Human Machine interfaces

Magelis Easy GXU

Essential panels, touch screen, for simple machines

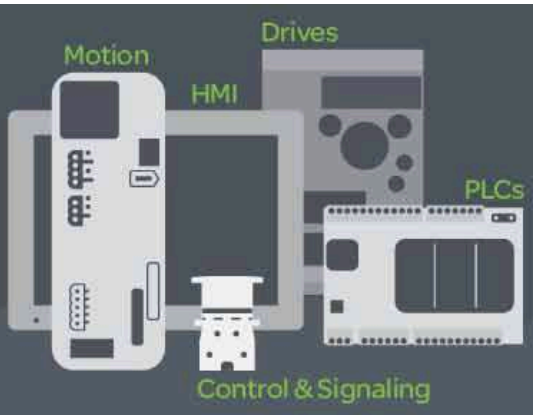
Catalogue

January 2015

Introducing the Easy line

Essential automation & control products

When just enough is just right!



Schneider Electric

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Human Machine interfaces
Magelis Easy GXU Essential panels

7" Wide and 10" Wide Magelis Easy GXU touch screen terminals

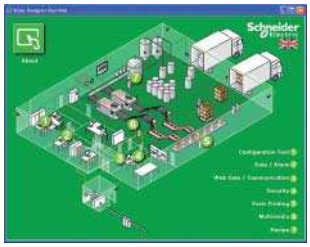
Presentation and applications

The range of Magelis™ Easy GXU touch screen terminals has been designed for manufacturers of simple machines and is dedicated to the following fields and types of machine:

- ■ Textile
  - □ blowing and carding machines
  - □ winding and twisting machines
  - □ dyeing and finishing machines
  - □ etc.
- ■ Packaging
  - □ vertical and horizontal packing
  - □ filling machine
  - □ labelling machine
  - □ etc.
- ■ HVAC & pumping
  - □ air compressor
  - □ water pumping
  - □ etc.
- ■ Miscellaneous activity sectors
  - □ machine tools (grinder, saw, etc.)
  - □ plastic and rubber (extruding machine, etc.)
  - □ printing (stamping and folding machines, etc.)
  - □ construction machines
  - □ etc.

This range of terminals consists of 4 models with 2 sizes of color TFT screen:

- ■ 7" Wide (HMIGXU3500 and HMIGXU3512)
- ■ 10" Wide (HMIGXU5500 and HMIGXU5512)



Example of project configuration

Operation

Magelis Easy GXU touch screen terminals are designed to fit for the essential needs of information and communication technologies, which, depending on the model, include:

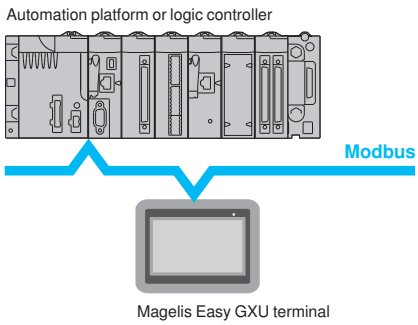
- ■ Essential level of communication (Serial multilink, USB downloading port)
- ■ High level of communication (Embedded Ethernet, multilink) *(1)*
- ■ External data storage (on a USB memory stick) for storing production data and backing up applications *(1)*
- ■ Management of peripheral equipment: printers, barcode readers, etc. *(1)*

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

Configuration

Magelis Easy GXU touch screen terminals are configured using Vijeo Designer . Basic software in Windows XP Professional, Windows 7 (Service Pack 3) and Windows 8.1 (32-bit and 64-bit) environments. This simplified configuration software boasts an intuitive user interface with many configurable windows, enabling projects to be developed quickly and easily.

Communication



Magelis Easy GXU touch screen terminals communicate with our Modicon Easy M100/200 PLCs via one or two integrated serial links, using communication protocols:

- ■ Schneider Electric (Modbus)
- ■ Third-party: Mitsubishi Electric, Omron, and Siemens

(1) Except HMIGXU3500 and HMIGXU5500.

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Magelis Easy GXU touch screen terminals: an optimum investment for communication with simple machines

A user-oriented range of products

The Magelis Easy GXU range of touch screen panels is designed to provide just the right level of performance for communication with simple machines: non-critical functions have been reduced so as to offer easy-to-use products with the correct level of quality at an affordable cost.

Fit for purpose

- The terminals feature the usual key-core characteristics (TFT color screens, USB connection, Ethernet port, etc.)
- Magelis Easy GXU terminals have a compact design: the panels are no more than 38 mm/*1.5 in.* thick.
- These terminals have a reserved space for the communication cable wiring.

Easy throughout the whole life cycle

- Easy to install using anti-drop hooks and screw fixings for one-handed installation
- Easy to set up and use thanks to a simplified and intuitive programming software (Vijeo Designer Basic) and an illustrated online help for self-guided training
- Easy to connect to our range of Modicon Easy M100/M200 logic controllers
- Easy to connect thanks to an embedded USB stick (no accessory needed)
- Easy to maintain with a replaceable battery for RTC *(1)* and a self-diagnosis tool

Robustness

- Able to adapt to non-standard wiring environments thanks to an embedded isolated power supply and enhanced integrated circuit protection for the serial port
- Robust design for harsh environments:
  - a small vent hole prevents ingress of resist to splashing water and conductive dust
  - PCBA coating helps withstand high humidiy and polluted environments.

Widely available everywhere

- Fast delivery through a large distribution network
- Fast access to information and support through Partner Relationship Management tool and dedicated network of engineers

(1) Battery for RTC (Real Time Clock): only for Magelis GXU universal touch screen terminals.

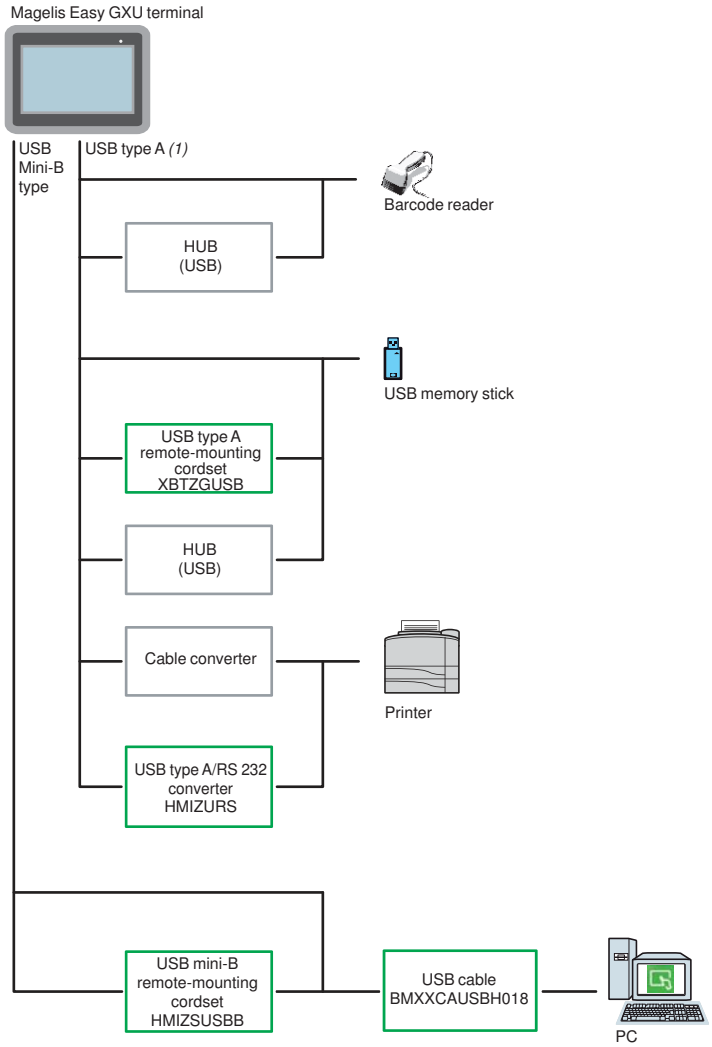
Human Machine interfaces
Magelis Easy GXU Essential panels

Functions

Magelis Easy GXU touch screen terminals 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, modification of numeric and alphanumeric values
- Display of date and time
- Real-time curves and trend curves with log
- Alarm display, alarm log and management of alarm groups
- Multi-window management
- Page calls initiated by the operator
- Multilingual application management (10 languages simultaneously)
- Recipe management
- Data processing via JavaScript
- Application and logs stored on external application memory card in USB stick format *(1)*
- Management of printer and barcode reader

Operating modes for Magelis GXU touch screen terminals

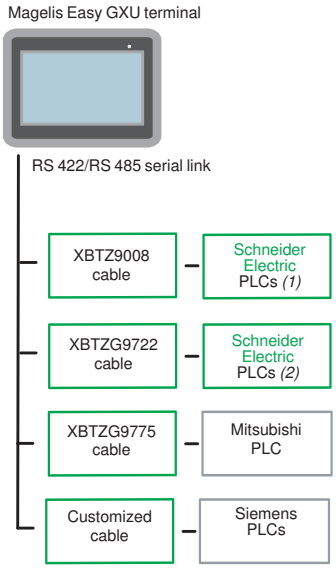
Edit mode



(1) Except HMIGXU3500 and HMIGXU5500.

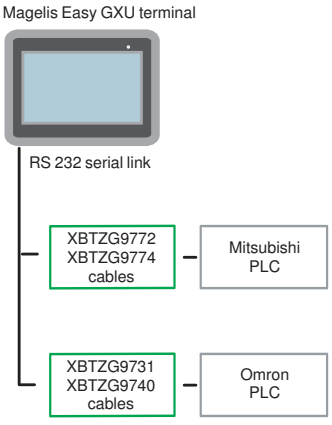
Operating modes for Magelis GXU touch screen terminals (continued)

Communication with RS 422/RS 485 serial link mode



Examples of connection to RS 422/RS 485 serial port (3)

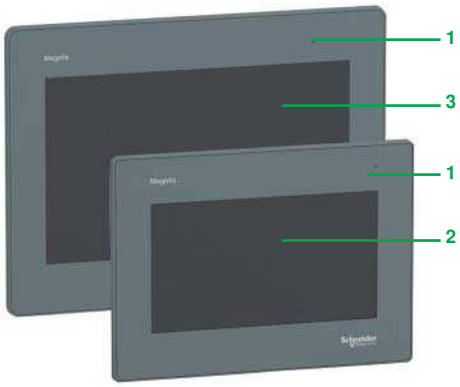
Communication with RS 232C serial link mode



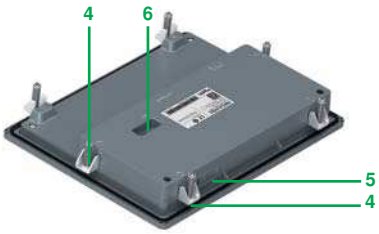
Examples of connection to RS 232C (3)

(1) M221/M241/M251/M218/M238/M258 logic controllers.
(2) M100/M200 logic controllers. For all other products, consult your Customer Care Centre.
(3) Non-exhaustive examples; consult your Customer Care Centre for more information.

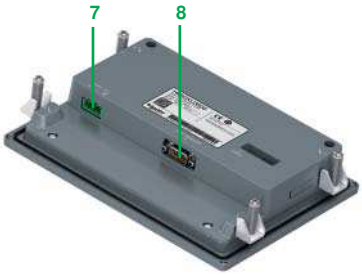
Human Machine interfaces
Magelis Easy GXU Essential panels
Basic touch screen terminals
Universal touch screen terminals



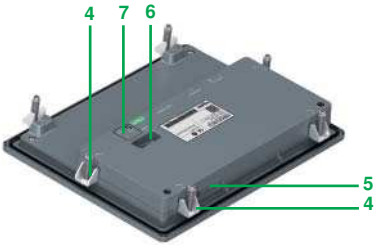
HMIGXU35●● (common front view)
HMIGXU55●● (common front view)



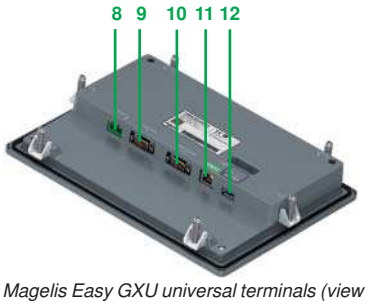
Magelis Easy GXU basic terminals (rear view)



Magelis Easy GXU basic terminals (bottom view)



Magelis Easy GXU universal terminals (rear view)



Magelis Easy GXU universal terminals (view of underside)

Magelis Easy GXU basic touch screen terminals

The basic touch screen terminals offer the following features:

On the front panel

1 An LED on/off indicator.
2 A 7” Wide color touch screen for HMIGXU3500.
3 A 10” Wide color touch screen for HMIGXU5500.

On the rear panel

4 Screw fixings supplied with the terminal:
- 4 fixing points for HMIGXU3500
- 6 fixing points for HMIGXU5500

5 A slide-open compartment containing a replaceable battery to power the embedded real-time clock *(1)*.
6 A USB mini-B port.

On the underside

7 A 24 V ⎓ power supply connector supplied with the terminal.
8 A 9-way male SUB-D connector for RS 422/RS 485 serial link (COM1 port).

Magelis Easy GXU universal touch screen terminals

The universal touch screen terminals offer the following features:

On the front panel

1 An LED on/off indicator.
2 A 7” Wide color touch screen for HMIGXU3512.
3 A 10” Wide color touch screen for HMIGXU5512.

On the rear panel

4 Screw fixings supplied with the terminal:
- 4 fixing points for HMIGXU3512
- 6 fixing points for HMIGXU5512

5 A slide-open compartment containing a replaceable battery to power the embedded real-time clock *(1)*.
6 A USB mini-B port.
7 A USB type A stick.

On the underside

8 A 24 V ⎓ power supply connector supplied with the terminal.
9 A 9-way male SUB-D connector for RS 232C serial link (COM1 port).
10 A 9-way male SUB-D connector for RS 422/RS 485 serial link (COM2 port).
11 An Ethernet port, 10/100 Base-Tx type.
12 A USB type A port.

(1) Replace battery only with identical type: BR2032. Replacement with another type of battery may cause a fire or explosion.

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Human Machine interfaces

Magelis Easy GXU Essential panels
Basic touch screen terminals
Universal touch screen terminals
Software and spare parts

PF143700

HMIGXU3500

Magelis Easy GXU basic touch screen terminals *(1) (2)*

Screen size and type	Number of ports	Memory capacity		Reference	Weight kg/ *lb*
		For application	For backup		
7" wide, color TFT screen	1 COM1 (RS 422/485) 1 USB mini-B	32 MB	128 kB	**HMIGXU3500**	0.550/ *1.213*
10" wide, color TFT screen	1 COM1 (RS 422/485) 1 USB mini-B	32 MB	128 kB	**HMIGXU5500**	1.050/ *2.315*

PF143707

HMIGXU5512

Magelis Easy GXU universal touch screen terminals *(1) (2)*

Screen size and type	Number of ports	Memory capacity		Reference	Weight kg/ *lb*
		For application	For backup		
7" wide, color TFT screen	1 COM1 (RS 232C) 1 COM2 (RS 422/485) 1 USB mini-B 1 USB A 1 10/100 Base-Tx	48 MB	128 kB	**HMIGXU3512**	0.560/ *1.235*
10" wide, color TFT screen	1 COM1 (RS 232C) 1 COM2 (RS 422/485) 1 USB mini-B 1 USB A 1 10/100 Base-Tx	48 MB	128 kB	**HMIGXU5512**	1.060/ *2.337*

Configuration software

Description	Used for	Reference
Vijeo Designer Basic *(4)*	Magelis Easy GXU models	*(3)*

Vijeo Designer Basic

Spare parts

Description	Used for	Sold in lots of	Reference	Weight kg/ *lb*
Set of fixing screws	Magelis Easy GXU models	**24**	**HMIZGFIX3**	–
Power supply connector	Magelis Easy GXU models	**4**	**HMIZGPWS2**	–

HMIZGFIX3

(1) Terminals supplied with fixing screws, power supply connector and instruction sheet. Setup documentation for Magelis Easy GXU terminals is included in electronic format with the Vijeo Designer Basic configuration software.
(2) Comprehensive information relating to Magelis Easy GXU terminals is available on our website.
(3) To download this software, visit our web site www.schneider-electric.com.
(4) Requires a software version ≥ 1.0 Service Pack 2. Cable for transferring application from PC to Magelis Easy GXU terminal (BMX XCA USBH018), to be ordered separately (see our website www.schneider-electric.com).

Human Machine interfaces
Magelis Easy GXU Essential panels
Connection accessories
Cables for Schneider Electric products

XBTZGUSB

HMIZSUSBB

Connection accessories

Designation	Description	Length m/ *ft*	Reference	Weight kg/ *lb*
USB cable for PC connection (USB type A/USB mini-B)	Enables connection of a PC (USB type A port) to Magelis GXU terminals (USB mini-B port, all models) in order to transfer applications developed with Vijeo Designer Limited Edition.	1.8/ *5.91*	**BMXXCAUSBH018**	0.230/ *0.507*
USB type A port remote-mounting cordset	Enables the USB type A port to be located remotely on HMIGXU3512 and HMIGXU5512 terminals on a panel or cabinet door while providing IP 65 degree of protection (Ø 21 mm/0.83 in. fixing device).	1/ *3.28*	**XBTZGUSB**	0.507/ *1.118*
USB mini-B port remote-mounting cordset	Enables the USB mini-B port to be located remotely on Magelis GXU terminals (all models) on a panel or cabinet door while providing IP 65 degree of protection (Ø 21 mm/0.83 in. fixing device).	1/ *3.28*	**HMIZSUSBB**	0.100/ *0.220*
USB type A port/9-way SUB-D converter for serial printer	Enables connection of an RS 232 serial link printer (9-way SUB-D) to the USB type A port of HMIGXU 3512 and HMI GXU 5512 terminals.	–	**HMIZURS**	–

Cables for connecting Magelis Easy GXU terminals to Schneider Electric products

Type of automation product	Type of connector (automation product end)	Protocol	Type of Magelis GXU terminal	Physical link (terminal port)	Length m/ *ft*	Reference	Weight kg/ *lb*
Twido	Terminal port, 8-way female mini-DIN	Modbus	All models	RS 485	2.5/ *8.20*	**XBTZ9018**	–
Modicon M340 **Modicon M218** **Modicon M238** **Modicon M258** **Modicon M221** **Modicon M241** **Modicon M251**	RJ45	Modbus	All models	RS 485	2.5/ *8.20*	**XBTZ9008**	–
Modicon Easy M100 **Modicon Easy M200**	Terminal block	–	All models	RS 485	2.5/ *8.20*	**XBTZG9722**	–
TeSys U/T starters **Altivar drives,** **Altistart starters,** **Lexium motion control,** **Preventa XPS MC**	RJ45	Modbus	All models	RS 485	2.5/ *8.20*	**XBTZ9008**	–

Human Machine interfaces

Magelis Easy GXU Essential panels

Cables for third-party PLCs

Connection via Modbus serial link

XBTZG9772

XBTZG9731

Cables and adapters for connecting Magelis GXU terminals to third-party PLCs

Description *Driver used*	Type of Magelis GXU terminal	Type of connector (fitted to cable, excluding adapter)	Physical link (terminal port)	Length m/ *ft*	Reference	Weight kg/ *lb*
Mitsubishi, Melsec PLCs						
Connection cable, *Q Link (SIO)*	HMIGXU3512 and HMIGXU5512 only	9-way SUB-D/9-way SUB-D	RS 232C	5/ *16.40*	**XBTZG9772**	–
Connection cable, *Q CPU (SIO)*	HMIGXU3512 and HMIGXU5512 only	9-way SUB-D/mini-DIN	RS 232C	5/ *16.40*	**XBTZG9774**	–
Connection cable, *FX (CPU)*	All models	9-way SUB-D/mini-DIN	RS 422	5/ *16.40*	**XBTZG9775**	–
Omron, Sysmac PLCs						
Connection cables, *Link (SIO)*	HMIGXU3512 and HMIGXU5512 only	9-way SUB-D/25-way SUB-D	RS 232C	5/ *16.40*	**XBTZG9731**	–
	HMIGXU3512 and HMIGXU5512 only	9-way SUB-D/9-way SUB-D	RS 232C	5/ *16.40*	**XBTZG9740**	–
Connection cable, *FINS (SIO)*	HMIGXU3512 and HMIGXU5512 only	9-way SUB-D/9-way SUB-D	RS 232C	5/ *16.40*	**XBTZG9740**	–
Siemens, Simatic PLCs						
Connection cables, *MPI port, S7 200 S7 300/400*	All models	9-way SUB-D/9-way SUB-D	RS 485	–	*(1)*	–
Customizable cables						
Universal cable, RS 422	All models	9-way SUB-D/flying leads at other end	RS 422	2.5/ *8.20*	**XBTZG9722**	–

LU9GC3

TWDXCAISO

Connecting Magelis GXU terminals via Modbus serial link

Type of bus/ network	Tap-off units	Connector (tap-off unit end)	Type of Magelis GXU terminal	Length m/ *ft*	Reference	Weight kg/ *lb*
Modbus serial link	8-port Modbus splitter box **LU9GC3** 2-port tap junction **TWDXCAISO** **TWDXCAT3RJ**	RJ45	All models	2.5/ *8.20*	**XBTZ9008**	–

(1) Customized cable.

Product reference index

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XBTZG9722 8
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XBTZG9731 **9**
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