

Human/Machine Interfaces

The essential guide



Automation systems at

Simply Smart*

Welcome to the Simply Smart* world, compliments of Telemecanique

In order to improve the performance of your production equipment, Telemecanique offers you a complete range of hardware and software specifically for Human/Machine dialogue.

Compact, the range of Magelis display units, terminals and industrial PCs is characterised by its ease of implementation.

Ingenious, the software range simplifies the design of your HMI (Human Machine Interfaces) applications.

Take advantage of these new Telemecanique offers that are **open** to new information and communication technologies. Used in conjunction with other Telemecanique equipment, they ensure an optimal solution for the operation of your automation systems.

***Simply Smart:**
*more ingenuity and intelligence
for continually improving ease of use.*



Hardware range

Robustness and simplicity

The new Magelis range, comprising display units, terminals, graphic terminals with keypad or touchscreen and /PC industrial PCs, offers improved robustness for ensuring the availability of your installation.

Of high performance, this range meets the needs of machine Manufacturers, System integrators and Users due to its reduced size, very easy installation and setting-up, and its openness to Web technologies using the Ethernet Transparent Ready architecture.



your beck and call

Software range

Ingenuity and user-friendliness

To benefit from perfect interoperability, select Telemecanique software.

- XBTL1001/L1003, automation system configuration software for display units and terminals.
- Vijeo Designer, multi-platform software which operates on the new graphic terminals in the Magelis range.
- Vijeo Look, open control software specifically for small and medium size applications.
- Monitor Pro, supervision software for distributed architectures, providing complete mastery of your production management.
- The FactoryCast HMI Web server executes at source the following functions: data acquisition, real-time databases, storage, alarm management and E-mail services, as well as monitoring your installation via animated Web pages.



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Human/Machine Interfaces

The essential guide

A selection of the most popular selling products enabling you to quickly locate the most appropriate solution for your application... from the display unit to the industrial PC



Type		Compact display units		
Display	Capacity	2 lines, 20 characters	4 lines, 20 characters	
	Type	Back-lit LCD, green	Back-lit LCD, green	Back-lit LCD, 3 colours: green, orange, red
Data entry		Via keypad with 8 keys (4 with changeable legends)		
Functions	Representation of variables	Alphanumeric	Alphanumeric	Alphanumeric
Communication	Downloadable protocols	Uni-Telway, Modbus	Uni-Telway, Modbus	Uni-Telway, Modbus
Development software		XBTL1001 and XBTL1003 (on Windows 98, 2000 and XP)		
Dimensions W x D x H		132 x 78 x 74 mm		132 x 104 x 74 mm
Compatibility with PLCs		Twido, Nano, TSX Micro, Premium, Quantum		Twido, Nano, TSX Micro, Premium, TSX series 7, Momentum, Quantum
Supply voltage		5 V DC	5 V DC	24 V DC, external
References		XBTN200	XBTN400	XBTN401

With matrix screen



Type		Multilingual display units		
Display	Capacity	8 lines, 40 characters		
	Type	Back-lit LCD, monochrome		
Data entry	Function / service keys	–	4 / 1	– / 5
Functions	Representation of variables	Alphanumeric, bargraph, gauge		
Communication	Downloadable protocols	Multiple (Uni-Telway, Modbus, AEG and for Allen Bradley, GE Fanuc, Omron, Siemens PLCs)		
Development software		XBTL1001 and XBTL1003 (on Windows 98, 2000 and XP)		
Dimensions W x D x H		202 x 64.8 x 111.3 mm		
Compatibility with PLCs		Twido, Nano, TSX Micro, Premium, Quantum		
Supply voltage		24 V DC		
Without printer link, without log		XBTHM007010	XBTHM027010	XBTHM017010
With printer link, with log		–	–	XBTHM017110

Terminals

With alphanumeric screen



Type		2 line multilingual alphanumeric terminals			
Display	Capacity	2 lines, 20 characters			
	Type	Fluorescent matrix, green		Back-lit LCD, green	
Data entry	Function / service keys	8 / 9	12 / 10	8 / 9	12 / 10
	Numeric keys	–	12	–	12
Functions	Representation of variables	Alphanumeric			
Communication	Downloadable protocols	Multiple (Uni-Telway, Modbus, AEG and for Allen Bradley, GE Fanuc, Omron, Siemens PLCs)			
Development software		XBTL1001 and XBTL1003 (on Windows 98, 2000 and XP)			
Dimensions W x D x H		253 x 62.5 x 152 mm			
Compatibility with PLCs		Twido, Nano, TSX Micro, Premium, Quantum		Twido, Nano, TSX Micro, Premium, Quantum	
Supply voltage		24 V DC		24 V DC	
Without printer link, without log		XBTP012010	XBTP022010	XBTP011010	XBTP021010
With printer link, with log		–	XBTP022110	–	XBTP021110

With matrix screen



Type		8 line multilingual matrix screen terminals	
Display	Capacity	8 lines, 40 characters	
	Type	Back-lit LCD, monochrome	
Data entry	Function / service keys	12 / 10	
	Numeric / soft function keys	12 / 4	
Functions	Representation of variables	Alphanumeric, bargraph, gauge	
Communication	Downloadable protocols	Multiple (Uni-Telway, Modbus, AEG and for Allen Bradley, GE Fanuc, Omron, Siemens PLCs)	
Development software		XBTL1001 and XBTL1003 (on Windows 98, 2000 and XP)	
Dimensions W x D x H		253 x 62.5 x 155 mm	
Compatibility with PLCs		Twido, Nano, TSX Micro, Premium	
Supply voltage		24 V DC	
Without printer link, without log		XBTPM027010	
With printer link, with log		XBTPM027110	



Type		Terminals with keypad	
Display	Screen size	5.7"	10.4"
	Type	Back-lit monochrome LCD, green 16 levels of grey	TFT, 256 colours
Data entry	Soft function keys with LED	8	10
	Static function keys with LED	10 + legends	12 + legends
	Service keys	12	12
	Alphanumeric keys	12 + 3 alphanumeric access	
Functions	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, potentiometer, selector	
	Recipes	125 records maximum with 5000 values maximum	
	Curves	16	16
	Alarm logs	Yes	Yes
Communication	Downloadable protocols	Uni-Telway, Modbus, AEG and for Allen Bradley, GE Fanuc, Omron, Siemens PLCs	
	Bus and networks	Fipway, Modbus Plus with PCMCIA card (except XBTF011110)	
Development software		XBTL1003 (on Windows 98, 2000 and XP)	
Dimensions W x D x H		220.3 x 88 x 265 mm	296 x 91 x 332 mm
Compatibility with PLCs		Twido, Nano, TSX Micro, Premium, Quantum	
RJ45 Ethernet 10TCP/IP connector		no	no yes
Supply voltage		24 V DC	
References		XBTF011110 / F011310	XBTF024510 XBTF024610

With touchscreen



Type		Terminals with touchscreen	
Display	Screen size	5.7"	10.4"
	Type	LCD STN, 256 colours	LCD TFT, 256 colours
Data entry		Touchscreen	Touchscreen
Functions	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, potentiometer, selector	
	Recipes	125 records maximum with 5000 values maximum	
	Curves	16	16
	Alarm logs	Yes	Yes
Communication	Downloadable protocols	Uni-Telway, Modbus, AEG and for Allen Bradley, GE Fanuc, Omron, Siemens PLCs	
	Bus and networks	Fipway, Modbus Plus with PCMCIA card (except XBTF032110)	
Development software		XBTL1003 (on Windows 98, 2000 and XP)	
Dimensions W x D x H		197 x 92.6 x 147 mm	296 x 91 x 222 mm
Compatibility with PLCs		Twido, Nano, TSX Micro, Premium, Quantum	
RJ45 Ethernet 10 TCP/IP connector		no	no yes
Supply voltage		24 V DC	
References		XBTF032110 / F032310	XBTF034510 XBTF034610

Graphic terminals open to NTIC

(New Technology for Information and Communication)

With 5.7" touchscreen



Type		Optimum	Multifunction		
Display	LCD screen size	5.7"	5.7"	5.7"	5.7"
	Type	Back-lit STN monochrome, blue	Back-lit STN, monochrome black and white	STN, colour 64 colours	TFT, colour 256 colours
Functions	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, button, light, clock, flashing light, keypad			
	Curves	yes, with log	yes, with log	yes, with log	
	Alarm logs	yes, incorporated	yes, incorporated	yes, incorporated	
Communication	Downloadable protocols	Uni-Telway, Modbus	Uni-Telway, Modbus	Uni-Telway, Modbus, Modbus TCP/IP	Uni-Telway, Modbus, Modbus TCP/IP
	Bus and networks	–	–	Ethernet, IEEE 802.3 10 BASE-T, RJ45	Ethernet, IEEE 802.3 10 BASE-T, RJ45
Development software		Vijeo Designer VJDSPULFUCDV10M (on Windows 2000 and XP)			
Dimensions W x D x H		207 x 58 x 157 mm	171 x 60 x 138 mm	132 x 74 x 78 mm	
Compatibility with PLCs		Twido, Nano, TSX Micro, Premium, Quantum			
Built-in Ethernet 10 TCP/IP		no	no	yes	no
Supply voltage		24 V DC	24 V DC	24 V DC	24 V DC
References		XBTG2110	XBTG2120	XBTG2130	XBTG2220
				XBTG2330	

With 7.4", 10.4" or 12.1" touchscreen



Type		Multifunction			
Display	LCD screen size	7.4"	10.4"	10.4"	12.1"
	Type	TFT, colour 256 colours	STN, colour 64 colours	TFT, colour 256 colours	TFT, colour 256 colours
Functions	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, button, light, clock, flashing light, keypad			
	Curves	yes, with log	yes, with log	yes, with log	
	Alarm logs	yes, incorporated	yes, incorporated	yes, incorporated	
Communication	Downloadable protocols	Uni-Telway, Modbus	Uni-Telway, Modbus, Modbus TCP/IP	Uni-Telway, Modbus, Modbus TCP/IP	Uni-Telway, Modbus, Modbus TCP/IP
	Bus and networks	–	Ethernet, IEEE 802.3 10 BASE-T, RJ45		
Development software		Vijeo Designer VJDSPULFUCDV10M (on Windows 2000 and XP)			
Dimensions W x D x H		215 x 60 x 170 mm	317 x 58 x 243 mm		
Compatibility with PLCs		Twido, Nano, TSX Micro, Premium, Quantum			
«Compact Flash» card slot		yes	yes	yes	yes
Built-in Ethernet 10 TCP/IP		no	yes	yes	yes
Supply voltage		24 V DC	24 V DC	24 V DC	24 V DC
References		XBTG4320	XBTG4330	XBTG5230	XBTG5330
					XBTG6330



Connection cables	PC to Magelis transfer cables (2.5 m)		
Application	PC to all XBTN200 and N400	PC to all XBT except XBTN200, N400 and XBTG	PC to XBTG
Type of connector	RJ45 / MiniDin + SUB D 9	SUB D 9 / SUB D 25	SUB D 9 / MiniDin
Physical link	RS 232C	RS 232C	TTL
References	XBTZ945	XBTZ915	XBTZG915

Connection cables	Telemecanique PLC connection cables (2.5 m)			
Application	XBTN200, N400 to Twido, Nano, TSX Micro, Premium	all XBT (except XBTN200, N400) to Twido, Nano, TSX Micro, Premium	Quantum	Momentum (port 1)
Type of connector	RJ45 / MiniDin	MiniDin / SUB D 25	SUB D 9 / SUB D 25	RJ45 / SUB D 25
Physical link	RS 485	RS 485	RS 232	RS 232
References	XBTZ978	XBTZ968	XBTZ9710	XBTZ9711



Network cards	PCMCIA type III card	
Compatibility	XBTF	XBTF
Protocol	Modbus Plus	Fipway
References	TSXMBP100	TSXFPP20



Memory cards	PCMCIA type II card	«Compact Flash» card	
Compatibility	XBTF	XBTG (except XBTG2110)	
Capacity	16 Mb	16 Mb	32 Mb
References	XBTMEM16	XBTZGM16	XBTZGM32



▲ Launch 3rd quarter 2004

Type		Smart <i>i</i> PC	Compact <i>i</i> PC	
Display	Size	15" active matrix XGA (1024 x 768)		
	Type	Back-lit active matrix TFT colour LCD (262,144 colours)		
Data entry		Via touchscreen	Via touchscreen	
Processor	Type	VIA	VIA	Intel Pentium 4 Mobile
	Frequency	667 MHz	667 MHz	1.7 GHz
Internal hard disk		–	≥ 20 Gb IDE, 2 1/2"	
RAM memory		128 Mb expandable up to 512 Mb	256 Mb expandable up to 512 Mb (1 memory slot max.)	
CD-ROM drive		–	Yes, 24 x	
Expansion slots		2 PCMCIA slots	1 PCI bus slot, 2 PCMCIA slots,	
		–	1 Compact Flash slot	
Ethernet TCP/IP network		1 x 10 BASE-T/100 BASE-TX (RJ45)		
Operating system		Windows XPe integrated	Windows 2000 pre-installed	
Input/Output ports		2 x USB, 1 x COM1, 1 x COM2,	2 x USB, 1 x COM1, 1 x COM2,	
	on front panel	1 x LPT1 (parallel), 1 x PS/2 keyboard	1 x LPT1 (parallel), 1 x PS/2 keyboard and 1 x PS/2 mouse	
Fixing		–		
Dimensions W x D x H		395 x 62 x 294 mm	395 x 100 x 294 mm	
Supply voltage		24 V DC	115...230 V AC	
References		MPCKT52NDJ00T	MPCKT52NAA00N	MPCKT55NAA00N ▲

Combined offers (bundle pack)

Magelis Compact *i*PC industrial PCs can be supplied with software packages.
Characteristics identical to standard industrial PCs shown above.

Type		Compact <i>i</i> PC		
Processor	Type	VIA	Intel Pentium 4M	
Applications		Vijeo Look	Vijeo Look	
Pre-installed software		Vijeo Look 2.5 RT1024	Vijeo Look 2.5 RT1024	Vijeo Look 2.5 BT1024
References		MPCKT52NAA00A	MPCKT55NAA00A ▲	MPCKT55NAA00B ▲

Accessories

Compact Flash card			
Capacity	512 Mb (empty) for Smart <i>i</i> PC or Compact <i>i</i> PC		
References	MPCYN00CFE00N		
RAM memory expansion			
Capacity	512 Mb SO DIMM for VIA	512 Mb SO DIMM for Pentium 4 Mobile	
References	MPCYK02RAM512	MPCYK05RAM512	



Type		12" front panel screen		
Display	Size	12" active matrix SVGA (800 x 600)		
	Type	Back-lit active matrix TFT colour LCD (262,144 colours)		
Data entry		Via keyboard	Via keyboard and touchscreen	Via touchscreen
	Keyboard	70 standard IBM keys + 2 x 10 user function keys	–	–
Dimensions W x D x H		410 x 52.7 x 330 mm	410 x 52.7 x 330 mm	380 x 52.7 x 330 mm
Input/Output ports on front panel		1 x IrDA infrared and 1 x PS/2 keyboard/mouse		
Associated product		1 central unit Control box or 1 central unit Control box pack (combined offer)		
Fixing		Fixings included with each screen for mounting on panel or enclosure door		
Supply voltage		115..230 V AC from Control box unit		
References		MPCNA20NNN00N	MPCNB20NNN00N	MPCNT20NNN00N



Type		15" front panel screen		
Display	Size	15" active matrix XGA (1024 x 768)		
	Type	Back-lit active matrix TFT colour LCD (262,144 colours)		
Data entry		Via keyboard	Via keyboard and touchscreen	Via touchscreen
	Keyboard	70 standard IBM keys + 2 x 10 user function keys	–	–
Dimensions W x D x H		480 x 52.7 x 370 mm	480 x 52.7 x 370 mm	460 x 52.7 x 340 mm
Input/Output ports on front panel		1 x IrDA infrared and 1 x PS/2 keyboard/mouse		
Associated product		1 central unit Control box or 1 central unit Control box pack (combined offer)		
Fixation		Fixings included with each screen for mounting on panel or enclosure door		
Supply voltage		115..230 V AC from Control box unit		
References		MPCNA50NNN00N	MPCNB50NNN00N	MPCNT50NNN00N

Modular industrial PCs

Modular *i*PC range



Central unit Control box type		Small	Medium		Large	
Processor	Type	Intel Celeron	Intel Celeron	Intel Pentium III	Intel Celeron	Intel Pentium III
	Frequency	566 MHz	566 MHz	850 MHz	566 MHz	850 MHz
Internal hard disk		≥ 20 Gb IDE, 2 1/2"				
RAM memory		128 Mb SDRAM expandable up to 512 Mb (2 memory slots max.)				
CD-ROM drive		Optional	Yes, removable 24 x			
Expansion slots		–	3 slots (1 ISA bus, 1 PCI bus and 1 ISA/PCI bus)		6 slots (2 ISA bus, 3 PCI bus and 1 ISA/PCI bus)	
Ethernet TCP/IP network		1 x 10 BASE-T/100 BASE-TX (RJ45)				
Bus and networks		–	With additional card on ISA or PCI bus: Modbus/Uni-Telway/Fipio bus, Modbus Plus/Fipway networks, INTERBUS-S/Profibus DP/CANopen Third party bus			
Video card	built-in	PCI 64 bit controller, 2 Mb RAM				
Operating system		Windows 2000 pre-installed				
Input/Output ports		2 x USB, 1 x COM1, 1 x COM4 and 1 x LPT1 (parallel) 1 x external VGA video screen, 1 x PS/2 keyboard (1) and 1 x PS/2 pointing device (1)				
Associated product		1 front panel screen or as a stand-alone (2)				
Fixings		Fixings included with each screen for mounting on panel or enclosure door				
Dimensions W x D x H		310 x 310 x 94.2 mm	310 x 310 x 184.5 mm		310 x 310 x 258 mm	
115...230 V AC supply voltage		MPCAN02NAA00N	MPCBN02NAA00N	MPCBN05NAA00N	MPCCN02NAA00N	MPCCN05NAA00N
24 V DC supply voltage		MPCAN02NDA00N	MPCBN02NDA00N	MPCBN05NDA00N	MPCCN02NDA00N	MPCCN05NDA00N

(1) Port not operational when the central unit Control box is used with the front panel screen.

(2) To use the Control box without a front panel screen, mounting panel **MPCNP00NNN00N** is required.

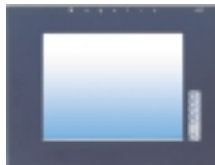
Combined offers (bundle pack)

Magelis *i*PC central unit Control boxes (115...230 V AC supply) can be supplied with software packages.

Characteristics identical to standard Control box units shown above.

Central unit Control box type		Small	Medium		
Processor	Type	Intel Celeron, 566 MHz	Intel Celeron, 566 MHz		
Pre-installed software	Pack A «Monitoring RT»	Vijeo Look supervision, 1024 I/O "Run Time"	Vijeo Look supervision, 1024 I/O "Run Time"		
	Pack B «Monitoring BT/RT»	–	Vijeo Look supervision, 1024 I/O "Build Time/Run Time"		
Pack A, 115 ... 230 V AC supply voltage		MPCAN02NAA00A	MPCBN02NAA00A		
Pack B, 115 ... 230 V AC supply voltage		–	MPCBN02NAA00B		

Accessories



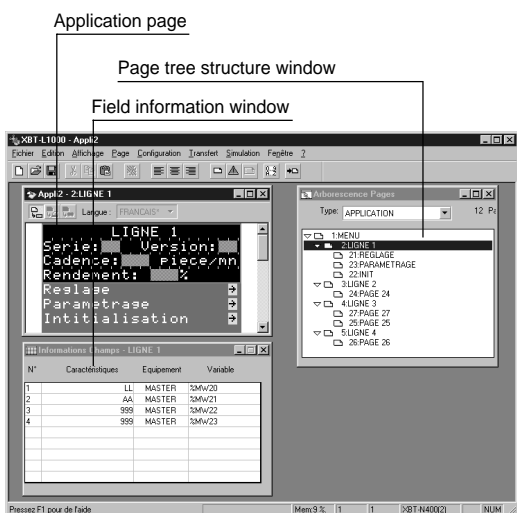
Separate components				
Description	External LCD flat screen, flush mounting 12" SVGA (800 x 600) 15" XGA (1024 x 768)		Swivel arm for external screen	Qwerty keyboard 101 keys, PS/2
References	–	–	MPCYN00ARM00N	MPCYN00KBD00N
	115...230 V AC supply voltage	MPCYS20NAN00N	MPCYS50NAN00N	–
	24 V DC supply voltage	MPCYS20NDN00N	MPCYS50NDN00N	–

Separate components for Control box				
Description	SDRAM memory expansion 64 Mb 128 Mb 256 Mb			CD-ROM drive for Small Control box
References	MPCYN00RAM064	MPCYN00RAM128	MPCYN00RAM256	MPCAN0 MPCYN00CDR00N



Type	Configuration software		
Compatibility	All XBTL except XBTF		XBTF
Operating system	Windows 98, 2000 and XP		Windows 2000 and XP
Version (1)	Light (not for XBTF)	Complete	Vijeo Designer complete
References for PC CD-ROM	XBTL1001M	XBTL1003M	VJDSPULFUCDV10M
References for CD-ROM update	-	XBTLUP1004	-

(1) Demonstration version available, XBTL1001M / L1003M demo: XBTL1003DEMO, Vijeo Designer demo: VJDSPULTUCDV10M



XBTL1001 / L1003 for Magelis display units and terminals

The XBTL1001/L1003 configuration software can be used to create operator dialogue applications designed for controlling automation systems for:

- all XBTLN/H/HM display units, XBTP/PM/E terminals with software XBTL1001,
- all XBTLN/H/HM display units, XBTP/PM/E and F terminals with software XBTL1003.

Applications created using the XBTL1001/L1003 software are independent to the protocol used. The same operator dialogue application can be used with PLCs available from the principal manufacturers.

Configuration

The XBTL1001/L1003 configuration software enables simple creation of various types of pages: application pages (can be interlinked), alarm pages, help pages, recipe pages, etc.

Vijeo Designer for Magelis touchscreen graphic terminals XBTF

The Vijeo Designer configuration software can be used to create operator dialogue applications designed for controlling automation systems for all the Magelis range of New Technology (NTIC) terminals: XBTF.

Configuration

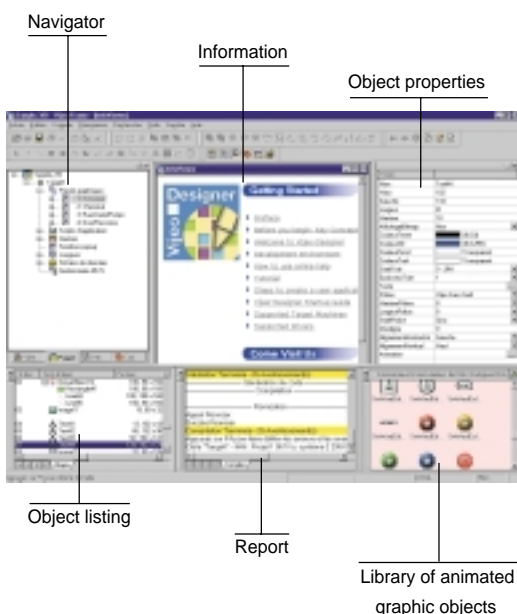
The Vijeo Designer configuration software enables operator dialogue projects to be easily and quickly performed due to advanced ergonomics using 6 configurable windows.

Vijeo Designer configuration software also offers complete application management tools:

- . Project creation, a project being one or several applications.
- . Cross-referencing of application variables.
- . Application synoptics documentation.
- . A simulation mode for easy testing of the application from the design office.

Powerful graphics editor for easy creation of synoptics.

8 types of object animation for animated synoptics.



Vijeo Look _____ Control software



Type	Control software	
Compatibility	All Telemecanique PLCs and Third party PLCs	
Operating system	Windows 2000 and XP	
Input/Output size	1024 I/O	
Version	"Build Time/Run Time"	"Run Time"
References for PC CD-ROM	VJLSMDBTLV25M	VJLSMDRTL25M

Vijeo Look for industrial PCs



Presentation

Vijeo Look 2.5 is a SCADA (Supervisory Control And Data Acquisition) software package designed for stand-alone stations, that offers perfect synergy between the Web and HMI (Human Machine Interface). It is based on open and standardised technologies.

Easy to implement, it offers all the standard functions of a graphic supervision tool.

Vijeo Look is supplied with a pre-configured OFS (OPC Factory Server) Data Server. It is compatible with PCs running Windows 2000 Professional or Windows XP Professional and enables the creation of applications based on all Telemecanique new and old generation PLCs.

The functions of Vijeo Look control software can be used for:

- . Acquisition of PLC tags.
- . Visualisation of these tags.
- . Process supervision and control.
- . Recording the values of the PLC tags or internal tags of the process in a database.
- . Embedded software processing.

The Inputs/Outputs are tags from the OPC Server (or those of the Inputs/Outputs of TSX Micro/Premium PLCs exchanged automatically). They are used for visualisation and embedded processing.

Simple and innovative, Vijeo Look offers optimal solutions.

Structure of the offer

2 types of software licence are available for Vijeo Look:

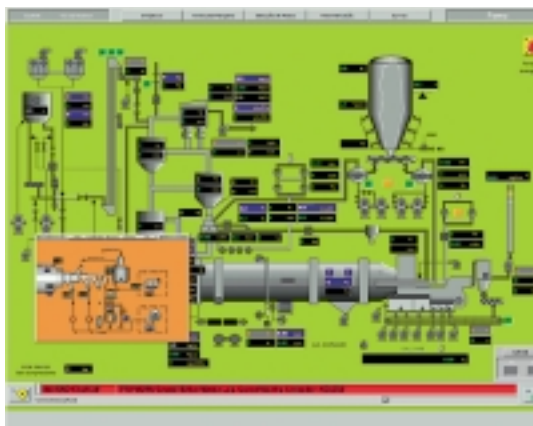
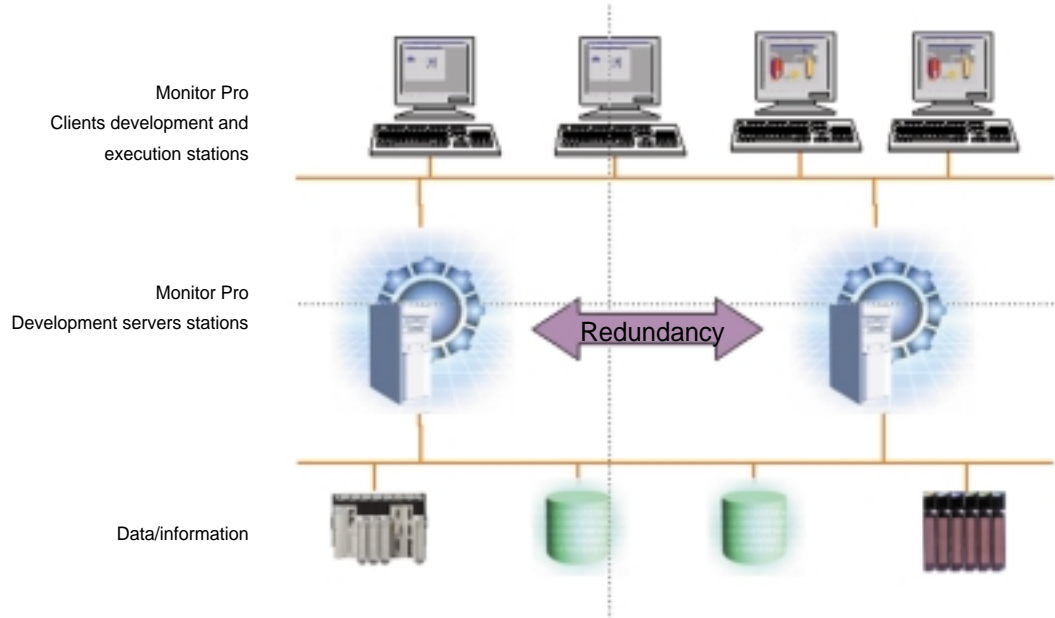
- . "Build Time/Run Time" for application development and execution.
- . "Run Time" for the execution of applications created with a "Build Time"/"Run Time" licence.

Monitor Pro _____ Supervision software



Type	Supervision software
Compatibility	All Telemecanique PLCs and other PLCs on the market via communication drivers or using the standard OPC
Operating system	Windows 2000 service Pack 3 and Windows XP
Input/Output size	11 sizes comprising 300 I/Os to unlimited I/Os (4800 tags to unlimited)
Versions	Development (Build Time/Run Time) and Execution (Run Time)
References for PC CD-ROM	Please contact your Regional Sales Office

Multi-level architecture



Description

Monitor Pro V7.2 is a SCADA (Supervisory Control And Data Acquisition) software solution. Its real-time high performance server offers excellent processing capability, mainly due to the application objects. In addition, its client-server architecture enables it to easily adapt to the topology of your application: multi-server for sharing the processing, multi-user for a wide distribution of information or in redundancy mode for your "high availability" applications.

- **The graphic interface** offers a library of graphic objects. Based on Windows technology, they can easily be customised.
- **The Configuration Explorer:** an intuitive environment for configuration of the real-time data server that also enables object orientated configuration.
- **Relational databases access interface,** supplied with SQL Server 2000. Monitor Pro V7.2 easily enables recording of the production data or access to the stored information. Monitor Pro V7.2 also operates with Oracle, Sybase, Dbase IV and databases supporting the ODBC standard.
- **Improved availability:** Monitor Pro incorporates redundancy services ensuring a high level of architecture availability.
- **Integrated traceability functions,** for real-time monitoring of the quality of your production as well as logging all the actions of the operators.

Monitor Pro V7.2 is the supervision software that adapts to your needs. It offers you real-time monitoring of production and enables you to optimise the operation of your equipment.

FactoryCast _____ Embedded Web servers



Implementation software	FactoryCast	FactoryCast HMI
Compatibility with Telemecanique PLCs	TSX Micro, Premium, Quantum	Premium, Quantum
Operating system	Windows 2000 and XP	
Application	Configuration of FactoryCast modules	Development and implementation of FactoryCast HMI application
References for multilingual PC CD-ROM	Included with FactoryCast modules	TLXCDFCHMIV1M



FactoryCast

Remote diagnostic functions using simple Internet browser

- . Secure access to the diagnostics system and application
- . Numerical or graphical display and adjustment of data
- . Open to customisation and creation of Web pages for diagnostics suited to your needs

FactoryCast HMI

Identical diagnostic functions as FactoryCast + new HMI functions embedded in a PLC module:

- . Real-time database and acquisition of PLC data (1000 variables)
 - . Calculations for pre-processing of data
 - . Advanced alarm management with e-mailing
 - . Archiving of data in relational databases (SQL, Oracle, MySQL)
- (Available on Telemecanique Quantum and Premium PLCs)

FactoryCast Web server modules



Automation platform		TSX Micro	Premium			Quantum	
Data rate		10/100 Mbit/s	10 Mbit/s	10/100 Mbit/s		10/100 Mbit/s	
Ethernet services	Modbus TCP/IP Protocol	Yes	Yes	Yes	Yes	Yes	Yes
	Uni-TE TCP/IP Protocol	Yes	Yes	Yes	–	–	–
	Ethway Protocol	–	Yes	–	–	–	–
	Global Data	–	–	Yes	–	Yes	–
	I/O Scanning	–	–	Yes	–	Yes	–
Embedded Web server	Standard Web services	Yes	Yes	Yes	Yes	Yes	Yes
	FactoryCast services	Yes	Yes	Yes	Yes	Yes	Yes
	FactoryCast HMI services	–	–	–	Yes	–	Yes
References		TSXETZ510	TSXETY110WS	TSXETY5103	TSXWMY100	140NOE77111	140NWM10000

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