*Product data sheet*

# Ethernet in Machines and Installations

## Human-Machine Interface products

## Magelis XBT GT touch-sensitive graphic terminals

## Presentation

Magelis XBT GT (with 3.8” to 15” LCD touch screen) graphic terminals provide simple access to communication solutions via their direct connection to the Ethernet TCP/IP network.

## Characteristics and references


| Touch screen graphic terminals | | Magelis XBT GT | | | | | |
|---|---|---|---|---|---|---|---|
| **Display** | LCD screen size | 3.8" | 5.7” | 7.5” | 10.4” | 12.1” | 15" |
| **Memory capacity** | Application | 8 MB Flash EPROM | 16 MB Flash EPROM | 32 MB Flash EPROM | | | |
| | Extension | – | By Compact Flash card 128, 256, 512 MB or 1 GB | | | | |
| **Functions** | Representation of variables | Alphanumeric, bitmap, bargraph, gauge, tank, curve, polygon, button, light | | | | | |
| | Curves | Yes, with log | | | | | |
| | Alarm log | Yes | | | | | |
| **Communication** | Integrated Ethernet (RJ45) | 10BASE-T | 10BASE-T/100BASE-TX | | | | |
| | Downloadable protocols | Uni-TE, Modbus, Modbus TCP/IP and third-party protocols | | | | | |
| **Compatibility with PLCs** | | Twido, Modicon M340, Modicon Premium, Modicon Quantum | | | | | |
| **Configuration software** | | Vijeo Designer **VJD ●●D TGS V44M** (on Windows 2000 and XP) | | | | | |
| **Operating systems** | | Magelis | | | | | |
| **Compact Flash card slot** | | – | Yes | | | | |
| **Dimensions** | W x H x D (mm) | 130 x 104 x 41 | 167.5 x 135 x 59.5 | 215 x 170 x 60 | 313 x 239 x 55 *(2)* | 313 x 239 x 56 | 395 x 294 x 60 |
| **Supply voltage** | | ⎓ 24 V | | | | | |
| **References** | Back-lit monochrome STN screen | **XBT GT1130** *(1)* | **XBT GT2130** | – | – | – | – |
| | 64-color STN screen | – | – | **XBT GT4230** | **XBT GT5230** | – | – |
| | 256-color TFT screen | – | **XBT GT2330** | **XBT GT4330** | **XBT GT5330** | **XBT GT6330** | – |
| | 256-color TFT screen with video input | – | – | **XBT GT4340** | **XBT GT5340** | **XBT GT6340** | **XBT GT7340** |

| Separate parts | | | | | |
|---|---|---|---|---|---|
| **Magelis XBT GT terminals** | Compact Flash memory cards | 128 MB | 256 MB | 512 MB | 1 Gb |
| **References** | | **XBT ZGM128** | **XBT ZGM256** | **MPC YN0 0CFE 00N** | **MPC YN0 0CF1 00N** |

*(1) With 6 function keys R1...R6.*
*(2) For XBT GT5330/GT5340 : 270.5 x 212.5 x 57.*

For further information, please consult our “Human-Machine Interface” catalog.

# Ethernet in Machines and Installations

## Human-Machine Interface products

## Magelis XBT F graphic terminals

## Presentation

Magelis XBT F 10.4” (with keypad or touch screen) graphic terminals provide simple access to communication solutions via their direct connection to the Ethernet TCP/IP network.

## Characteristics and references


| Graphic terminals | | Magelis XBT F | | | | |
|---|---|---|---|---|---|---|
| **Display** | LCD screen size | 10.4” | | | | |
| **Memory capacity** | Application | 16 MB Flash EPROM (via PCMCIA type II card) | | | | |
| | Extension | – | | | | |
| **Data entry keypad** | Soft function keys with LED | 10 | – | | | |
| | Static function keys with LED | 12 + legends | – | | | |
| | Service keys | 12 | – | | | |
| | Alphanumeric keys | 12 + 3 alphanumeric access | – | | | |
| **Touch-sensitive keys** | | – | – | 8 in 1 row | 16 in 2 rows | 12 in 2 columns |
| **Touchscreen data entry** | | – | Yes | | | |
| **Functions** | Representation of variables | Alphanumeric, bitmap, bargraph, gauge, potentiometer, selector | | | | |
| | Recipes | 125 records maximum with 5000 values | | | | |
| | Curves | 16 real-time curves | | | | |
| | Alarm log | Yes | | | | |
| **Communication** | Integrated Ethernet | 10BASE-T/100BASE-TX (RJ45) | | | | |
| | Buses and networks | Fipio, Fipway, Modbus Plus | | | | |
| | Downloadable protocols | Uni-TE, Uni-TE TCP, Modbus, Modbus TCP/IP and third-party protocols | | | | |
| **Compatibility with PLCs** | | Twido, Modicon M340, Modicon Premium, Modicon Quantum | | | | |
| **Configuration software** | | **XBT L1003M** (on Windows 98, 2000 and XP) | | | | |
| **Operating systems** | | Magelis | | | | |
| **Dimensions** | W x H x D (mm) | 296 x 91 x 332 | 296 x 91 x 222 | 296 x 95 x 222 | | |
| **Supply voltage** | | ⎓ 24 V | | | | |
| **References** | 256-color TFT screen | **XBT F024610** | **XBT F034610** | **XBT FC044610** | **XBT FC084610** | **XBT FC064610** |

| Separate parts | | | | | |
|---|---|---|---|---|---|
| **Magelis XBT F Graphic terminals** | PCMCIA memory card | 16 MB | – | – | – |
| | PCMCIA card for connection to | | Fipio bus | Fipway network | Modbus Plus network |
| **References** | | **XBT MEM16** | **TSX FPP 10** | **TSX FPP 20** | **TSX MBP 100** |

*Product data sheet*

# Ethernet in Machines and Installations

## Human-Machine Interface products

## Magelis Smart *i*PC industrial PCs

## Presentation

Magelis Smart *i*PC industrial PCs are "hardened" PCs, which do not feature vulnerable components: hard disk, CD-ROM drive, etc. They are equipped with a 12" or 15" active-matrix backlit color TFT LCD touch screen

■ 12" models (**MPC ST2 1NAJ 10T/R** ) have a 100…240 V power supply and feature in particular two Ethernet 10BASE-T/100BASE-TX ports (RJ45 connectors) and a total of 5 USB ports, one of which is located on the front panel.
■ 15" models (**MPC ST5 2NDJ 10T/R** ) have a ⎓ 24 V power supply, 1 Ethernet port and 2 USB ports.

Magelis Smart *i*PC industrial PCs feature a Windows XPe SP2 operating system and are supplied ready-to-use in two configurations:
■ **Web edition**: **MPC ST● ●N●J 10T**, with application software pre-installed on a 1-GB Flash memory card:
□ Internet Explorer for browsing the Web (Internet/Intranet)
□ Windows Terminal Services client for client/server architectures
□ Software (readers) for reading Word (.doc), Excel (.xls), PowerPoint (.ppt), and Acrobat (.pdf) files
■ **HMI edition - Vijeo Designer RT**: **MPC ST● ●N●J 10R**, with the software components listed above pre-installed on a Flash card, plus:
□ Vijeo Designer Run Time software

## Characteristics and references


| Compact industrials PCs | | Smart *i*PC | | | |
|---|---|---|---|---|---|
| **Display** | Size | 12" XGA (800 x 600) | | 15" XGA (1024 x 768) | |
| | Format | TFT active matrix back-lit color LCD (262,144 colors) | | | |
| **Data entry** | | Via touchscreen | | | |
| **Processor** | Format | Intel Celeron M | | VIA | |
| | Frequency | 600 MHz | | 667 MHz | |
| **Ethernet TCP/IP Network** | | 2 x 10BASE-T/100BASE-TX (RJ45) | | 1 x 10BASE-T/100BASE-TX (RJ45) | |
| **Storage** | | 1 GB Compact Flash | | | |
| **RAM** | | 256...1024 MB | | 256...512 MB | |
| **CD-ROM drive** | | – | | | |
| **Expansion slots** | PCMCIA cards | 1 slot (taking a maximum of 1 x type III card or 1 x type I card) | | 1 slot (taking a maximum of 1 x type III card or 2 x type I cards) | |
| | PCI port | – | | | |
| | Compact Flash card | 1 slot reserved for 1-GB card containing OS and software | | | |
| **Operating system** | | Windows Xpe integrated | | Windows 2000 preinstalled | |
| **I/O ports** | | 4 x USB | | 2 x USB, 1 x COM1, 1 x COM2, 1 x parallel 1 x PS2 keyboard | |
| | On front panel | 1 x USB | | – | |
| **Mounting** | | On panel or cabinet door (8 fixing bolts supplied) | | | |
| **Dimensions** | W x H x D (mm) | 313 x 239 x 65 mm | | 395 x 294 x 65 mm | |
| **Power supply** | | ∿ 100...240 V | | ⎓ 24 V | |
| **Edition** | Web | **MPC ST2 1NAJ 10T** | – | **MPC ST5 2NDJ 10T** | – |
| | HMI Vijeo Designer Run- Time | – | **MPC ST2 1NAJ 10R** | – | **MPC ST5 2NDJ 10R** |

| Separate parts | | 12" MPC ST2 NAJ 10● | 15" MPC ST5 2NDJ 10● |
|---|---|---|---|
| **RAM expension kit** | 512 MB | **MPC YK0 5RAM 512** | **MPC YK0 2RAM 512** |
| | 1024 MB | **MPC YK2 2RA1 024** | – |
| **Compact Flash memory** | 1 GB blank | **MPC YN0 0CF1 00N** | |
| | 1 GB, Web edition software pre-installed | **MPC YN2 1CF1 00T** | **MPC YN0 0CF1 52T** |
| | 1 GB HMI edition Vijeo Designer RT software pre-installed | **MPC YN2 1CF1 00R** | **MPC YN0 0CF1 52R** |

# Ethernet in Machines and Installations

## Human-Machine Interface products

## Magelis Compact iPC industrial PCs

## Presentation

Magelis Compact *i*PC industrial PCs are “hardened” PCs adapted to the restrictions of industrial environments, and combining compact dimensions with advanced performance and openness to applications under Windows 2000 or Windows XPpro. Powered by a ∿ 100…240 V supply, they are equipped with a 12” or 15” active-matrix backlit color TFT LCD touch screen, a USB port on the front panel (in addition to the standard USB ports), a ⩾ 20 GB hard disk, a slot for a PCI card, and a slot for a PCMCIA card.

### Compact *i*PC - Hardware

■ 12” models **MPC KT2 2NA● 00N** (Intel Celeron M 1.3 GHz processor) feature in particular two Ethernet 10BASE-T/100BASE-TX ports (RJ45 connectors) and a total of 5 USB ports, one of which is located on the front panel.
■ 15” models **MPC KT5 2NA● 00N** (VIA 667 MHz processor) and **MPC KT5 5NA● 00N** (Intel Pentium 4M 1.7 GHz processor) feature 1 Ethernet port and 2 USB ports.

### Compact *i*PC - Software packages

Magelis Compact *i*PC hardware is also available in the form of “packages”, which are supplied together with the application software listed below and are compatible with the relevant processor power:
**Vijeo Designer RT**:References **MPC KT● ●NA● 00R**

## Characteristics and references


| Compact industrials PCs | | Compact *i*PC | | |
|---|---|---|---|---|
| **Display** | Size | 12" XGA (1024 x 768) | 15” XGA (1024 x 768) | |
| | Format | TFT active matrix back-lit color LCD (262,144 colors) | | |
| **Data entry** | | Via touchscreen | | |
| **Processor** | Format | Intel Celeron M | VIA | Pentium 4 Mobile |
| | Frequency | 1.3 GHz | 667 MHz | 1.7 GHz |
| **Ethernet TCP/IP Network** | | 2 x 10BASE-T/100BASE-TX (RJ45) | 1 x 10BASE-T/100BASE-TX (RJ45) | |
| **Storage** | | Hard disk ⩾ 20 GB | | |
| **RAM** | | 512...1024 MB | 512 MB | |
| **CD-ROM drive** | | – | Yes, 24x | |
| **Floppy disk drive** | | – | Yes, 3.5", 1.44 MB | |
| **Expansion slots** | PCMCIA cards | 1 slot (taking a maximum of 1 x type III card or 1 x type I card) | 1 slot (taking a maximum of 1 x type III card or 2 x type I cards) | |
| | PCI port | 1 PCI bus slot | | |
| **Operating system** | | Windows 2000 or Windows XP Pro | | |
| **I/O ports** | | 4 x USB<br>1 x RS232 | 2 x USB, 1 x COM1, 1 x COM2,<br>1 x parallel<br>2 x PS2 | |
| | On front panel | 1 x USB | – | |
| **Mounting** | | On panel or cabinet door (8 fixing bolts supplied) | | |
| **Dimensions** | W x H x D (mm) | 313 x 239 x 108 mm | 395 x 294 x 108 mm | |
| **Software package** | – | **MPC KT2 2NA● 00N** | **MPC KT5 2NA● 00N** | **MPC KT5 5NA● 00N** |
| | Vijeo Designer Run Time | **MPC KT2 2NAX 00R** | **MPC KT5 2NAX 00R** | **MPC KT5 5NAX 00R** |
| | Vijeo Look Run Time | – | **MPC KT5 2NA● 00A** | – |
| | Vijeo Look Built Time | – | – | **MPC KT5 5NA● 00B** |

| Separate parts | | 12" models MPC KT2 2NA● 00N | | 15" models MPC KT5 2NA● 00N | 15" models MPC KT5 5NA● 00N |
|---|---|---|---|---|---|
| RAM expansion Kit | 512 MB | MPC YK0 5RAM 512 | – | **MPC YK0 2RAM 512** | **MPC YK0 5RAM 512** |
| | 1024 MB | – | **MPC YK2 2RA1 024** | – | – |

# Ethernet in Machines and Installations

## Human-Machine Interface products

## Magelis Modular *i*PC industrial PCs

## Presentation

The main features of the Magelis Modular *i*PC range of industrial PCs are:
- Modularity in respect of power ratings and expansion options for Control box 102 and Control box 402.
- Integration of diagnostic tools designed to facilitate operation and maintenance.

The Magelis Modular *i*PC offer comprises:
- Three front panels with 15” color TFT LCD screen.
- Control box 102 and Control box 402.

Magelis *i*PC front panel screens for mounting on a Control box 102/402 comprise:
- A 15” TFT active matrix backlit color LCD screen, with or without touch-screen capability, depending on the model
- An infrared IrDA-compatible port
- A connector for the PS/2 keyboard or mouse port, protected by a plug

With the keyboard model:
- A standard IBM 70-key keyboard
- 2 x 10 user-configurable keys
- A pointing device with tactile feedback

## Characteristics and references

| **Screens for Modular *i*PC** *industrial PCs (any screen can be used with any type of Control box)* | | | | |
|---|---|---|---|---|
| **Display** | LCD screen size | 15" XGA (1024 x 768) | | |
| | Format | TFT active matrix back-lit (262,144 colors) | | |
| **Data entry** | By | Keyboard | Keyboard and touchscreen | Touchscreen |
| | Alphanumeric keys | 70 standard IBM keys | | – |
| | User function keys | 2 x 10 keys | | – |
| **Touch panel** | | Analog resistive, 35 million cycles | | |
| **I/O ports** | | 1 PS/2 port for keyboard/mouse and pointing device<br>1 IrDA compliant infrared port | | |
| **Mounting** | | On any Control box MPC EN0/DN0 listed below | | |
| **Power supply** | | Via Control box | | |
| **Dimensions (W x H x D)** | | 480 x 370 x 53 mm | 480 x 370 x 53 mm | 460 x 340 x 53 mm |
| **References** | | **MPC NA5 0NNN 20N** | **MPC NB5 0NNN 20N** | **MPC NT5 0NNN 20N** |

# Ethernet in Machines and Installations

## Human-Machine Interface products

## Magelis Modular *i*PC industrial PCs

## Presentation

Modular *i*PC Control boxes will feature one of the 15" MPC N●5 front panels and are equipped with:

- An Intel Celeron M 1.3 GHz or Intel Pentium M 1.6 GHz processor
- A 40 MB hard disk, minimum
- 512 MB of RAM as standard, expandable to 4 GB
- A floppy disk drive
- A removable CD-ROM drive *(1)*
- A TCP/IP, 10BASE-T/100BASE-TX, 10/100 Mbps Ethernet port *(RJ45 connector)*
- Two 12 Mbps USB ports
- Two serial COM ports *(RS 232)*
- One parallel port
- Windows 2000 or Windows XP Pro operating system pre-installed

## Characteristics and references


| Control boxes | | Control box 102 | | Control box 402 | |
|---|---|---|---|---|---|
| **Processor** | Format | Intel Celeron M | Intel Pentium M | Intel Celeron M | Intel Pentium M |
| | Frequency | 1.3 GHz | 1.6 GHz | 1.3 GHz | 1.6 GHz |
| **Storage** | | Hard disk ⩾ 40 GB, removable | | | |
| **RAM** | | SDRAM 256 MB, expandable to 512 MB (2 memory slots maximum) | | | |
| **CD-ROM drive** | | Yes, removable, 24x or combined DVD-R/CD-RW drive (available as an option) | | | |
| **Floppy disk drive** | | 3.5", 1.44 MB | | | |
| **Expansion slots** | | 1 x PCI bus slot and<br>2 x type 1/2 (or 1 x type III) PCMCIA slots | | 4 x PCI bus slots and<br>2 x type 1/2 (or 1 x type III) PCMCIA slots | |
| **Integrated Ethernet TCP/IP port** | | 1 x 10BASE-T/100BASE-TX (RJ45) | | | |
| **I/O ports** | | 2 x USB, 1 x COM1, 1 x COM4, and 1 x parallel, 1 x VGA external video port, 2 x PS/2 port *(1)* | | | |
| **Mounting** | | ■ With front panel screen: on panel or cabinet door (fixing bolts supplied with each unit). On 19" rack with 15" front panel screen, requires mounting accessory MPC YNO 0RMK 00N.<br>■ Without front panel screen: on panel or cabinet door, requires mounting panel MPC NP0 0NNN 00N. | | | |
| **Operating system** | | Windows XP Pro or Windows 2000 operating system pre-installed | | | |
| **Dimensions** | W x H x D (mm) | 310 x 310 x 155 | | 310 x 310 x 245 | |
| **Power supply** | ∿ **100…240 V** | **MPC EN0 2NA● 00N** | **MPC EN0 5NA● 00N** | **MPC DN0 2NA● 00N** | **MPC DN0 5NA● 00N** |
| | ⎓ **24 V** | **MPC EN0 2ND● 00N** | **MPC EN0 5ND● 00N** | **MPC DN0 5ND● 00N** | **MPC DN0 5ND● 00N** |

*(1) Port not operational when the Control box is fitted with the front panel screen.*

***Nota :*** *Operating system: Replace ● with X to order the model with Windows XP Pro installed or with A to order the model with Windows 2000 pre-installed.*

| Modular Magelis *i*PC-Vijeo Look software combined offers | | Control box 102 | Control box 402 | |
|---|---|---|---|---|
| **Processor** | | Intel Celeron, 1.3 GHz | Intel Pentium, 1.6 GHz | |
| **Expansion card slots** | | 1 x PCI slot<br>2 x PCMCIA slots | 4 x PCI slots<br>2 x PCMCIA slots | |
| **Vijeo Look supervisory software** (see page 48297/10) | | Run Time (RT) monitoring | Run Time (RT) monitoring | Build Time/Run Time (BT/RT) monitoring |
| **Power supply** | ∿ 115…230 V | **MPC EN0 2NAX 00A** | **MPC DN0 5NAX 00A** | **MPC DN0 5NAX 00B** |

| Separate parts | | | |
|---|---|---|---|
| **RAM expension kit** *(2)* | | 512 MB | 1 GB |
| **Power supply** | ∿ 115…230 V | **MPC YDE RAM0 512** | **MPC YDE RAM1 024** |

*(2) Control box 102 and 402 units have 2 slots for RAM cards (one of wich has a 512 MB RAM card installed as standard).*

*Product data sheet*

# Ethernet in Machines and Installations

## Human-Machine Interface products

## Magelis *i*Display flat screens

## Presentation

Magelis *i*Display screens are monitors with industrial flat screens designed for use in conjunction with PCs.
The screen is availables in size 15”. Featuring the latest TFT LCD technology, they offer top-class visualization and extended service life. Their touch screen interface makes for easy setup of user-friendly and high-performance HMI interfaces.

Certified in accordance with PLC product standards, designed for use in harsh industrial environments and offering an excellent screen size/dimensions ratio, they can be installed easily on any machine and in any device, and are suitable for use in any type of environment.

With identical dimensions to and a screen the same size as Magelis Smart *i*PC and Compact *i*PC industrial PCs, Magelis *i*Display screens can be used to visualize the development of installations with optimum ease and simplicity.

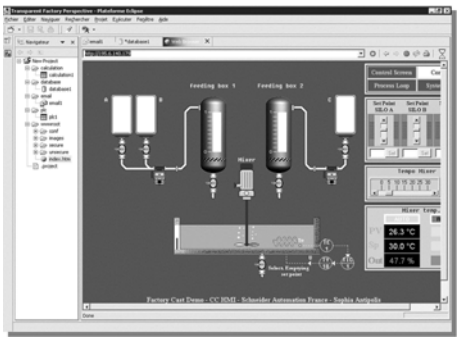
## Characteristics and references


| | | | |
|---|---|---|---|
| **Type** | | **15"** | |
| **Screen** | Resolution | XGA 1024 x 768 | |
| | Type | Active-matrix color TFT LCD | |
| | Number of colors | 16 777 216 | |
| | Brightness | ⩾ 200 cd/m$^2$ adjustable | |
| | Backlighting (service life) | 50,00 hours | |
| **Product certification** | | UL 508, CSA, IEC 61131-2 | |
| **Temperature** | in operation | 0 to +50°C, compliant with EN 61131-2, UL | |
| | in storage | -10 to +60°C, compliant with IEC 68-2-2 tests Bb and Ab, IEC 68-2-14 test Na, and EN 61131-2 | |
| **IP level** | | IP 65 | |
| **Product certification** | | UL 508, CSA, IEC 61131-2 | |
| **Touch panel** | | Analog resistive, 35 million cycles | |
| **Inputs** | Image | VGA or DVI-D port | |
| **Outputs** | Touch panel | USB or RS 232C port | |
| **Power supply I** | Voltage ratings | ∼ 100 to 240 V (threshold values 98 to 264 V), EN 61131-2-compliant | |
| | Frequencies | 50/60 Hz (threshold values 47/63 Hz), EN 61131-2-compliant | |
| | Micro-breaks | ⩽ 20 ms | |
| **Power consumption** | | 120 VA | |
| **Dimensions** | W x H x D (mm) | 395 x 294 x 65 | |
| **Mounting** | | Magelis *i*Display flat screens MPC YT5 can be mounted on a panel or cabinet door (fixing parts supplied). | |
| **Cable** | | 3 meters included | |
| **Power supply** | ∼ **100…240 V** | **MPC YT5 0NAN 00N** | **MPC YT9 0NAN 00N** |

# Ethernet in Machines and Installations

## Human-Machine Interface products

## FactoryCast HMI software

### Web application development, FactoryCast HMI software

FactoryCast HMI application development software, referenced TLX CD FCHMI V1M, provides multiproject management and complete control of FactoryCast HMI applications, during both the development and the debugging phases, thanks to the online mode and simulation mode (operational when the system is offline) options.

This software enables the intuitive and user-friendly setup of HMI functions by simply setting parameters using a tree structure of the application and can be used for complete management of the Web site:

■ Setting parameters for HMI functions:
□ Configuration of PLC interfaces: Import symbol databases and set parameters for the acquisition period
□ Configuration of spreadsheets
□ Configuration of E-mail
□ Configuration of connections to databases
□ SOAP/XML client /server interface (see page 48373/5)
□ Recipe management

■ Management of the Web site:
□ Management of the Web site tree structure (creation/deletion of HTML folders and files)
□ Management of default Web site pages
□ Management of user Web site pages *(1)*
□ Graphic object editor for animating Web pages
□ Launch of the system editor for HTML pages (FrontPage or similar)
□ Up/downloading/comparison of Web pages in online mode
□ Debugging of Web pages in online mode or in simulation mode (including animations and Java beans)

■ Simulation mode
The application and the Web site (including animations and Java beans) can be debugged in either online or simulation mode, which enables operation to be tested without a FactoryCast HMI module and without a physical connection to a PLC, thus simplifying debugging.

An integrated graphics editor in the FactoryCast HMI software can be used to easily customize the following graphic objects: bar charts, gauges, LEDs, curves, cursors, operator input fields, alphanumeric display fields, buttons, etc.
User Web pages are created graphically using an external HTML editor (FrontPage or similar, not supplied).
FactoryCast HMI includes a plug-in for FrontPage 2000. This plug-in makes it easier to set up animations, which enable PLC variables to be accessed in realtime in the HTML pages created by the user. They are created in the HTML editor by simply inserting customized graphic objects (FactoryCast Java beans).

*(1) Creation of user Web pages: User Web pages created in the FactoryCast HMI environment are actual animated supervision screens and can be used to monitor your process. Based on HMI Web technology, they enable realtime access to PLC variables thanks to the FactoryCast graphic objects library (FactoryCast Java beans).*


*TSX WMY 100*


*140 NWM 100 00*

## References

### FactoryCast HMI modules

| Active Web server | Module for automation platform | Data rate | Reference | Weight kg |
|---|---|---|---|---|
| **FactoryCast HMI** | Modicon Premium | 10/100 Mbps | **TSX WMY 100** | 0.340 |
| | Modicon Quantum | 100 Mbps | **140 NWM 100 00** | - |

### FactoryCast HMI installation software (to be ordered separately)

| Name and description | Use | Operating system | Reference | Weight kg |
|---|---|---|---|---|
| **Multilingual FactoryCast HMI** *(1)* | Development and debugging of the HMI application | Windows 2000, Windows XP | **TLX CD FCHMI V1M** | 0.340 |

*(1) Includes documentation in electronic format.*

# Ethernet in Machines and Installations

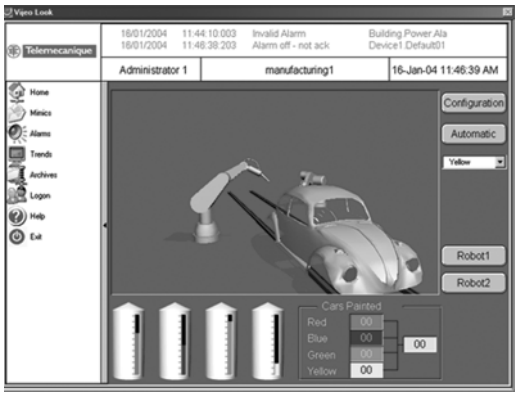
## Human-Machine Interface products

## Vijeo Look control software

## Presentation

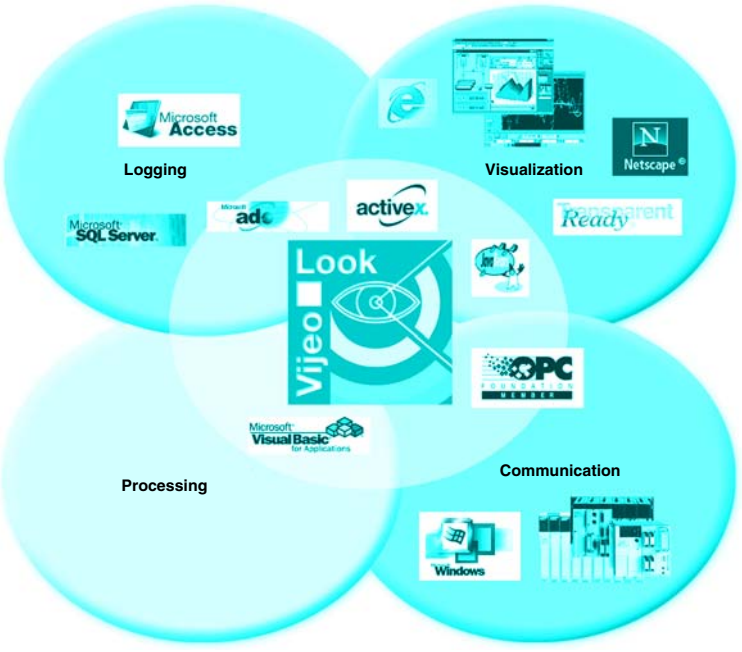
Vijeo Look version 2.5 is a SCADA (Supervisory Control And Data Acquisition) software package designed for standalone stations. It is based on open, standardized technologies, similar to Transparent Ready products. For example, it provides the ability to display pages in Modicon PLC embedded Web servers.

It is easy to implement and offers all the standard functions of a graphic supervision tool. Vijeo Look is supplied with a pre-configured OFS *(OPC Factory Server,* see page 48297/13*)* data server. It is compatible with PCs running Windows 2000 Professional or Windows XP Professional, and is used for creating applications based on Telemecanique Twido, Modicon TSX Micro, Modicon Premium/Atrium/Momentum/Quantum PLCs.




The functions of Vijeo Look supervisory software can be used for:
- Acquisition of PLC tags
- Visualization of these tags
- Process supervision and control
- Recording the values of PLC tags or internal process tags in a database
- Embedded software processing

PLC tags are acquired exclusively by connecting to the PLCs via the OPC server, supplied with the OFS data server software included with Vijeo Look.
In the case of discrete and analog I/O tags from TSX Micro/Premium/Quantum PLCs (and Advantys STB/Momentum/TBX remote I/O), the acquisition process in the Vijeo Look database takes place in an implicit, transparent manner.
As an OPC server, Vijeo Look enables you to create and enhance tags, as well as make them available.




## Structure of the offer

The Vijeo Look offer includes 2 types of software license:
- Build Time/Run Time license *(BT/RT)* allowing the application to be built and run
- Run Time license *(RT)* allowing the application built with the RT/BT license to run

There are four I/O sizes offered for each license type: Small (128 I/O), Medium (512 I/O), Large (1024 I/O) and Extra Large (2048 I/O).

## References

**Vijeo Look software**

| | | | | | |
|---|---|---|---|---|---|
| **Compatibility** | | Twido, Modicon TSX Micro/Momentum/Premium/Atrium/Quantum PLCs | | | |
| **Operating system** | | Windows 2000 Professional or Windows XP Professional | | | |
| **Type of license** | | Small, 128 I/O | Medium, 512 I/O | Large, 1024 I/O | Extra Large, 2048 I/O |
| **References** | Build Time/Run Time (BT/RT) | **VJL SMD BTS V26M** | **VJL SMD BTM V26M** | **VJL SMD BTL V26M** | **VJL SMD BTX V26M** |
| | Run Time (RT) | **VJL SMD RTS V26M** | **VJL SMD RTM V26M** | **VJL SMD RTL V26M** | **VJL SMD RTX V26M** |

# Ethernet in Machines and Installations

## Human-Machine Interface products

## Vijeo Citect supervisory software


## Presentation

The Vijeo Citect supervisory software offer is characterized by its flexibility, allowing customers to build the supervision solution that corresponds to their needs.

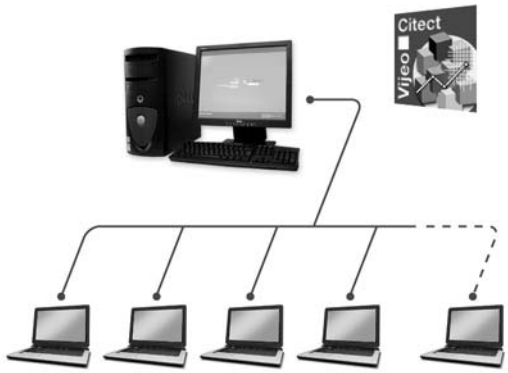
Vijeo Citect features and power makes it suitable for any application in any market, in most demanding fields:

- Energy and Infrastructure: Airports, Roads & tunnels, Water, Oil & Gas.
- Industry: Mining, Metal, Minerals.

The very flexible architecture in vijeo Citect software and applications make the investments are always scalable, and durable.

From small stand-alone system, to large distributed redundant multiple network systems, only one single development tool needs to be used: this dramatically reduces training and knowledge management costs, optimizing the investments.

As Vijeo Citect is perfectly aligned with Schneider Electric's control/HMI/SCADA offer development strategy, designers and users take full benefit from single accountability with Schneider Electric for system integration and performance.



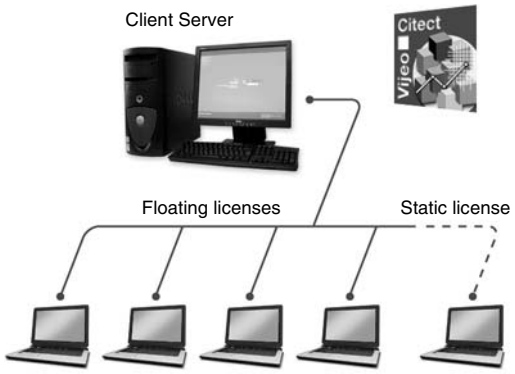

*Single server architecture with 2 Web Clients*

## Server licenses

Vijeo Citect exists:

- in a **Client-Server** architecture, ranging from 150 Points to an unlimited number of Points
- in a **stand-alone** version called **Vijeo Citect Lite** that can manage up to 500 Points

Each Server license includes a Server Client and OFS. OFS allows a Vijeo Citect SCADA application, as a "client", to access any data in any Schneider Electric control system and electrical distriblicenseution device connected to networks or fieldbuses, in real time. It also allows communication with third-party devices supporting Modbus and Modbus TCP protocols.




*Single server architecture with 3 Client licenses: 2 floating and 1 static*

## Client licenses

Four types of Clients are available

- **Control Clients**, used by operators accessing the Vijeo Citect Server thru a local connection.
- **View Clients**, for user who do not need to perform any control, but who need to get a display of the Vijeo Citect application thru local connection.
- **Web Control Clients**: Control Clients, thru a Web connection.
- **Web View Clients**: View Clients, thru the Web.

.

## Static, Floating and Redondancy Client licenses

- **Static Client license**: For operators who need to have access to the control system at any time, whatever the number of Clients currently connected to the Server is. Resides in a physical key plugged into the operators's Client PC.
- **Floating Client license**: For users who do not need to use the Client all the time. Connections is allowed until the number of floating licenses purchased has been reached. Stored on the Server key.
- **Redundancy Client license**: For a Standby Server in a Redundant configuration.

## Characteristics

| | |
|---|---|
| **Compatibility** | All Modicon PLCs and all automation systems using the OPC standard (OFS) |
| **Operating system** | Windows XP Pro, Windows 2000, Windows Server 2003 |
| **Sizes** | 150, 500, 1500, 5000, 15000, unlimited number of Points |
| **License types** | □ Server, Client, Redundant<br>□ Vijeo Citect Lite: Stand-alone system, 500 Points |
| **Client types** | □ Control<br>□ Web Control<br>□ View<br>□ Web View |
| **Development workshop** | Delivers components: CD including Vijeo Citect, OFS, Schneider Electric drivers pack, hardware key(s), installation guide |
| **Hardware keys** | USB or parallel |
| **Evaluation license** | Runs in stand-alone mode |
| **Support** | Includes technical support and upgrades. (1 year included at purchase) |
| **References** | **Please contact your Regional Sales Office** |

*Product data sheet*

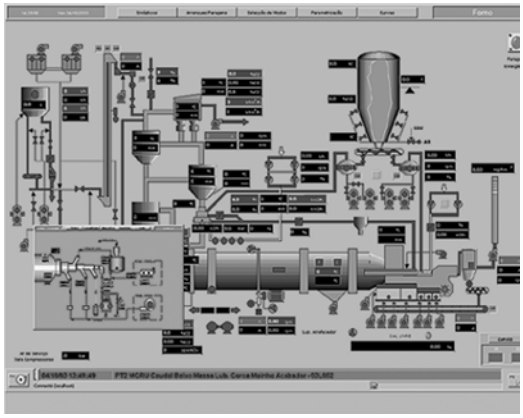
# Ethernet in Machines and Installations

## Human-Machine Interface products

## Monitor Pro SCADA software


## Description

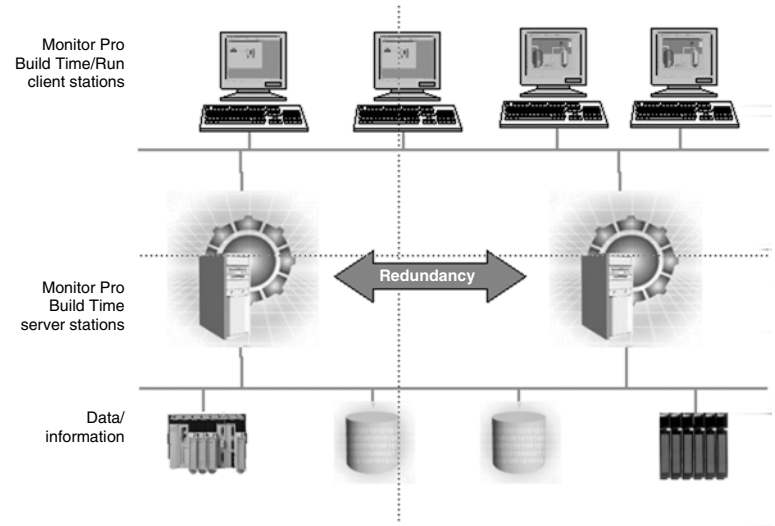
Monitor Pro V7.6 is a SCADA (Supervisory Control and Data Acquisition) software solution. Its high-performance real-time server offers excellent processing capability, mainly due to the application objects. In addition, its client-server architecture on Ethernet TCP/IP enables it to be easily integrated in architectures based on Transparent Ready products: multi-server for sharing processing, multi-user for 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, the interface is easy to customize.
- **Configuration Explorer**: an intuitive environment for configuring the real-time data server and for object-oriented configuration.
- **The relational database access interface,** supplied with SQL Server 2000. Monitor Pro V7.6 makes it easy to record production data or access stored information. Monitor Pro V7.6 also operates with Oracle, Sybase, Dbase IV and all other databases that support 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 V7.6 is the supervisory software package that adapts to your needs. It offers you real-time production monitoring and enables you to optimize the use of your equipment.

## Multi-level architecture



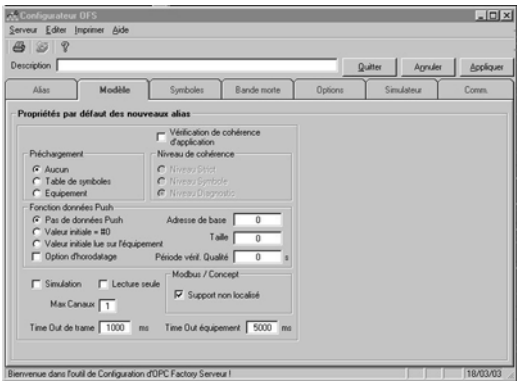

## Characteristics

| Format | Control software |
|---|---|
| **Compatibility** | All Telemecanique PLCs and all automation systems on the market via communication drivers or using the OPC standard |
| **Operating system** | Windows 2000 service Pack 3, Windows XP or Windows Server 2003 |
| **Input/Output size** | 11 sizes, from 300 I/O to an unlimited number of I/O (from 4800 tags to an unlimited number) |
| **Version** | Build Time/Run Time (BT/RT) or Run Time (RT) |
| **PC CD-ROM references** | **Please contact your Regional Sales Office** |

# Ethernet in Machines and Installations

## Human-Machine Interface products

## OPC Factory Server

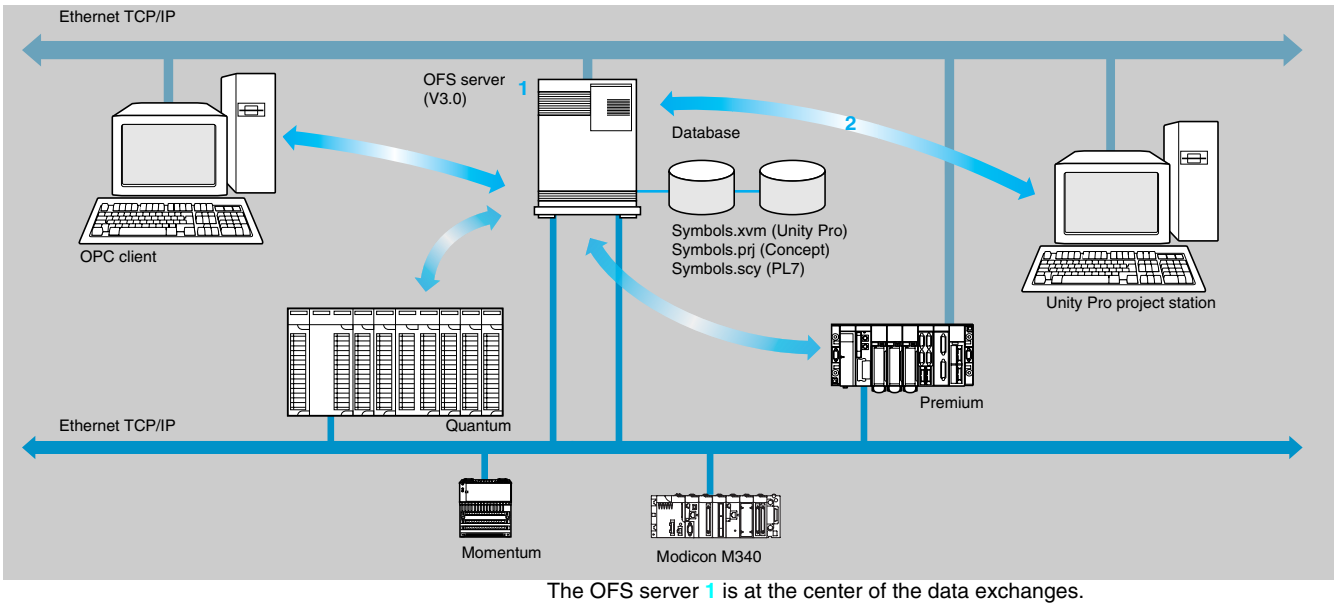


## Description

Based on the OLE for Process Control (OPC) standard, Telemecanique's OPC Factory Server (OFS) software allows “client” software applications, such as supervisors/SCADA and customized interfaces, to access the data of Schneider Electric control system and electrical distribution devices connected to networks or fieldbuses in real time.
It also allows communication with third-party devices supporting Modbus and Modbus TCP protocols.

**In version V3.3**, the OFS data server integrates the most recent specifications of the OPC Foundation:
- **OPC-DA** (OPC Data Access)
- **.NET API interface**
- **OPC XML-DA V1.0** (OPC XML Data Access)

OFS software can be integrated in control system architectures as shown below:




The OFS server 1 is at the center of the data exchanges.
The direct and dynamic link 2 between the OFS server and the Unity Pro project station results in productivity gains for designers and users of the devices.
OFS has direct access to the items in the Unity Pro project. In addition, it performs a consistency check between these items and those of the Premium and Quantum PLCs.

## Structure of the offer

The OFS V3.3 offer comprises:
- OPC server software
- OPC server simulator (for debugging the application when no PLCs are present)
- OFS server configuration software
- An example of OPC client for setting up applications
- The setup documentation on CD-ROM

Supplied on CD-ROM, the software operates independently on a PC. It interfaces with the variable export files generated by PL7, ProWORX, Concept, and Unity Pro software.
It also provides a direct and dynamic link to the Unity Pro and Concept applications *(1)*.
The OFS V3.3 offer is available in two levels:
- **OFS Small:** data server for 1000 items *(2)* that does not support the OPC XML-DA protocol
- **OFS Large:** complete data server

## References

| | | | | |
|---|---|---|---|---|
| **OFS data server software** | | | | |
| **Operating system** | | Windows 2000 Professional or Windows XP | | |
| **Type of license** | | Single station | 10 stations | 200 stations |
| **References** | OPC Factory Server V3.3 Small software | **TLX CD SUOFS 33** | **TLX CD STOFS 33** | **–** |
| | OPC Factory Server V3.3 Large software | **TLX CD LUOFS 33** | **TLX CD LTOFS 33** | **TLX CD LFOFS 33** |

*(1) Requires Concept version > 2.0 software to be installed on the same station.*
*(2) item: variable, structure, table etc. in the Unity Pro application.*