

# Human/Machine Interface

Magelis™ XBTGH Advanced hand-held panels

Catalog

February 2015



# General contents

## Magelis™ XBTGH Advanced hand-held panels

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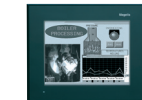
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# Operator dialogue terminals

## Advanced touch panels

### Magelis™ GT

<b>Applications</b>	Display of text messages, graphic objects and synoptic views Control and configuration of data	
<b>Type of terminal</b>	Advanced touch panels	
<b>Display</b>	Type	Backlit color STN LCD or backlit color TFT LCD (320 x 240 pixels) or (640 x 480 pixels) (3)
	Capacity	5.7" (color)
<b>Data entry</b>	Via touch screen	
	Static function keys	–
	Dynamic function keys	–
	Service keys	–
	Alphanumeric keys	–
<b>Memory capacity</b>	Applications	16 MB Flash EPROM (3)
	Expansion	32 MB Flash EPROM By means of 128 MB, 256 MB, 512 MB, 1 GB or 2 GB CF card (except XBT GT2110)
<b>Functions</b>	Maximum number of pages	Limited by capacity of internal Flash EPROM memory or CF card memory
	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	(3) 1 input (reset) and 3 outputs (alarm, buzzer, run) 1 audio input (microphone), 1 composite video input (digital or analog video camera), 1 audio output (loudspeaker) (1)
<b>Communication</b>	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/RS 422/485 (COM1) and RS 485 (COM2)
	USB ports	1 (3) 1
	Bus and networks	Modbus Plus and Fipway with USB gateway, PROFIBUS DP and Device Net with optional card Ethernet TCP/IP (10BASE-T/100BASE-TX) (1)
	Printer link	RS 232C (COM1) serial link, USB port for parallel printer
<b>Development software</b>	Vijeo Designer (on Windows XP Professional and Windows 7 Professional 32/64-bit)	
<b>Operating system</b>	Magelis (133 MHz RISC CPU) (3)	Magelis (266 MHz RIS CPU)
<b>Type of terminal</b>	XBTGT22/23/24/29	XBTGT43
<b>Pages</b>	Please refer to our website <a href="http://www.schneider-electric.com">www.schneider-electric.com</a>	



Backlit color STN LCD or backlit color TFT LCD (320 x 240 pixels) or (640 x 480 pixels) (3)  
5.7" (color)

Backlit color TFT LCD (640 x 480 pixels)  
7.5" (color)

Via touch screen  
–  
–  
–  
–

16 MB Flash EPROM (3) 32 MB Flash EPROM  
By means of 128 MB, 256 MB, 512 MB, 1 GB or 2 GB CF card (except XBT GT2110)

Limited by capacity of internal Flash EPROM memory or CF card memory  
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  
–  
(3) 1 input (reset) and 3 outputs (alarm, buzzer, run)  
1 audio input (microphone), 1 composite video input (digital or analog video camera), 1 audio output (loudspeaker) (1)

Uni-TE (2), Modbus, Modbus TCP/IP (1) and for PLC brands: Mitsubishi, Omron, Allen-Bradley and Siemens  
RS 232C/RS 422/485 (COM1) and RS 485 (COM2)  
1 (3) 1  
Modbus Plus and Fipway with USB gateway, PROFIBUS DP and Device Net with optional card  
Ethernet TCP/IP (10BASE-T/100BASE-TX) (1)  
RS 232C (COM1) serial link, USB port for parallel printer

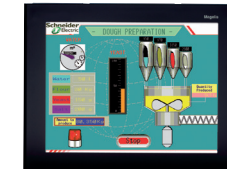
Vijeo Designer (on Windows XP Professional and Windows 7 Professional 32/64-bit)  
Magelis (133 MHz RISC CPU) (3) Magelis (266 MHz RIS CPU)

XBTGT22/23/24/29 XBTGT43

Please refer to our website [www.schneider-electric.com](http://www.schneider-electric.com)

(1) Depending on model.  
(2) Uni-TE version V2 for Twido controller and TSX Micro/Premium platform.  
(3) For XBTGT2430, 32 MB Flash EPROM, 1 sound output, 2 USB ports, 266 MHz RISC CPU.  
(4) For XBTGT5430.

<b>Applications</b>	Display of text messages, graphic objects and synoptic views Control and configuration of data		
<b>Type of terminal</b>	Advanced touch panels		
<b>Display</b>	Backlit color TFT LCD (640 x 480 pixels or 800 x 600 pixels) (4)	Backlit color TFT LCD (800 x 600 pixels)	Backlit color TFT LCD (1024 x 768 pixels)
	10.4" (color)	12.1" (color)	15" (color)
<b>Data entry</b>	Via touch screen		
	–		
	–		
	–		
	–		
<b>Memory capacity</b>	32 MB Flash EPROM		
	By means of 128 MB, 256 MB, 512 MB, 1 GB or 2 GB CF card		
<b>Functions</b>	Limited by capacity of internal Flash EPROM memory or CF card memory		
	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		
	1 input (reset) and 3 outputs (alarm, buzzer, run)		
	1 audio input (microphone), 1 composite video input (digital or analog video camera), 1 audio output (loudspeaker) (1)		
<b>Communication</b>	Uni-TE (2), Modbus, Modbus TCP/IP (1) and for PLC brands: Mitsubishi, Omron, Allen-Bradley and Siemens		
	RS 232C/RS 422/485 (COM1) and RS 485 (COM2)		
	2		
	Modbus Plus with USB gateway		
	Ethernet TCP/IP (10BASE-T/100BASE-TX)		
	RS 232C (COM1) serial link, USB port for parallel printer		
<b>Development software</b>	Vijeo Designer (on Windows XP Professional and Windows 7 Professional 32/64-bit)		
<b>Operating system</b>	Magelis (266 MHz RIS CPU)		
<b>Type of terminal</b>	XBTGT53/54	XBTGT63	XBTGT73
<b>Pages</b>	Please refer to our website <a href="http://www.schneider-electric.com">www.schneider-electric.com</a>		



Backlit color TFT LCD (640 x 480 pixels or 800 x 600 pixels) (4)  
10.4" (color)

Backlit color TFT LCD (800 x 600 pixels)  
12.1" (color)

Backlit color TFT LCD (1024 x 768 pixels)  
15" (color)

Via touch screen  
–  
–  
–  
–

32 MB Flash EPROM  
By means of 128 MB, 256 MB, 512 MB, 1 GB or 2 GB CF card

Limited by capacity of internal Flash EPROM memory or CF card memory  
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  
1 input (reset) and 3 outputs (alarm, buzzer, run)  
1 audio input (microphone), 1 composite video input (digital or analog video camera), 1 audio output (loudspeaker) (1)

Uni-TE (2), Modbus, Modbus TCP/IP (1) and for PLC brands: Mitsubishi, Omron, Allen-Bradley and Siemens  
RS 232C/RS 422/485 (COM1) and RS 485 (COM2)  
2  
Modbus Plus with USB gateway  
Ethernet TCP/IP (10BASE-T/100BASE-TX)  
RS 232C (COM1) serial link, USB port for parallel printer


Vijeo Designer (on Windows XP Professional and Windows 7 Professional 32/64-bit)  
Magelis (266 MHz RIS CPU)

XBTGT53/54 XBTGT63 XBTGT73

Please refer to our website [www.schneider-electric.com](http://www.schneider-electric.com)

# Operator dialogue terminals

Advanced touch panels  
Magelis GK, GH and GTW

<b>Applications</b>		Display of text messages, graphic objects and synoptic views Control and configuration of data	
<b>Type of terminal</b>		Advanced touchscreen panels with keyboard	
			
<b>Display</b>	Type	Color TFT LCD (320 x 240 pixels) or monochrome STN	Color TFT LCD (640 x 480 pixels)
	Capacity	5.7" (monochrome or color)	10.4" (color)
<b>Data entry</b>		Via keypad and/or touch screen (configurable) and/or by industrial pointer	
	Static function keys	10	12
	Dynamic function keys	14	18
	Service keys	8	
	Alphanumeric keys	12	
<b>Memory capacity</b>	Application	16 MB Flash EPROM	32 MB Flash EPROM
	Expansion	By means of 128 MB, 256 MB, 512 MB, 1 GB or 2 GB CF card	
<b>Functions</b>		Limited by capacity of internal Flash EPROM memory or CF card memory	
	Maximum number of pages	Unlimited (8000 variables max.)	
	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	–	1 input - 3 outputs
	Multimedia I/O	–	–
<b>Communication</b>	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/RS 422/485 (COM1) RS 485 (COM2)	
	USB ports	1	2
	Bus and networks	Modbus Plus, Fipway with USB gateway, PROFIBUS DP and Device Net with optional card Ethernet TCP/IP (10BASE-T/100BASE-TX)	
	Printer link	RS 232C (COM1) serial link, USB port for parallel printer	
<b>Development software</b>		Vijeo Designer (on Windows XP Professional and Windows 7 Professional 32/64-bit)	
<b>Operating system</b>		Magelis (CPU 266 MHz RISC)	
<b>Type of terminal</b>		<b>XBTGK21/23</b>	<b>XBTGK53</b>
<b>Page</b>			
Please refer to our website <a href="http://www.schneider-electric.com">www.schneider-electric.com</a> .			

(1) Depending on model.  
(2) Uni-TE version V2 for Twido controller and TSX Micro/Premium platform.

<b>Display of text messages, graphic objects and synoptic views Control and configuration of data</b>			
<b>Advanced hand-held panels</b>		<b>Advanced open touchscreen panels</b>	
			
<b>Color TFT LCD</b>	(640 x 480 pixels)	Color TFT LCD (800 x 600 pixels)	Color TFT LCD (800 x 600 pixels)
	5.7" (color)	10.4" (color)	12" (color)
<b>Color TFT LCD</b>	(1024 x 768 pixels)		
	15" (color)		
Via touch screen		Via touch screen	
11		–	
–		–	
–		–	
–		–	
32 MB Flash EPROM		2 GB CF system card included with terminal, expandable to 4 GB	
By means of 128 MB, 256 MB, 512 MB, 1 GB or 2 GB CF card (3)			
Limited by capacity of internal Flash EPROM memory or CF card memory			
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			
–			
1 audio output			
Uni-TE (2), Modbus, Modbus TCP/IP and for PLC brands: Mitsubishi, Omron, Rockwell Automation and Siemens		Uni-TE (2), Modbus, Modbus TCP/IP (1) and for PLC brands: Mitsubishi, Omron, Allen-Bradley and Siemens	
RS 232C/RS 422-485 (COM1)	RS 232C (COM1)	RS 232C (COM1)	RS 232C (COM1)
1	2+1 frontal	4+1 frontal	2+1 frontal
–	Modbus Plus with USB gateway		
1 Ethernet port (10BASE-T/100BASE-TX)	2 Ethernet ports (4) (10BASE-T/100BASE-TX/1 GB)		
–	RS 232C (COM1) serial link, USB port for parallel printer		
Vijeo Designer (on Windows XP Professional and Windows 7 Professional 32/64-bit)			
Magelis (266 MHz RISC CPU)		Windows XP Embedded	
<b>XBTGH2460/ XBTGH2460B (5)</b>	<b>HMIGTW5354</b>	<b>XBTGTW652</b>	<b>HMIGTW7354 HMIGTW73545 (6)</b>
See page 11	Please refer to our website <a href="http://www.schneider-electric.com">www.schneider-electric.com</a> .		

(1) Depending on model.  
(2) Uni-TE version V2 for Twido controller and TSX Micro/Premium platform.  
(3) Except for HMIGTW●●●● with 4 GB SD memory card.  
(4) Except on XBTGTW652 with 1 Ethernet TCP/IP port (10BASE-T/100BASE-TX) and 1 Ethernet TCP/IP port (10BASE-T/100BASE-TX/1 GB).  
(5) Version without Emergency stop button.  
(6) Version with stainless steel front panel.

# Operator dialogue terminals

## Advanced hand-held panels

### Magelis™ GH



#### Presentation

The Magelis Advanced hand-held panels with touch screen terminals offer consists of:

- A portable touch screen terminal (XBTGH) with 5.7" color screen and safety devices (Emergency stop, enabling grip switch, etc.)

#### Operation

These terminals are available in multifunction level (5.7" ) feature new information and communication technologies which, depending on the model, include:

- High level of communication (embedded Ethernet, multilink, Web server and FTP)
- External storage of data (Compact Flash memory card and USB memory stick) for storing production data and backing up applications
- Multimedia data with integrated image and sound management (digital or analog camera)
- Management of peripherals: Printers, bar code readers, loudspeakers, etc.



Display of a video sequence

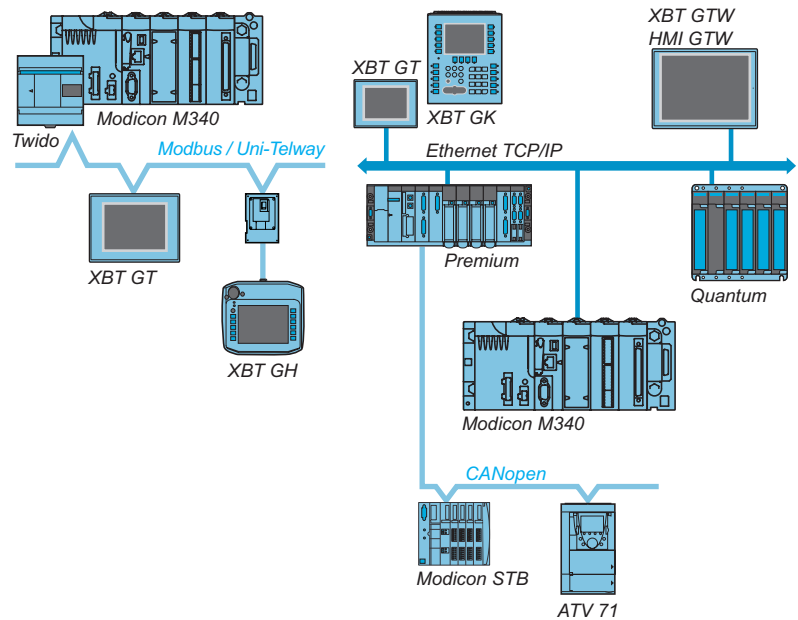
#### Configuration

Magelis Standard Advanced panels can be configured using Vijeo Designer software in a Windows XP Professional and Windows 7 Professional 32/64-bit environment.

Vijeo Designer software boasts an advanced user interface with many configurable windows, enabling projects to be developed quickly and easily. This version can process composite video signals from a camera or camcorder.

Please refer to the HMI software catalogs available in [www.schneider-electric.com](http://www.schneider-electric.com).

#### Communication



Magelis Standard Advanced 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

Magelis multifunction terminals can be connected, depending on the model, to Ethernet TCP/IP networks using Modbus TCP or third party protocols, and to fieldbuses (FIPWAY, Modbus Plus, Device Net, PROFIBUS DP).

#### Functions

Magelis Standard Advanced panels offer the following functions:

- Display of animated mimics with 8 types of animation (pressing the touch panel, color changes, filling, movement, rotation, size, visibility and value display)
- Control and modification of numeric or alphanumeric variables
- Display of current date and time
- Real-time and trending curves with log
- Alarm display, alarm log and management of alarm groups
- Multiwindow management
- Page calls initiated by the operator
- Multilingual application management (10 languages at the same time)
- Recipe management
- Data processing via Java script
- Storage of the application and logs on external Compact Flash application memory card (multifunction range) or USB key
- Serial printer and bar code reader management (multifunction range)
- Sound messages management (multifunction range)
- Composite video signal management from camera or camcorder on XBTGT and digital video signal (Webcam) management on Magelis GTW

Magelis Standard Advanced panels have been designed for Transparent Ready architectures and equipment (combination of Web and Ethernet TCP/IP technologies). Therefore, all terminals 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 terminal from a PC with an Internet browser.

The latest version of Vijeo Designer thus allows Magelis Standard Advanced panels to browse HTML pages and send e-mails.

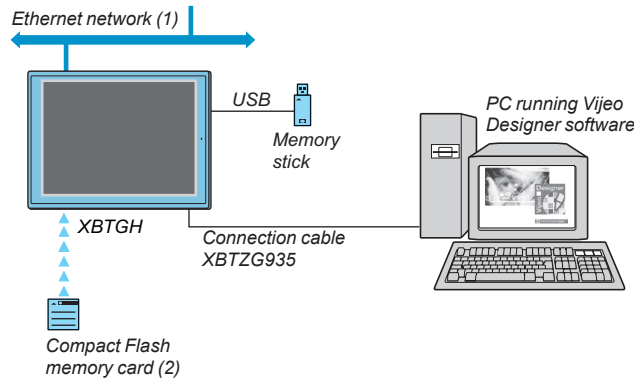
The flexibility of Windows XP Embedded on touch screen/open Standard Advanced panels Magelis GTW terminals simultaneously allows:

- The running of a Vijeo Designer application
- The use of Internet Explorer or Office Readers (.pdf, .doc, .xls, and .ppt documents)

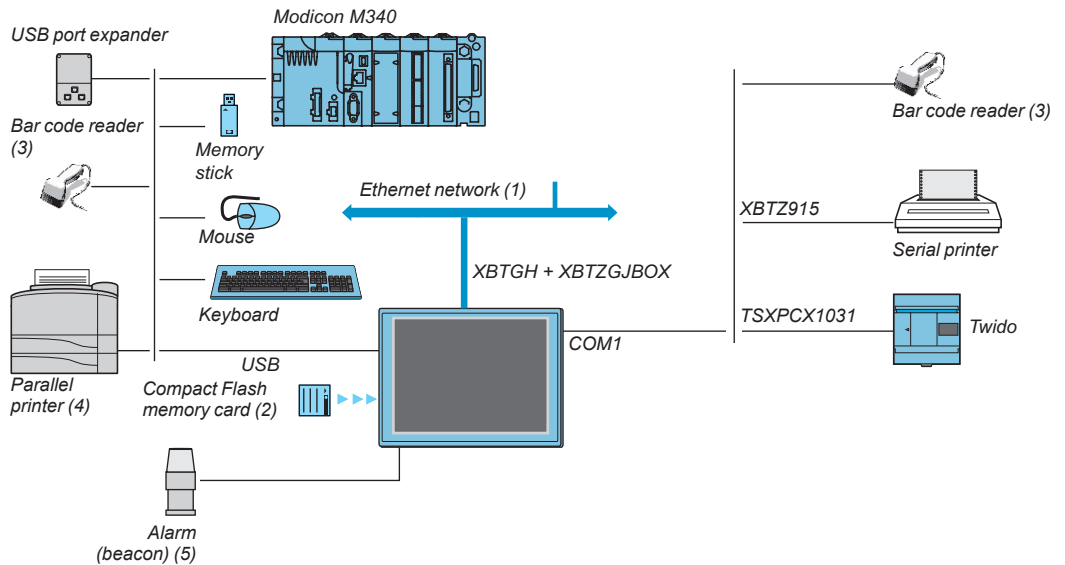
#### Panel operating modes

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

#### Edit mode



#### Operating mode



(1) With XBTGT●●30/XBTGT●●40/XBTGK●●30/XBTGTW●●●/HMI GTW●●●● and XBTGH246●●.  
 (2) Memory card, except XBTGT11/13/2110.  
 (3) Validated with DataLogic Gryphon bar code reader.  
 (4) Validated with Hewlett Packard printer via USB/PIO converter.

#### Improve environmental resistance with Conformal Coating

The Conformal Coating service offer consists of varnishing the electronic cards to prolong the service life of the terminals and enable them to be used in corrosive environments. The varnishing increases resistance to condensation, dusty atmospheres and chemical corrosion (sulphurous and halogenous atmospheres).

For further information on this service offer, please contact our Customer Care Centre.



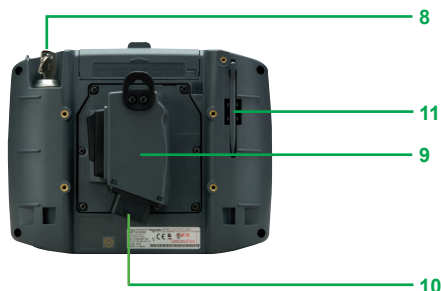
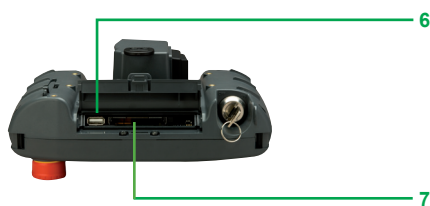
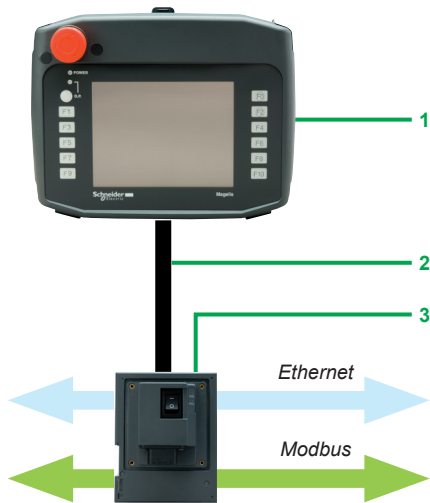
## Operator dialogue terminals

Advanced hand-held panels

Magelis™ XBTGH with 5.7" screen

Junction box XBTZGJBOX, cables XBTZGHL

### Description



#### Overview

Magelis XBTGH2460 **1** and XBTGH2460B (without Emergency stop button) are portable graphic display terminals with a 5.7" touch screen. They enable connection on the Ethernet or Modbus network at any point where an XBTZGJBOX junction box **3** is installed.

The connection between the terminal and junction box is established using an XBTZGHL●● **2** cable, which is available in various lengths (1).

#### Standard Advanced panels Magelis Multifunction XBTGH2460 and XBTGH2460B

##### The front panel comprises:

- 1** A touch screen for displaying synoptic views (5.7" color), configurable using Vijeo Designer
- 2** A multicolor indicator (green, orange and red) showing the terminal's operating mode
- 3** 11 function keys Fi
- 4** An operating key with O.P. LED (green) for touch screen validation
- 5** An emergency stop button with 2 NC safety contacts and 1 NO auxiliary contact for stopping the machine if necessary (model XBTGH2460 only)

##### The rear panel comprises:

- 6** A USB type A host connector for peripheral connection and application transfer (with protective cover)
- 7** A slot for a Compact Flash memory card (also protected by the cover)
- 8** A key switch for switching the Magelis XBTGH on/off
- 9** A 3-position enabling grip switch for protecting the operator (the OK signal is only sent when the grip switch is in the centre position)
- 10** A 24-way connector for connecting the 3 m or 10 m flexible interface cable between the Magelis XBTGH and the junction box
- 11** A stylus for the touch screen
- 12** Two holes for inserting re-usable labels in the function keys

(1) To be ordered separately (see page 13).



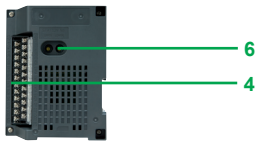
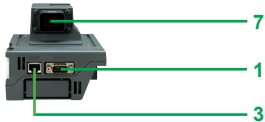
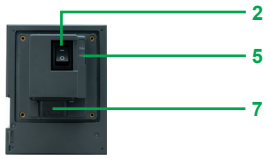
# Operator dialogue terminals

Advanced hand-held panels

Magelis™ GH with 5.7" screen

Junction box XBTZGJBOX, cables XBTZGHL

## Description (continued)



### XBTZGJBOX junction box for XBTGH

#### It comprises:

- 1 A 9-way SUB-D connector for RS 232C or RS 422/485 serial link to PLCs (COM1)
- 2 An ON/OFF switch for the junction box
- 3 An RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX
- 4 A 24-way screw terminal block for connecting 24 V  $\bar{\text{---}}$  power supply and output signals from the Magelis XBTGH terminal
- 5 An LED indicating the status of the link with the Magelis XBTGH, 3 colors (green, orange and red)
- 6 2 thumbwheels for configuring the station number on the junction box
- 7 A 32-way connector for connecting the Magelis XBTGH terminal using flexible cable (XBTZGHL)

### Flexible cables XBTZGHL

For connecting the Magelis XBTGH terminals to their XBTZGJBOX junction boxes.

4 cable lengths are available:

- 3 m, cable **XBTZGHL3**
- 5 m, cable **XBTZGHL5**
- 10 m, cable **XBTZGHL10**

- 20 m, cable **XBTZGHL20** with the following limitations applying to the junction box:  
no RS 232C serial link, an isolation box cannot be used and a 24 V  $\bar{\text{---}}$  supply voltage tolerance of approximately 10%.

#### XBTGH Advanced hand-held panels

Type of front panel	Number of ports	Application memory capacity	Compact Flash memory	Video input	Number of Ethernet ports	Reference	Weight kg/lb
<b>Multifunction, 5.7" screen</b>							
TFT color mode screen and Emergency stop button	1 COM1 1 USB	32 MB	Yes	No	1	<b>XBTGH2460 (1)</b>	–
TFT color mode screen	1 COM1 1 USB	32 MB	Yes	No	1	<b>XBTGH2460B (1)</b>	–



XBTGH2460



XBTZGJBOX



XBTZGHL●●

#### Connection components

Description	Usage	Length m/ft.	Reference	Weight kg/lb
<b>Junction box for XBTGH</b>	Specifically for the XBTGH terminal, it enables: <ul style="list-style-type: none"> <li>■ 24 V <math>\overline{\text{DC}}</math> power supply to XBTGH terminal</li> <li>■ Connection of various safety inputs/outputs</li> <li>■ Connection on multiprotocol serial link (9-way SUB-D) or Ethernet TCP/IP (RJ45)</li> </ul> Can be mounted on 35 mm $\overline{\text{DIN}}$ rail	–	<b>XBTZGJBOX (1) (2)</b>	–
<b>Interface cable for XBTGH</b>	For connecting XBTGH terminal to junction box XBTZGJBOX	3/9.84	<b>XBTZGHL3</b>	–
		5/16.40	<b>XBTZGHL5</b>	–
		10/32.80	<b>XBTZGHL10</b>	–
		20/65.62	<b>XBTZGHL20 (3)</b>	–

(1) The XBTGH terminal is connected to junction box XBTZGJBOX using cable XBTZGHL●●, to be ordered separately.

(2) A junction box is required at each XBTGH terminal connection point.

(3) With this cable, the following limitations apply to the junction box:

- no RS 232C serial link
- an isolation box cannot be used
- 24 V  $\overline{\text{DC}}$  supply voltage tolerance of approximately 10%

# Operator dialogue terminals

Advanced hand-held panels

Replacement parts for terminals

Magelis GH

## Separate components

Description	Characteristics	Compatible with terminals	Reference	Weight kg/lb
Wall mounting kit	Fixing components for mounting XBTGH terminal on a wall	XBTGH	XBTZGWMKT	–
Neck strap	For use with XBTGH hand-held terminal	XBTGH	XBTZGNSTP	–
Cover for shunt Emergency stop on junction box	Enables deactivation of the junction box terminal without activating the Emergency stop (requires installation of external switching system)	XBTGH	XBTZGHCAP	–

## Spare parts

Description	For use with terminals	Reference	Weight kg/lb
Seals	XBTGH (for junction box)	XBTZG5H	–
Sheets of customizable labels for XBT GK/GH terminals <b>Sold in lots of 10</b>	XBTGH	XBLYGH2	–
Stylus <b>Sold in lots of 5</b>	XBTGH	XBTZGPEN	–
Emergency stop button protection	XBTGH	XBTZGESGD	–
Hand strap	XBTGH	XBTZGHSTP	–

## 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
XBTGH	USB	TTL	2/6.56	XBTZG935	0.290/ 0.639

(1) Cable included (depending on model) with Vijeo Designer software packages.

# Operator dialogue terminals

Advanced hand-held panels

Connection accessories for terminals

Magelis GH

## 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/ft.	Reference	Weight kg/lb
Twido, Nano, Modicon TSX Micro, Modicon Premium	Terminal port, 8-way female mini-DIN	Uni-TE (V1/V2), Modbus	XBTGH (Junction box)	RS 485	COM1	2.5/8.20	<b>XBTZ9018</b>	0.170/ 0.375
			XBTGH (Junction box)	RS 232	COM1	2.5/8.20	<b>TSXPCX1031</b>	–
Modicon M340 Modicon M238 Modicon M258	RJ45	Modbus	XBTGK	RS 485	COM1	1.8/5.90	<b>XBTZ938 + (1)</b>	0.230/ 0.507
						2.5/8.20	<b>XBTZ9008</b>	–
Modicon Premium with TSXSCY2160●	25-way female SUB-D	Uni-TE (V1/V2)	XBTGH (Junction box)	RS 485	COM1	2.5/8.20	<b>XBTZ918 + (1)</b>	0.230/ 0.507
Modicon Quantum	9-way male SUB-D	Modbus	XBTGH (Junction box)	RS 232C	COM1	2.5/8.20	<b>XBTZ9710 + (2)</b>	0.210/ 0.462
						3.7/12.14	<b>990NAA26320</b>	0.290/ 0.639
Modicon STB	HE13 (NIM, network interface module)	Modbus	XBTGH (Junction box)	RS 232C	COM1	2/6.56	<b>STBXCA4002</b>	0.210/ 0.462
						2.5/8.20	<b>XBTZ988 + (2)</b>	0.220/ 0.485
Modicon Momentum M1	RJ45 (port 1 on Momentum M1)	Modbus	XBTGH (Junction box)	RS 232C	COM1	2.5/8.20	<b>XBTZ9711 + (2)</b>	0.210/ 0.462
TeSys U, T starters ATV 312/61/71 variable speed drives ATS 48 starters Lexium 05 Preventa XPSMC	RJ45	Modbus	XBTGH (Junction box)	RS 485	COM1	2.5/8.20	<b>XBTZ9008</b>	–

(1) Adaptor XBTZG909 to be used with cables with “ + (1) ” after the reference.

(2) Adaptor XBTZG919 to be used with cables with “ + (2) ” after the reference.



TSXPCX1031

# Operator dialogue terminals

Advanced hand-held panels  
 Connection accessories for terminals  
 Magelis GH

## 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/ft.	Reference	Weight kg/lb
Connection cable, A CPU (SIO)	XBTGH (Junction box)	9-way SUB-D 25-way SUB-D	RS 422	5/16.40	XBTZG9773	–
Connection cable, Q Link (SIO)	XBTGH (Junction box)	9-way SUB-D 9-way SUB-D	RS 232C	5/16.40	XBTZG9772	–
Connection cable, Q CPU (SIO)	XBTGH (Junction box)	9-way SUB-D mini-DIN	RS 232C	5/16.40	XBTZG9774	–
Connection cable, A Link (SIO)	XBTGH (Junction box)	9-way SUB-D 25-way SUB-D	RS 232C	5/16.40	XBTZG9731	–
Connection cable, FX (CPU)	XBTGH (Junction box)	9-way SUB-D mini-DIN	RS 422	5/16.40	XBTZG9775	–
Cable for 2-port adaptor, FX (CPU), A CPU (SIO) QnA CPU (SIO)	XBTGH (Junction box)	9-way SUB-D Flying leads	RS 422	5/16.40	XBTZG9778 + (4)	–
Adaptor unit FX (CPU), A CPU (SIO) QnA CPU (SIO)	XBTGH (Junction box)	2-port unit Screw terminals / 2 x 9-way SUB-D	RS 422	–	XBTZG979	–



XBTZG9772



XBTZG9731

### Omron, Sysmac PLCs

Description Driver used	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM1)	Length m/ft.	Reference	Weight kg/lb
Connection cables, Link (SIO)	XBTGH (Junction box)	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	–
Connecting cables FINS (SIO)	XBTGH (Junction box)	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 adaptor)	Physical link (COM1)	Length m/ft.	Reference	Weight kg/lb
Connection cables DF1 Full Duplex	XBTGH (Junction box)	9-way SUB-D 25-way SUB-D	RS 232C	5/16.40	XBTZG9731	–
Connection cables, DH485	XBTGH (Junction box)	25-way SUB-D 8-way mini-DIN	RS 485	5/16.40	XBTZ9732 + (2)	–

(2) Adaptor XBTZG909 to be used with cables with " + (2) " after the reference.

(4) Adaptor XBTZGCOM1 (9-way female/female SUB-D) to be used with cables with " + (4) " after the reference (XBTZG9778).

## Cables and adaptors for connecting Magelis terminals to third-party PLCs (continued)

## Siemens, Simatic PLCs

Description Driver used	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link	Length m/ft.	Reference	Weight kg/lb
Connection cables, MPI port, S7 300/400	XBTGH (Junction box)	9-way SUB-D 9-way SUB-D	RS 232C (COM1)	3/9.84	<b>XBTZG9292</b>	–



XBTZG9731

## Customizable cables

Description Driver used	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link	Length m/ft.	Reference	Weight kg/lb
Universal cable, RS 422	XBTGH (Junction box)	9-way SUB-D/flying leads other end	RS 422 (COM1)	2.5/8.20	<b>XBTZG9722</b>	0.210/ 0.462
Universal adaptor, RS 422/485	XBTGH (Junction box)	9-way SUB-D/Screw terminal	RS 422 (COM1)	–	<b>XBTZG949 + (5)</b>	–
		9-way SUB-D/Screw terminal	RS 485 (COM2)	–	<b>XBTZG949 + (6)</b>	–

## Connection of Magelis terminals via serial links and Ethernet network

Type of bus/network	Type of terminal	Type of connector (tap-off unit side)	Type of terminal	Length m/ft.	Reference	Weight kg/lb
Uni-Telway serial link	XBTGH (Junction box)	15-way female SUB-D	Subscriber socket <b>TSXSACA62</b>	1.8/5.90	<b>XBTZ908 + (1)</b>	0.240/ 0.530
		8-way female mini-DIN	Connection box <b>TSXPACC01</b>	2.5/8.20	<b>XBTZ9018</b>	–
Modbus serial link	XBTGH (Junction box)	15-way female SUB-D	Subscriber socket <b>TSXSACA64</b>	1.8/5.90	<b>XBTZ908 + (1)</b>	0.240/ 0.530
		RJ45	8-port Modbus splitter box <b>LU9GC3</b> 2-port tap-off junction <b>TWDXCAISO</b> <b>TWDXCAT3RJ</b>	2.5/8.20	<b>XBTZ9008</b>	–
Ethernet TCP/IP network	XBTGH (Junction box)	RJ45	Hubs	2/6.56	<b>490NTW00002</b>	–
			499 NEH/NOH	5/16.40	<b>490NTW00005</b>	–
			Switches	12/39.37	<b>490NTW00012</b>	–
			499 NES, 499 NMS, 499 NSS and 499 NOS	40/131.2	<b>490NTW00040</b>	–
			80/262.5	<b>490NTW00080</b>	–	



TSXSACA62



TSXPACC01



TSXSACA64



LU9GC3



VW3A8306TF10



TWDXCAISO

## Modular regulated switch mode power supplies (2)

Input voltage/ Output voltage	Combination with terminals	Nominal power	Nominal current	Reference	Weight kg/lb
100...240 / 24 V single-phase wide range line supply 47...63 Hz	XBTGH	30 W	1.2 A	<b>ABL8MEM24012</b>	0.195/ 0.430

(1) Adaptor XBTZG909 to be used with cables with “ + (2) ” after the reference.

(2) Dimensions: H x W x D = 90 x 54 x 59 mm (ABL 8MEM24012) and 90 x 72 x 59 mm (ABL 7RM24025). For further information, please consult our website [www.schneider-electric.com](http://www.schneider-electric.com).

(5) Cable to be created by user and used in conjunction with 9-way female/female SUB-D adaptor XBTZGCOM1.

(6) Cable to be created by user and used in conjunction with isolation box XBTZGI485 and 9-way male/female SUB-D adaptor XBTZGCOM2.

490NTW00002	15
490NTW00005	15
490NTW00012	15
490NTW00040	15
490NTW00080	15
990NAA26320	13

**A**

ABL8MEM24012	15
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**S**

STBXCA4002	13
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**T**

TSXPCX1031	13
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**X**

XBLYGH2	12
XBTGH2460	11
XBTGH2460B	11
XBTZ908	15
XBTZ918	13
XBTZ938	13
XBTZ988	13
XBTZ9008	13
	15
XBTZ9018	13
	15
XBTZ9710	13
XBTZ9711	13
XBTZ9732	14
XBTZG5H	12
XBTZG935	12
XBTZG949	15
XBTZG979	14
XBTZG9292	15
XBTZG9722	15
XBTZG9731	14
XBTZG9740	14
XBTZG9772	14
XBTZG9773	14
XBTZG9774	14
XBTZG9775	14
XBTZG9778	14
XBTZGESGD	12
XBTZGHCAP	12
XBTZGHL3	11
XBTZGHL5	11
XBTZGHL10	11
XBTZGHL20	11
XBTZGHSTP	12
XBTZGJBOX	11
XBTZGNSTP	12
XBTZGPEN	12
XBTZGWMKT	12







Human Machine Interface

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