The Essential Guide

Magelis™ Human Machine Interfaces

2011

Make the most of your energy℠

Schneider Electric™

Vijeo Designer

Thanks to its intuitive design, Vijeo™ Designer – the single configuration software tool for Schneider Electric's entire HMI range – can process all your operator dialog projects quickly and easily.

Magelis™ STU graphic display terminal with touch screen

Install your terminal in seconds

Featuring a quick mounting system and easy-to-use configuration software, the Magelis STU range can significantly reduce the overall cost of your installation, saving you time and money!

A new generation of high-performance screens

Simplicity
- Tool-free installation with no special drilling requirements, thanks to the 22 mm diameter push button mounting system
- Expandable, modular design with removable 3.5" or 5.7" screen
- Ease of maintenance:
  – LED backlight, no batteries required
  – Removable power supply connector
- Flexible programming

Optimum visibility
- Modular design with removable 3.5" or 5.7" screen
- Clear, precise color QVGA 65K touch screen

Enhanced communication
- Embedded Ethernet connection for faster, more open communication
- Multi-protocol RS485/232 standard RJ45 ports and USB ports (mini and standard versions)

Magelis™ Smart + industrial PC with 15″ touch screen

No maintenance, no rotating parts

With no hard disk or fan, Magelis Smart + functions like an operator terminal with all the capabilities of Windows® XP Pro:

- Integrated Flash disk with Windows XP
- Intel Celeron® M 1 GHz processor, 1 GB RAM
- 2 Ethernet ports

Unrivalled rugged design

- IP 65 protection
- Certifications: UL 508 Industrial Control Equipment, UL, ATEX hazardous atmospheres, Marine

Excellent compatibility

- Supports Vijeo™ Designer applications (demo version can be expanded to unlimited version)
- Fully supports Vijeo Citect™ supervisory software

Human Machine Interfaces

Comprehensive HMI solutions for a wide range of applications

All-in-one	Small Panels	Magelis STO/STU, XBT N/R/RT
	Advanced Panels	Magelis XBT GT/GK/GTW/GH
	HMI Controllers	Magelis XBT GC
	PC Panels	Magelis Smart
		Magelis Compact iPC
BOX	Embedded BOX	Magelis Smart BOX
	PC BOX	Magelis Compact PC BOX
		Magelis Flex PC BOX
Display	Industrial Display	Magelis iDisplay
Configuration Software	Vijeo Designer Lite	
	Vijeo Designer	

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For Magelis STO/STU, XBT GT, GK, GTW, GH, Smart, Compact iPC, PC BOX

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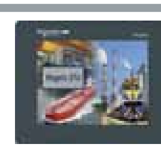
Magelis STO with graphic screen

Type		Specifications		
Display	LCD screen size/resolution	3.4"/monochrome (200 X 80 pixels)		
	Type	Green, orange, red	White, pink, red	Green, orange, red
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad		
	Curves/alarm logs	Yes, with log/Yes, incorporated		
Communication	Serial link	1 RJ45 (RS 232 – RS 485)		1 Terminal Block RS232
	Networks	—	—	—
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic), Uni-TE, Modbus™, Modbus TCP		Zelio™
Development software		Vijeo Designer VJD•••TG•V••M (on Windows XP, Vista and 7 – 32 bit only) or Vijeo Designer Limited Edition		
Dimensions W x D x H (mm)		116.5 x 38.5 x 77.5		
Compatibility with PLCs		Twido™, Modicon™ TSX Micro™, Modicon Premium™, Modicon Quantum™, Modicon M340™		Zelio
CompactFlash card slot		No		
USB port		1 host type A + 1 Device type miniB		
Built-in Ethernet TCP/IP		No		
Supply voltage		24 VDC		
References		HMISTO511	HMISTO512	HMISTO501

Magelis STU with graphic screen



Type		Specifications	
Display	LCD screen size/resolution	3.5"/QVGA (320 X 240 pixels)	5.7"/QVGA (320 X 240 pixels)
	Type	TFT 65 536 colors	
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad	
	Curves/alarm logs	Yes, with log/Yes, incorporated	
Communication	Serial link	1 RJ45 (RS 232 – RS 485)	
	Networks	Ethernet, IEEE 802.3, 10/100 BASE-T, RJ45	
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic), Uni-TE, Modbus, Modbus TCP	
Development software		Vijeo Designer VJD•••TG•V••M (on Windows XP, Vista and 7 – 32 bit only) or Vijeo Designer Limited Edition	
Dimensions W x D x H (mm)		Front: 98 x 16 x 81	Front: 163 x 17.5 x 129.5
		Rear: 118 x 30 x 98	
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon M340	
CompactFlash card slot		No	
USB port		1 host type A + 1 Device type miniB	
Built-in Ethernet TCP/IP		Yes	Yes
Supply voltage		24 VDC	
References		HMISTU655	HMISTU855

Magelis XBT N with matrix, semi-graphic screen[1]

Type		Specifications			
Display	Capacity	2 lines, 20 characters	1 to 4 lines, 5 to 20 characters		
	Type	Back-lit LCD Green		Back-lit LCD Three colors: green, orange, red	
Data entry		Via keypad with 8 keys (four customizable keys)			
Functions	Representation of variables	Alphanumeric	Alphanumeric, bar graph, curves, button and light		
	Alarm log	No	Yes	Yes	Yes
Communication	Serial link	1 RJ45 (RS 232 – RS 485)		1 Sub-D25 (RS 232 – RS 485) + 1 miniDin RS232 [2]	
Communication protocols		Uni-TE, Modbus Master		Uni-TE, Modbus Master, Siemens, Rockwell, Omron, Mitsubishi, Zelio [2]	
Development software		Vijeo Designer Lite (on Windows XP and Vista)			
Dimensions W x D x H (mm)		132 x 37 x 74			
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon M340		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon Momentum, Modicon M340, Zelio [2]	
Supply voltages		5 VDC or PLC power supply		24 VDC	
References		XBTN200	XBTN400	XBTN410	XBTN401

[1] Except XBTN200: alphanumeric screen.
[2] For XBTN401 only

Magelis XBT N with matrix, semi-graphic screen, dedicated

Type		Specifications	
Display	Capacity	1 to 4 lines, 5 to 20 characters	
	Type	Back-lit LCD Green	Back-lit LCD Three colors: green, orange, red
Data entry		Via keypad with eight keys	
Functions	Representation of variables	Alphanumeric, bar graph, curves, button and light	
	Alarm log	Yes	
Communication	Serial link	1 Sub-D25	1 Sub-D25 (RS 232 – RS 485) + 1 miniDin RS232 [2]
Communication protocols		Modbus	Zelio
Development software		Vijeo Designer Lite (on Windows XP and Vista)	
Dimensions W x D x H (mm)		132 x 37 x 74	
Compatibility with PLCs		Motor starter TeSys™ Model U	Zelio (including connection cable)
Supply voltage		24 VDC	
References		XBTNU400	XBTNSR2 [3]

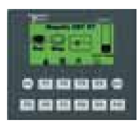
[2] For XBTN401 only
[3] Including : 1 XBTN401 + 1 cable SR2CBL08 for Zelio

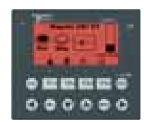
Magelis XBT R with matrix, semi-graphic screen[1]

Type		Specifications		
Display	Capacity	4 lines, 20 characters		
	Type	Back-lit LCD Green		Back-lit LCD Three colors: green, orange, red
Data entry		Via keypad with eight keys (four customizable keys)		
Functions	Representation of variables	Alphanumeric, bar graph, curves, button and light		
	Alarm log	Yes	Yes	Yes
Communication	Serial link	1 RJ45 (RS 232 – RS 485)	1 Sub-D25 (RS 232 – RS 485) + 1 miniDin (RS232)	
Communication protocols		Uni-TE, Modbus Master	Uni-TE,Modbus Master/Slave [1], Siemens, Rockwell, Omron, Mitsubishi, Zelio [1]	
Development software		Vijeo Designer Lite (on Windows XP and Vista)		
Dimensions W x D x H (mm)		137 x 37 x 118		
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon M340	Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon Momentum, Modicon M340, Zelio [1]	
Supply voltages		5 VDC or PLC power supply	24 VDC	
References		XBTR400	XBTR410	XBTR411

[1] For XBTR411 only

Magelis XBT RT with semi-graphic and touch screen

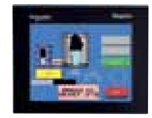




Type		Specifications	
Display	Capacity	10 lines, 33 characters	
	Type	Back-lit LCD Green	Back-lit LCD Three colors: green, orange, red
Data entry		Via keypad with 12 keys (10 customizable keys) or touchscreen	
Functions	Representation of variables	Alphanumeric, bar graph, curves, button and light	
	Alarm log	Yes	Yes
Communication	Serial link	1 RJ45 (RS 232 – RS 485) + 1 miniDin (RS232) [2]	
Communication protocols		Uni-TE, Modbus Master, Siemens, Rockwell,Omron, Mitsubishi	
Development software		Vijeo Designer Lite (on Windows XP and Vista)	
Dimensions W x D x H (mm)		137 x 37 x 118	
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon M340, Modicon Quantum, Zelio [2]	
Supply voltages		5 VDC or PLC power supply	24 VDC
References		XBTRT500	XBTRT511

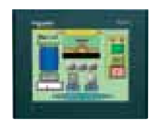
[2] For XBTRT511 only

Magelis XBT GT with 3.8" touch screen



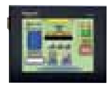
Type		Specifications		
Display	LCD screen size/resolution	3.8"/QVGA		
	Type	STN monochrome, amber or red		TFT 256 color
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad		
	Curves/alarm logs	Yes, with log/Yes, incorporated		
Communication	Serial link	1 RJ45 (RS 232 – RS 485)		
	Networks	—	Ethernet, IEEE 802.3	
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic) Uni-TE, Modbus, Modbus TCP		
Development software		Vijeo Designer VJD•••TG•V••M (on Windows XP, Vista and 7 – 32 bit only)		
Dimensions W x D x H (mm)		118 × 30 × 98		
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon M340		
CompactFlash card slot		No		
USB port host type A		1	1	1
Built-in Ethernet TCP/IP		No	Yes	
Supply voltage		24 VDC		
References		XBTGT1105	XBTGT1135	XBTGT1335

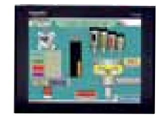
Magelis XBT GT with 5.7" touch screen



Type		Specifications						
Display	LCD screen size/resolution	5.7"/QVGA						5.7"/VGA
	Type	STN Monochrome			STN, color	TFT, color 65536 colors		
		Blue backlighting	Black and White backlighting		4096 colors		High brightness backlighting	
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad						
	Curves/alarm logs	Yes, with log/Yes, incorporated						
Communication	Serial link	1 Sub-D9 (RS 232/RS 422 – RS 485) + 1 RJ45 (RS 485)						
	Networks	—		Ethernet, IEEE 802.3 10/100 BASE-T, RJ45	—	Ethernet, IEEE 802.3 10/100 BASE-T, RJ45	Ethernet 10/100 BASE-T	Ethernet, IEEE 802.3 10/100 BASE-T, RJ45
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic)						
Development software		Vijeo Designer VJD•••TG•V••M (on Windows XP, Vista and 7 – 32 bit only)						
Dimensions W x D x H (mm)		167.5 x 60 x 135						
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon M340, Modicon Momentum						
CompactFlash card slot		No	Yes					
USB port host type A		1						2
Video in		No						
Built-in Ethernet TCP/IP		No	No	Yes	No	Yes	Yes	Yes
Supply voltage		24 VDC						
References		XBTGT2110	XBTGT2120	XBTGT2130	XBTGT2220	XBTGT2330	XBTGT2930	XBTGT2430

Magelis XBT GT with 7.5" and 10.4" touch screen



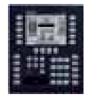
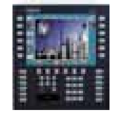


Type		Specifications						
Display	LCD screen size/resolution	7.5"/VGA			10.4"/VGA			10.4"/ SVGA
	Type (color)	STN	TFT	TFT	STN	TFT	TFT	TFT
	Number of colors	4096	65536	65536	4096	65536	65536	65536
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad						
	Curves/alarm logs	Yes, with log/Yes, incorporated						
Communication	Serial link	1 Sub-D9 (RS 232/RS 422 – RS 485) + 1 RJ45 (RS 485)						
	Networks	Ethernet, IEEE 802.3 10/100 BASE-T, RJ 45						
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic) Uni-TE, Modbus, Modbus TCP/IP						
Development software		Vijeo Designer VJD•••TG•V••M (on Windows XP, Vista and 7 – 32 bit only)						
Dimensions W x D x H (mm)		215 x 60 x 170			313 x 56 x 239	271 x 57 x 213		
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon M340						
CompactFlash card slot		Yes						
USB port host type A		1	1	1	2	2	2	2
Video in		No	No	Yes	No	No	Yes	No
Built-in Ethernet TCP/IP		Yes						
Supply voltage		24 VDC						
References		XBTGT4230	XBTGT4330	XBTGT4340	XBTGT5230	XBTGT5330	XBTGT5340	XBTGT5430

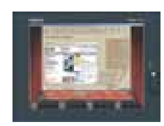
Magelis XBT GT with 12.1" and 15" touch screens

Type		Specifications		
Display	LCD screen size/resolution	12.1"/SVGA		15"/XGA
	Type (color)	TFT	TFT	TFT
	Number of colors	65536	65536	65536
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad		
	Curves/alarm logs	Yes, with log/Yes, incorporated		
Communication	Serial link	1 Sub-D9 (RS 232/RS 422 – RS 485) + 1 RJ45 (RS 485)		
	Networks	Ethernet, IEEE 802.3 10/100 BASE-T, RJ 45BASE-T, RJ 45		
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic) Uni-TE, Modbus, Modbus TCP/IP		
Development software		Vijeo Designer VJD•••TG•V••M (on Windows XP, Vista and 7 – 32 bit only)		
Dimensions W x D x H (mm)		313 x 56 x 239		395 x 60 x 294
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon M340		
CompactFlash card slot		Yes		
USB port host type A		2		
Video in		No	Yes	Yes
Built-in Ethernet TCP/IP		Yes		
Supply voltage		24 VDC		
References		XBTGT6330	XBTGT6340	XBTGT7340

Magelis XBT GK with touch screen and keypad

Type		Specifications		
				
Display	LCD screen size/resolution	5.7"/QVGA		10.4"/VGA
	Type	STN monochrome black and white	TFT Color 65536 colors	
Data entry	Soft function keys with LED	14		18
	Static function keys with LED	10 + legends		12 + legends
	Service keys/ alphanumeric keys	8/12		
	Touch screen and industrial pointer	Yes		
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad		
	Curves	Yes, with log		
Communication	Serial link	1 Sub-D9 (RS 232/RS 422 – RS 485) + 1 RJ45 (RS 485)		
	Networks	—	Ethernet, IEEE 802.3 10/100 BASE-T, RJ 45	
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic) Uni-TE, Modbus, Modbus TCP/IP		
Development software		Vijeo Designer VJD•••TG•V••M (on Windows XP, Vista and 7 – 32 bit only)		
CompactFlash card slot		Yes		
Dimensions W x D x H (mm)		220.3 x 88 x 265	296 x 91 x 332	197 x 92.6 x 147
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon M340		
USB port		1	1	2
Video in		No	No	No
Built-in Ethernet TCP/IP		No	Yes	
Supply voltage		24 VDC		
References		XBTGK2120	XBTGK2330	XBTGK5330

Magelis XBT GTW with 8.4", 12" and 15" touch screen

Type	Specifications		
			
Pre-installed software	OS: Windows XP Embedded, Internet Explorer, Office & Acrobat Reader, .NET, Vijeo Designer Run Time unlimited		
	—	Vijeo Citect Web Client	
Touch screen	8.4" LCD TFT	12" LCD TFT	15" LCD TFT
Resolution	SVGA 800 x 600	SVGA 800 x 600	XGA 1024 x 768
Font panel ports	—	1 x USB	1 x USB
Processor	Celeron M @ 600 MHz	Celeron M @ 1 GHz	Celeron M @ 1 GHz
RAM	512 MB ▶ 1024 MB	512 MB ▶ 1024 MB	1024 MB
Storage	CF 2 GB expandable to 4 GB	CF 2 GB expandable to 4 GB	CF 4 GB
Extension	—	1 x PCMCIA slot (for 1 type II card)	1 PCMCIA slot (for 1 type III card or 2 type I cards)
Ethernet ports	2 (10/100/1G + 10/100)	2 (10/100/1G + 10/100)	2 (10/100/1G + 10/100)
I/O ports	4 x USB, 2 x RS 232	4 x USB, 1 x RS 232	4 x USB, 2 x RS 232
Power supply	24 VDC	24 VDC	24 VDC
Dimensions W x D x H (mm)	230 x 65 x 177	313 x 60 x 239	395 x 65 x 294
References	XBTGTW450	XBTGTW652	HMIGTW7353

Magelis XBT GH with 5.7" touch screen

Type		Specifications		
+ Screen				
Display	LCD screen size/resolution	5.7"/VGA		
	Type (color)	TFT		
	Number of colors	65536		
Data entry	Function keys	11 + label		
	Operation key	1 with LED (validation touchscreen)		
Safety components	Key switch	Yes for ON/OFF		
	3 positions enable switch	Yes, OK signal in intermediate position only		
	Emergency stop	Yes, red with two safe contacts and one auxiliary contact		
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad		
	Curves/alarm historic	Yes, with log/Yes, incorporated		
Connection		32-pins connector (communication, alimentation, I/O)		
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic) Uni-TE, Modbus, Modbus TCP/IP		
Development software		Vijeo Designer VJD•••TG•V••M (on Windows XP, Vista and 7 – 32 bit only)		
CompactFlash card slot		Yes		
Dimensions W x D x H (mm)		224 x 174 x 87.1		
USB port		1		
Supply voltage		24 VDC		
Reference		XBTGH2460		
+ Cable interface		**Connection with junction box**		
Type of connector		2 x 32-pins speed connectors		
Length		3 m	5 m	10 m
References		XBTZGHL3	XBTZGHL5	XBTZGHL10
+ Junction box		**Connection with PLCs**		
Communication	Serial link	1 SubD9 (RS232/RS422 – RS 425)		
	Network	1 Ethernet RJ45 IEEE 802.3 10/100 T-BASE		
Connection	32-pins connector	Interface cable 3 or 10 m		
	24-pins screw terminals blocks	24 VDC, state of I/O safety components		
Reference		XBTZGJBOX		

A large number of accessories (cables, memory cards, protective sheets, etc.) are available for the advanced panels range.

Certification marine* CE UL Class 1 Div 2 CSA PCT ME25 C-Tick Ex Catégorie 3 RoHS

Modular HMI controller
Magelis XBTGT/GK with control function

Type		Specifications	
Display	LCD screen size/resolution	5.7"/QVGA to 10.4"/VGA	5.7" (QVGA/VGA), 7.5" (VGA), 10.4" (VGA/SVGA), 12.1" (SVGA), 15" (XGA)
	Type	STN monochrome or TFT color	STN monochrome, STN 4096 colors, TFT 65000 colors
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad	
	Curves/alarm logs	Yes, with log/Yes, incorporated	
	Control	5 languages IEC	
Communication	Serial link	1 RJ45 (RS 485) + 1 Sub9 (RS 232/RS 422 – RS 485)	
	Networks	Ethernet, IEEE 802.3 10/100 BASE-T, RJ45 depending on model	
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic), Uni-TE, Modbus, Modbus TCP	
Development software		SoMachine (under Windows XP and Vista)	
Dimensions W x D x H (mm)		Depending on model	
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon M340	
CompactFlash card slot		Yes	
USB port		1 or 2	
Built-in Ethernet TCP/IP		Depending on model	
Built-in I/O		No	
Extensions		CANopen module mandatory	
Supply voltage		24 VDC	
References		XBTGK2•/53	XBTGT2•/4•/5•/63/73

The CANopen master module shown below may be added to any of the XBTGK* and XBTGT* products shown above and programmed with SoMachine™ software to provide an all-in-one HMI controller including control logic and the ability to utilize remote IO via the CANopen bus. Please contact your Schneider Electric automation representative for additional details on this unique and powerful automation solution.

Control extension

Type of module	CANopen master
Characteristics	Class M10 limited 16 slaves, Standard DS301 V4.O2
Reference	XBTZGCANM

Magelis XBT GC compact HMI controller

Type		Specifications		
Display	LCD screen size/resolution	3.8"/QVGA	5.7"/QVGA	
	Type	STN monochrome, amber or red	STN monochrome, gray	STN 4096 colors
Functions	Representation of variables	Alphanumeric, bitmap, bar graph, gauge, button, light, clock, flashing light, keypad		
	Curves/alarm logs	Yes, with log/Yes, incorporated		
	Control	5 languages IEC		
Communication	Serial link	—	1 Sub9 (RS 232/RS 422 – RS 485)	
	Networks	—	—	Ethernet, IEEE 802.3 10/100 BASE-T, RJ45
Communication protocols		Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic) Uni-TE, Modbus, Modbus TCP		
Development software		SoMachine (on Windows XP and Vista)		
Dimensions W x D x H (mm)		130 x 76 x 104	207 x 76 x 157	
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon M340		
CompactFlash card slot		No		
USB port host type A		1	1	1
Built-in Ethernet TCP/IP		No	No	Yes
Integrated I/O		12I/6O 24 VDC	16I/16O 24 VDC	
Extensions		2 modules TM2 or CANopen module	3 modules TM2 or CANopen module	
Supply voltage		24 VDC		
References	Source output	XBTGC1100T	XBTGC2120T	XBTGC2230T
	Sink output	XBTGC1100U	XBTGC2120U	XBTGC2230U

Extensions

Type of module		CANopen master
Characteristics		Class M10 limited 16 slaves, Standard DS301 V4.O2
Reference		XBTZGCCAN

Type of module	Digital Inputs/Outputs						
Characteristics	8I 24 VDC Screw terminal	16I 24 VDC Screw terminal	16I 24 VDC HE10	32I 24 VDC HE10	8I 120 VAC Screw terminal	4I 24 VDC 4O Relays Screw terminal	16I 24 VDC 8O Relays Screw terminal
References	TM2DDI8DT	TM2DDI16DT	TM2DDI16DK	TM2DDI32DK	TM2DAI8DT	TM2DMM8DRT	TM2DMM24DRF

Type of module		Digital Inputs/Outputs				
Characteristics		8O Transistor 24 VDC Screw terminal	16O Transistor 24 VDC HE10	32O Transistor 24 VDC HE10	8O Relays 230 VAC 30 VDC Screw terminal	16O Relays 230 VAC 30 VDC Screw terminal
References	Source output	TM2DD08TT	TM2DD016TK	TM2DD032TK	TM2DRA8RT	TM2DRA16RT
	Sink output	TM2DD08UT	TM2DD016UK	TM2DD032UK	—	—

Type of module	Analog Inputs/Outputs					
Characteristics	2I Current/ Voltage	2I Thermocouple	4I Current/ Voltage Temperature	8I Current/ Voltage	8I Temperature	8I PTC
References	TM2AMI2HT	TM2AMI2LT	TM2AMI4LT	TM2AMI8HT	TM2ARI8LRJ TM2ARI8LT	TM2ARI8HT

Type of module	Analog Inputs/Outputs				
Characteristics	1O Current/ Voltage	2O Voltage	2I Current/Voltage 1O Current/ Voltage	2I Temperature 1O Current/ Voltage	4I Current/Voltage 2O Current/ Voltage
References	TM2AMO1HT	TM2AVO2HT	TM2AMM3HT	TM2ALM3LT	TM2AMM6HT

Magelis Smart with 8.4", 12", 15" touch screens

Type			Smart 8.4	Smart 12	Smart 15	Smart+ 15
Pre-installed software			OS: Windows XP Embedded, Internet Explorer, Office & Acrobat Reader, .NET			OS: Windows XP Professional
			—	Vijeo Designer Runtime demo, Vijeo Citect Web Client		
Touch screen			8.4" LCD TFT	12" LCD TFT	15" LCD TFT	
Resolution			SVGA 800 x 600	SVGA 800 x 600	XGA 1024 x 768	
Front-side port			—	1 x USB	1 x USB	
Processor			Celeron M @ 600 MHz	Celeron M @ 1 GHz	Celeron M @ 1 GHz	
RAM			512 MB ▶ 1024 MB	512 MB ▶ 1024 MB	1024 MB	
Storage			CF 2 GB expandable to 4 GB	CF 2 GB expandable to 4 GB	CF 4 GB	Flash Disk 15GB
Extension			—	1 x PCMCIA slot (for 1 type II card)	1 PCMCIA slot (for 1 type III card or 2 type I cards)	
Ethernet ports			2 (10/100/1G + 10/100)	2 (10/100/1G + 10/100)	2 (10/100/1G + 10/100)	
I/O ports			4 x USB, 2 x RS 232	4 x USB, 1 x RS 232	4 x USB, 2 x RS 232	
Certification			UL 508, CSA 142, Marine [1]	UL 508, CSA 142	UL 508, cUL, UL 1604 (Haz-Loc Class 1 Div 2) [1], Marine DNV [1]	
Dimensions W x D x H (mm)			230 x 65 x 177	313 x 60 x 239	395 x 65 x 294	
iPC without maintenance	License VJDSNRTMPC for Vijeo. iPC without maintenance unlimited, to be ordered separately.	AC	MPCST11NAJ00T	MPCST21NAJ20T	HMIPSC7AE03	—
(CompactFlash disk)		DC	MPCST11NDJ00T	MPCST21NDJ20T	HMIPSC7DE03	—
iPC without maintenance	License VJDSNRTMPC for Vijeo. iPC without maintenance unlimited, to be ordered separately.	AC	—	—	—	HMIPSF7AP03
(Flash disk)		DC	—	—	—	HMIPSF7DP03
Vijeo Citect Lite 1200 E/S		AC	—	—	—	HMIPSF7APL3
Vijeo Citect Full 500 E/S		AC	—	—	—	HMIPSF7APF3

[1] DC version, only

Magelis Compact iPC with 8.4", 12", 15" touch screen

Type			Compact iPC 8.4"	Compact iPC 12"	Compact iPC 15"	
Pre-installed software			Windows XP PRO, Vijeo Designer Run Time Demo			
Touch screen			8.4" LCD TFT	12" LCD TFT	15" LCD TFT	
Resolution			SVGA 800 x 600	XGA 1024 x 768	XGA 1024 x 768	
Front-side port			—	1 x USB	1 x USB	
Processor			Celeron M @ 1 GHz	Celeron M @ 1.5 GHz	Celeron M @ 1.6 GHz	
RAM			512 MB ▶ 1024 MB	512 MB ▶ 1024 MB	512 MB ▶ 2 GB	1.5 GB ▶ 2 GB
Drive devices			—	—	Engraver DVD	
Storage			HDD ≥ 80 GB	HDD ≥ 250 GB or Flash disk 15 GB	HDD ≥ 80 GB or Flash disk 15 GB	
Extension			—	1 PCMCIA slot (for 1 type II card)	1 PCMCIA slot (for 1 type III card or 2 type I card)	
Ethernet ports			2 (10/100/1G + 10/100)	2 (10/100/1G + 10/100)	2 (10/100/1G + 10/100)	
I/O ports			4 x USB, 2 x RS 232	4 x USB, 1 x RS 232	4 x USB, 4 x RS 232	
Certification			UL508, CSA	UL508, CSA	UL508, CSA, UL1604 (Haz-Loc Class 1, Div 2)	
Dimensions W x D x H (mm)			230 x 120 x 177	313 x 100 x 239	395 x 100 x 294	
General purpose	License VJDSNRTMPC for Vijeo. Designer Run Time ≥ 5.1, unlimited, to be ordered separately.	AC	MPCKT12NAX00N	MPCKT22NAX20N	MPCKT55NAX20N	—
(Hard drive)		DC	—	—	MPCKT55NDX20N	—
Heavy duty		AC	—	MPCKT22MAX20N	MPCKT55MAX20N	—
(Flash disk)	SCADA Edition (Vijeo Citect)	AC				
	Vijeo Citect Lite 1200 I/O		—	—	—	MPCKT55MAX20L
	Vijeo Citect Full 500 I/O		—	—	—	MPCKT55MAX20V

Magelis (BOX) • • • • • • • • • • • • • • • Embedded BOX and PC BOX

Magelis Smart BOX, Magelis Compact PC BOX

Type			Smart BOX	Compact PC BOX
Pre-installed software			Windows XP PRO, Vijeo Designer Run Time Demo	
Processor			Celeron M @ 600 MHz	Celeron M @ 1 GHz
RAM	Default ▶ Max		256 MB ▶ 1024 MB	512 MB ▶ 1024 MB
Storage			CF 2 GB	HDD ≥ 80 GB
Drives			—	—
Extension			—	1 x PCI
Video ports			1 x RGB	1 x RGB
Ethernet ports			2 (10/100/1G + 10/100)	2 (10/100/1G + 10/100)
I/O ports			4 x USB, 2 x RS 232	4 x USB, 2 x RS 232
Certification			UL 508, CSA, UL1604 (Haz-Loc Class 1 Div 2), ATEX2-22, Marine DNV [1]	UL 508, CSA
Connection	For iDisplay		Yes	Yes
	For Front Panel		No	No
Dimensions W x D x H (mm)			218 x 65 x 165	218 x 115 x 165
iPC general purpose	License VJDSNRTMPC for Vijeo. Designer Run Time ≥ 5.1, unlimited, to be ordered separately.	AC	—	MPCKN02NAX00N
(Hard drive)			—	
iPC without maintenance	License VJDSNRTMPC for Vijeo. Designer Run Time ≥ 5.1, unlimited, to be ordered separately.	AC	MPCSN01NAJ00T [2]	—
(CompactFlash disk)		DC	MPCSN01NDJ00T	—

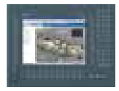
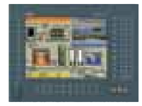
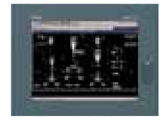
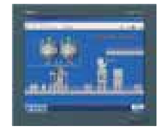
[1] Marine DNV and Atex 2-22 on DC version only [2] With delivered external alimentation adaptator

Magelis Flex PC BOX

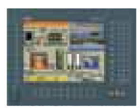
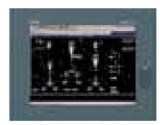
Type			Flex PC BOX F			Flex PC BOX H		
Pre-installed software			Windows XP PRO, Vijeo Designer Run Time Demo					
Processor			Celeron M 1.86 GHz	Core Duo 2 GHz		Celeron M 1.86GHz	Core Duo 2 GHz	
RAM	Default ▶ Max		512MB ▶ 2 GB	1 GB ▶ 2 GB	2 GB	512MB ▶ 2 GB	1 GB ▶ 2 GB	2 GB
Storage			HDD ≥ 250 GB with option RAID or Flash Disk 15 GB			HDD ≥ 250 GB with option RAID or Flash Disk 15 GB		
Drives			Engraver DVD					
Extension			2 PCI			4 PCI		
Video ports			1 x DVI-I (RGB)					
Ethernet ports			2 (10/100/1 G + 10/100)					
I/O ports			4 x USB, 4 x RS 232					
Certification			UL 508, cUL, UL 1604 (Haz-Loc Class 1 Div 2), ATEX2-22 [1]					
Connection	For iDisplay		Yes					
	For Front Panel		Yes					
Dimensions W x D x H (mm)			243 x 160 x 289			243 x 205 x 289		
iPC general purpose	License VJDSNRTMPC for Vijeo. Designer Run Time ≥ 5.1, unlimited, to be ordered separately.	AC	MPCFN02NAX00N	MPCFN05NAX00N	—	MPCHN02NAX00N	MPCHN05NAX00N	—
(Hard drive)		DC	MPCFN02NDX00N	MPCFN05NDX00N	—	MPCHN02NDX00N	MPCHN05NDX00N	—
iPC without maintenance		AC	—	MPCFN05MAX00N	—	—	MPCHN05MAX00N	—
(CompactFlash disk)		DC	—	—	MPCFN05MAX00V	—	—	MPCHN05MAX00V

[1] Atex 2/22 for DC version only

Magelis • Front Panel

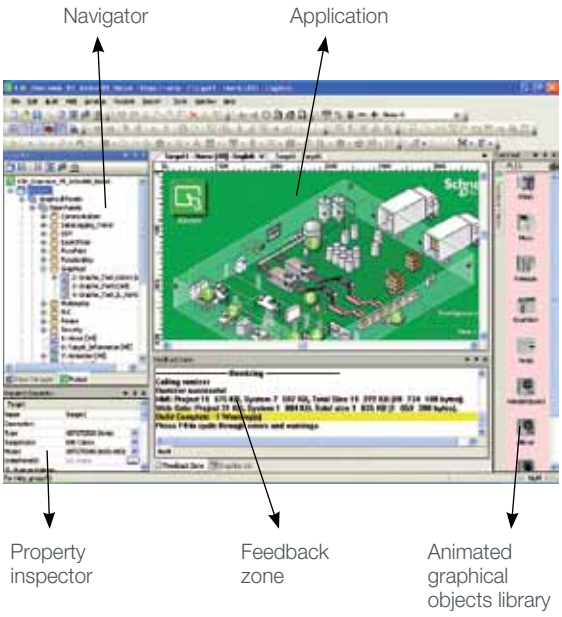
Magelis iPC to be connected only with Magelis Flex PC BOX				
Type	12" touch and keypad	15" touch and keypad	15" touch	19" touch
Touch screen	12" LCD TFT	15" LCD TFT	15" LCD TFT	19" LCD TFT
Resolution	SVGA 800 x 600	XGA 1024 x 768	XGA 1024 x 768	SXGA 1280 x 1024
Front-side port	1 x USB	1 x USB	1 x USB	1 x USB
Dimensions W x D x H (mm)	420 x 31 x 320	483 x 31 x 365	420 x 31 x 320	460 x 44 x 390
References	MPCYB20NNN00N	MPCYB50NNN00N	MPCYT50NNN00N	MPCYT90NNN00N

Magelis • Industrial Display

Magelis iDisplay with 15" and 19" touch screen			
Type	15" touch and keypad	15" touch	19" touch
Touch screen	15" LCD TFT	15" LCD TFT	19" LCD TFT
Resolution	XGA 1024 x 768	XGA 1024 x 768	SXGA 1280 x 1024
Front-side port	1 x USB	1 x USB	1 x USB
Video ports	1 x VGA and 1 x DVI	1 x VGA and 1 x DVI	1 x VGA and 1 x DVI
Touch screen ports	1 x USB and 1 x RS 232	1 x USB and 1 x RS 232	1 x USB and 1 x RS 232
Power supply	100…240 VAC	100…240 VAC	100…240 VAC
Certification	UL 508, CSA	UL 508, CSA	UL 508, CSA
Dimensions W x D x H (mm)	483 x 65 x 365	395 x 60 x 294	460 x 65 x 390
References	MPCNB50NAN00N	MPCYT50NAN00N	MPCYT90NAN00N

Vijeo Designer • • • • • • • • • • • • • • • Configuration Software

Magelis STO/STU, XBT GT, GK, GTW, GH
Magelis Smart, Compact iPC and PC BOX*



Vijeo Designer configuration software enables creation of automated system control operator dialogue applications for Magelis STO/STU, XBT GT, GK, GTW, GH terminals and Smart & Compact iPC and PC BOX. It also enables management of the multimedia functions of XBT GTW and Smart & Compact iPC (video and audio) and offers users of Ethernet terminals and iPC remote access via a Web browser (WEB Gate function).

Configuration

Vijeo Designer configuration software enables fast, simple processing of operator dialogue projects thanks to its ergonomics, developed around six configurable windows. It also offers comprehensive application management tools:

- Project creation; projects comprising one or several targets (terminal or **iPC**)
- Recipe editor (32 groups of 256 recipes of max. 1024 ingredients)
- User action list (eg. script) for application adaptability
- Application variable cross-referencing
- Vectorial graphic library for more attractive graphic screens
- Application block diagram documentation
- Simulation mode for simple design office application testing
- High-performance graphic editor for simple block diagram creation (over 30 animated pre-configured generic objects)
- Support of layers and masks for faster development.
- Data sharing (up to 300 variables on eight terminals)
- Management of 40 alphabets (including simplified Chinese, Korean, Arabic and Hebrew) with the opportunity to have 15 languages per application and dynamic change
- Programmable controller database sharing (Unity Pro™, PL7™, Concept™, TwidoSoft™, ProWORX™, ModSoft™), process variables or operators actions
- Advanced traceability function (periodic, at event or on request)
- Project backup on terminal for simple maintenance
- User-friendly data recovery tool
- Support of standard USB peripherals (USB key up to 4 GB)
- Support of external USB keyboards and mice
- Integration with Schneider Electric equipment (buffer diag., variables access, Unity DDT and unlocated variables)
- Event-triggered e-mail funtion
- Over 35 third-party protocols
- Multilingual software: English, French, German, Italian, Spanish, Portuguese and Simplified Chinese
- Printing function

Industrial intelligence option: Intelligent Data Service

Intelligent Data Service (IDS) is an extension of Vijeo Designer for the PC (Magelis or standard PC) which supports the implementation of control solutions for one or a number of terminals (up to 8). This extension offers total traceability. Both process variables and operator actions are tracked so that the right decisions can be made at the right time (Industrial Business Intelligence).

Powerful Data can be collected from multiple terminals via Ethernet without impairing HMI reaction times.

Flexible Various storage methods are supported, CSV file can be read directly in MS Excel, recording in user-defined format in an SQL database or secure IDV (Intelligent Data Vault) files to ensure compatibility with the requirements of 21 CFR Part 11.

*Available with Vijeo Designer ≥ 5.0

Selection guide for Vijeo Designer

Number of licences	Composition	References
Single (1)	Without cable With USB cable	VJDSNDTGSV••M VJDSUDTGAV••M
Group (3)	Without cable	VJDGNDTGSV••M
Team (10)	Without cable	VJDTNDTGSV••M
Facility (Unlimited)	Without cable	VJDFNDTGSV••M

The software is supplied on DVD and runs under Windows XP, Windows Vista and Windows 7.
•• represent the version number. For example VJDSNDTGSV51M is Vijeo Designer version 5.1.
Versions are subject to change.

Runtime for Magelis iPC	Composition	References
Single (1)	Without cable	VJDSNRTMPC
IDS Single (1)	Without cable	VJDSNTRCKV••M

•• represents the version number.

Vijeo Designer Lite • • • • • • • • • • Configuration Software

Magelis XBT N, R, RT

Vijeo Designer Lite configuration software enables the creation of simple operator dialogue applications on Magelis XBT N, R and RT Small Panel ranges.
It also enables transparent recovery of all applications for Magelis XBT N and R produced using its predecessor: XBT L1000.

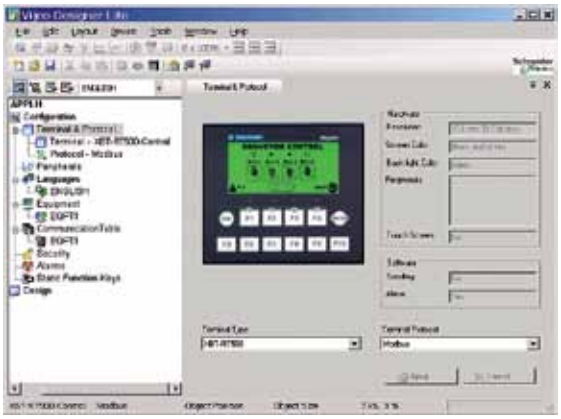
For simplified installation and improved consistency, Vijeo Designer Lite retains the main characteristics of Vijeo Designer software (ergonomics, interface ...) which has become the reference in the HMI field.

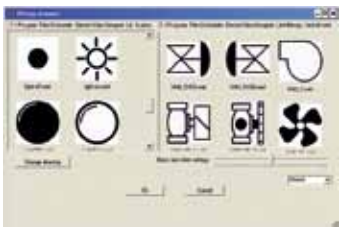
Configuration

Vijeo Designer Lite software enables fast and easy creation of different types of pages (application page, alarm pages, help pages...) and the installation of navigation between pages.

It offers:

- Graphic objects developed for Magelis XBT RT (bar charts, trend curves...)
- Character fonts Byzantine, simplified Chinese, Cyrillic and Japanese
- Project reports
- Application simulation on PC
- Six languages: English, French, German, Italian, Spanish and Chinese.





Selection guide for Vijeo Designer Lite

Number of licenses	Composition	References
Single (1)	Without cable With USB cable	VJDSNDTMSV••M VJDSUDTMSVppM

Software is delivered on CD-ROM and can be executed under Windows 2000, XP and Vista.
•• represents the version number.

These references are downloadable on Schneider-Electric.com.

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