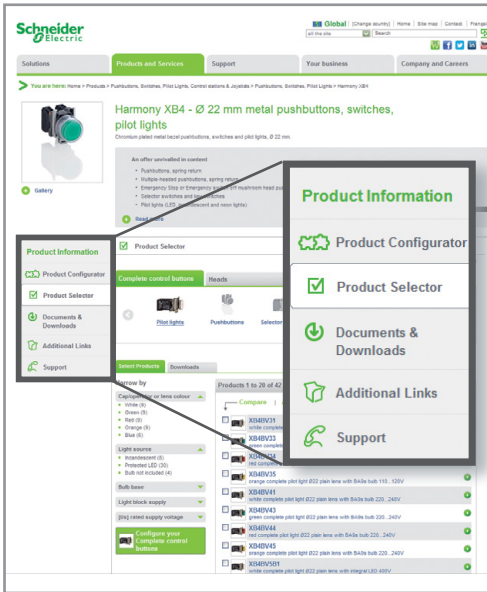
Dynamic catalogs (hyperlinks, video, ...)

Product selector: dynamic filters to get easily your part number

Access product references with adapted tools

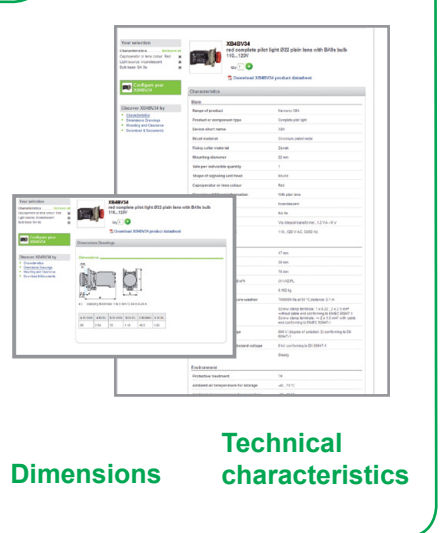
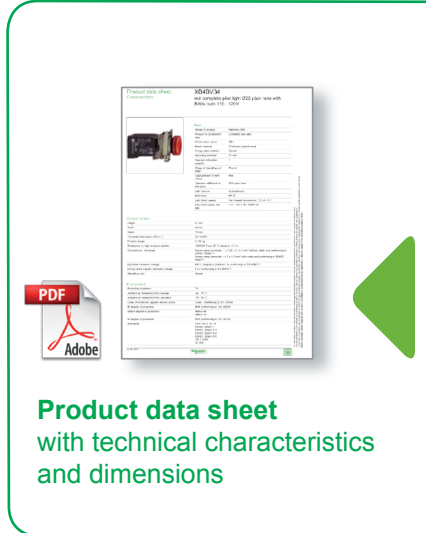
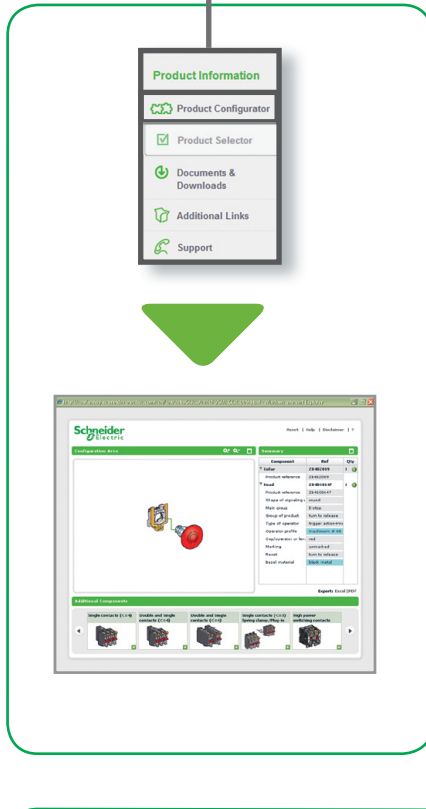


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Graphic product configurator
Select the right product with just a few clicks

Dynamic product selector
Visualize product characteristics and dimensions



Product data sheet
with technical characteristics
and dimensions

Dimensions

Technical characteristics

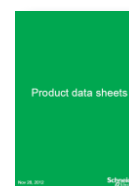
Compare, select, and compile



Path: www.schneider-electric.com > **Products and Services** > Automation and control > ... > Harmony XB4*

Compare technical characteristics

Select and store your products into the basket



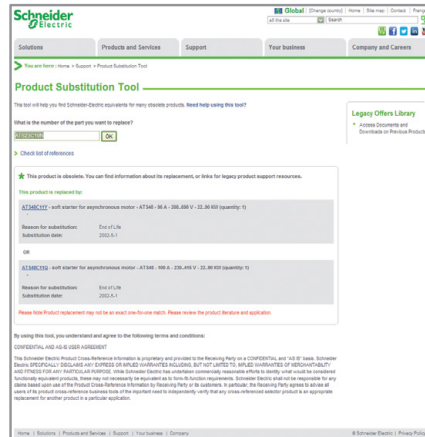
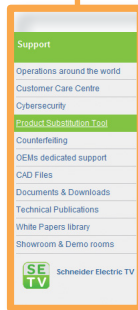
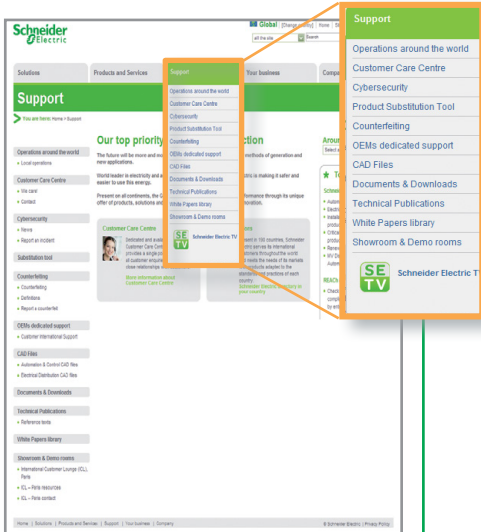
Compile all data sheets in a unique document

* Example of research on a product

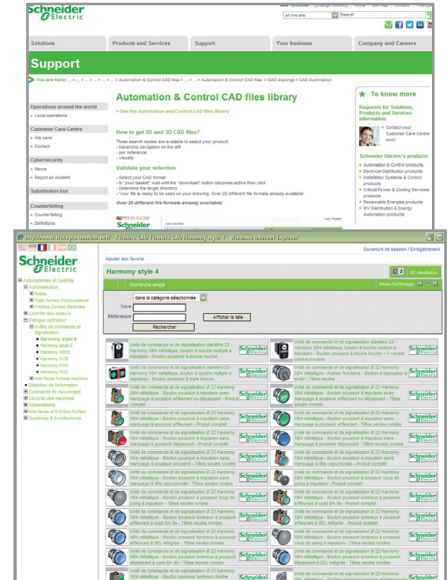
Check the product status, design your equipment



Path: www.schneider-electric.com > **Support** > Product Substitution Tool
 Path: www.schneider-electric.com > **Support** > CAD files



Product status:
 indicate whether the product is still commercialized. Otherwise, the tool suggests a product substitution.



CAD files:
 available in various formats they will be easily integrated into your installation design software.

Please note that references to products and services are just examples.

490NTW00002	2/19	HMIZSUSBB	2/13
490NTW00005	2/19	HMIZURS	2/15
490NTW00012	2/19		
490NTW00040	2/19	S	
490NTW00080	2/19	STBXCA4002	2/16
990NAA26320	2/16	T	
B		TSXCUSBFIP	2/20
BMXXCAUSBH018	2/15	TSXPCX1031	2/16
	2/16	V	
BMXXCAUSBH045	2/16	VW3A8306	2/19
H		VW3A8306D30	2/18
HMIGTO1300	2/11	VW3A8306R30	2/16
HMIGTO1310	2/11	VW3A8306TF10	2/19
HMIGTO2300	2/11	X	
HMIGTO2310	2/11	XBTZ915	2/15
HMIGTO2315	2/11	XBTZ988	2/16
HMIGTO3510	2/11	XBTZ9710	2/16
HMIGTO4310	2/11	XBTZ9711	2/16
HMIGTO5310	2/11	XBTZ9732	2/18
HMIGTO5315	2/11	XBTZ9780	2/16
HMIGTO6310	2/11		2/19
HMIGTO6315	2/11	XBTZ9782	2/16
HMIZ951	2/17	XBTZ9980	2/16
HMIZECOV1	2/12	XBTZ9982	2/16
HMIZECOV2	2/12	XBTZG919	2/15
HMIZECOV4	2/12	XBTZG939	2/15
HMIZECOV5	2/12	XBTZG9292	2/18
HMIZECOV6	2/12	XBTZG9721	2/18
HMIZG51	2/14	XBTZG9731	2/17
HMIZG52	2/14		2/18
HMIZG54	2/14	XBTZG9740	2/17
HMIZG55	2/14	XBTZG9772	2/17
HMIZG56	2/14	XBTZG9774	2/17
HMIZG60	2/12	XBTZGCO4	2/13
HMIZG62	2/12	XBTZGI232	2/15
HMIZG63	2/12	XBTZGI485	2/15
HMIZG64	2/12	XBTZGUMP	2/20
HMIZG65	2/12	XBTZGUSBB	2/13
HMIZG66	2/12		
HMIZG522	2/14		
HMIZG552	2/14		
HMIZG562	2/14		
HMIZGBAT	2/14		
HMIZGCLP1	2/14		
HMIZGFIX	2/14		
HMIZGFIX2	2/14		
HMIZGPWS	2/14		
HMIZGPWS2	2/14		
HMIZLYGO1	2/14		
HMIZLYGO3	2/14		
HMIZSCLP3	2/14		
HMIZSD4G	2/12		

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