Rugged and open to your applications

Magelis industrial PCs

Opti PC, Smart, Smart+, Compact iPC,
Smart BOX, Compact BOX, Flex PC BOX, and iDisplay

Vijeo Citect

Intelligent
Data Service

Vijeo Designer

Windows XP ™

CF Compact
Flash

Flash disk Flash
disk

HDD Hard
disk

Schneider Electric

Magelis iPC is used as part of an automation solution running under Windows.

Magelis is a complete range of "all-in-one" (with touch screen) and "BOX" (without screen) industrial PCs. To ensure flexibility, Magelis touch screens are the same size for both iPC solutions and for XBTGT operator terminals.

Magelis iPCs offer unbeatable value and is suitable for all types of specification, from the simplest (IP65 screen only, PC for general purposes) to the most demanding (PC without fan, Flash disk without rotating part, redundant hard disks or backup batteries).
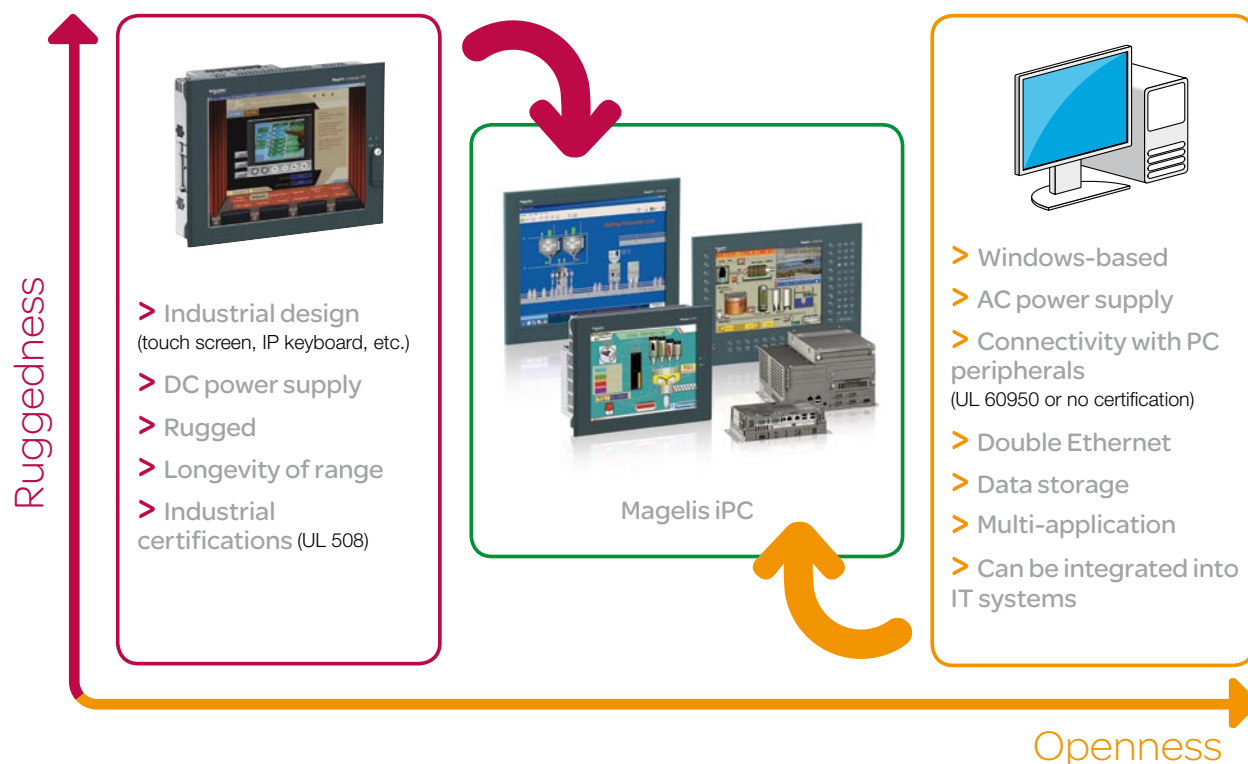
Magelis iPCs are compatible with Windows-based applications by design and offer combined software options such as human machine interfaces (HMIs), traceability, and SCADA supervisor.

Magelis iPC

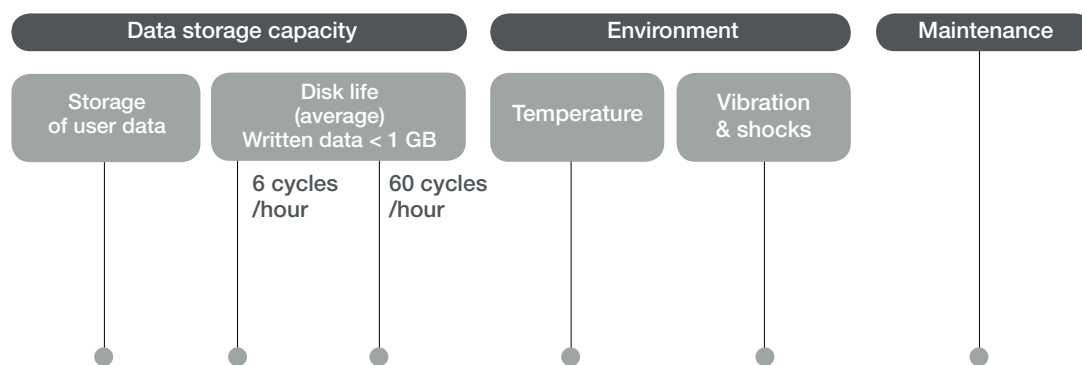## Magelis IPC, HMI terminal continuity under Windows

Magelis iPCs have to be as rugged as operator terminals based on realtime operating systems. Some of the industrial PCs in the range have similar certifications (UL 508 for automation products, UL and ATEX for explosive zones, Marine). With their sealed touch screens, keyboard and pointer options, compact dimensions, and choice of DC or AC power supply, Magelis iPCs can easily be integrated into control systems. The longevity of the range is assured; in spite of rapid technological advances, there is no risk of choices already made being undermined.

Magelis iPCs offer all of the openness associated with Windows in terms of software applications and connectivity. They have a very high storage capacity and double Ethernet ports, one of which supports very high speeds. They provide a window on the IT world.

Ruggedness

> Industrial design
(touch screen, IP keyboard, etc.)

> DC power supply

> Rugged

> Longevity of range

> Industrial
certifications (UL 508)

Magelis iPC

> Windows-based

> AC power supply

> Connectivity with PC
peripherals
(UL 60950 or no certification)

> Double Ethernet

> Data storage

> Multi-application

> Can be integrated into
IT systems

Openness

Define your user environment

Magelis iPCs are able to meet the requirements of the various types of environment associated with automation solutions. The table below will help you identify your own application type.

	Data storage capacity		Environment		Maintenance
Storage of user data	**Disk life (average) Written data < 1 GB**		**Temperature**	**Vibration & shocks**	
	6 cycles /hour	**60 cycles /hour**			

General purpose

< 160 GB	5 years	2 years	Normally > 5°C & < 50°C Less than 25% of time between > 35°C & < 50°C	Normally < 1G	Fan filter cleaning Disk replacement

General purpose

Heavy duty

< 15 GB	10 years	10 years	Normally > 0°C & < 50°C	Normally < 2G	Fan filter cleaning

Heavy duty

Maintenance-free

< 15 GB	10 years	10 years	Normally > 0°C & < 50°C	Normally < 2G	None
No user data	No writing	No writing			

Maintenance-free

Magelis Opti PC

"All-in-one" PC

Maintenance-free

CF **4GB**

8,4" - 15" Touch screens

Maintenance-free PC at an unbeatable price

Magelis Opti PC is a range of maintenance-free PCs with no rotating parts (no hard disk or fan). Offering unbeatable value, it is based on Windows XP Embedded.

The high-definition color TFT LCD touch screens are available in 8.4" and 15" versions and have an IP54 front panel. With an adapter and optional cable, they support both AC and DC power supplies. Magelis Opti PC is certified to UL/cUL 60950 as IT equipment.

Optimized functionality

Magelis Opti PC has an Intel® Celeron M 1 GHz processor with 1 GB of SDRAM and offers a number of standard interfaces (e.g. Ethernet port, USB, serial ports, VGA).

Embedded software

Magelis Opti PC comes with Windows XP Embedded SP3, Internet Explorer 6.0, Adobe Flash Player, Adobe PDF Reader, Office Viewer, and a 4 GB SLC Compact Flash card. The range supports Vijeo Designer HMI applications (demonstration version can be expanded to unlimited version).

The system supports 14 languages for multi-user applications.

Microsoft
Windowsxp
Embedded

Magelis Smart

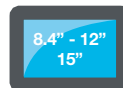## Universal Windows terminal

Maintenance-free

CF 2/4GB

Vijeo Designer

Vijeo Citect Web client

8.4" - 12" 15"

Touch screens

Maintenance-free and rugged

Magelis Smart is maintenance-free and extremely rugged.
The range contains no rotating parts (no hard disk or fan) and offers IP65 protection. The touch screens (8.4", 12", and 15") are the same size as the rest of the Magelis range (iPC and XBTGT operator terminals). The operating system and applications are located on a write-protected (by default) Compact Flash to protect against any kind of damage. The range has been certified to the most demanding standards (UL 508 for automation equipment, UL and ATEX for explosive zones, Marine).

The power of a PC with Windows

Magelis Smart PCs have Intel Celeron M processors, 2 Ethernet ports (one of which supports very high speeds), as many as 5 USB ports on the front panel, and up to 2 serial links.

Embedded software

Based on Windows XP Embedded, the embedded software consists of readers for office applications, multimedia and email, and a Web browser. This software is designed to support .net applications, the Vijeo Designer HMI (demonstration version can be expanded to unlimited version), and the Vijeo Citect SCADA supervisor's Web clients.

Microsoft
Windows xp
Embedded

Magelis Smart+

Maintenance-free Windows XP PC

Flash disk 15GB

Vijeo Designer   Vijeo Citect

15"   Touch screens

Maintenance-free

Innovative industrial PCs, which, like operator terminals, contain no rotating parts, but offer all the openness associated with Windows XP Pro

The first maintenance-free industrial PC with Windows XP Pro

Magelis Smart+ is maintenance-free and contains no rotating parts (no hard disk or fan). It also offers all of the openness associated with Windows XP Pro. The IP65 touch screen shares the same 15" dimensions as the rest of the Magelis range. With its Intel Celeron M 1 GHz processor, 1 GB of RAM, and 2 Ethernet ports, Magelis Smart+ offers great performance and, crucially, features a Flash disk with Windows XP Pro.

As rugged as an operator terminal, the range has been certified to the most demanding standards (UL 508 for automation equipment, UL and ATEX for explosive zones, Marine).

Smart+ supports Vijeo Designer applications (demonstration version can be expanded to unlimited version) and, crucially, is the first maintenance-free Magelis iPC to fully support the Vijeo Citect SCADA supervisor.

Windows XP ™ Professional

Magelis Compact iPC

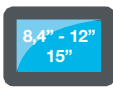## Universal industrial PC

HDD 80/160/ 250 GB*   General purpose

Flash disk 15GB   Heavy duty

Vijeo Designer   Vijeo Citect

8,4" - 12" 15"   Touch screens

General purpose   **Heavy duty**

Magelis Compact iPCs are universal industrial PCs with 1 PCI slot and an optional DVD reader. Their slim build, however, ensures that they can be easily integrated into automation equipment. They can accommodate hard disks with a large capacity or Flash disks with no rotating parts for more demanding applications. They offer IP65 protection and their touch screens (8.4", 12", and 15") are the same size as the rest of the Magelis range. Their Intel Celeron M processors (Pentium M) are powerful and they have 2 Ethernet ports, one of which supports very high speeds. They owe their considerable openness to Windows XP Pro. They have UL 508 certification for automation equipment and UL certification for explosive zones.

Magelis Compact iPCs support Vijeo Designer applications (demonstration version can be expanded to unlimited version) and can be used in tandem with the Vijeo Citect SCADA supervisor.

* 250 GB coming soon

Windows XP ™ Professional

Magelis Smart BOX
& Compact PC BOX

Industrial PC BOX versions

Magelis Smart BOX and Compact BOX are like the Smart and Compact iPCs but have no screen. They can be used with Magelis iDisplay or any other remote screen. They have an Intel Celeron M processor and 2 Ethernet ports, one of which supports very high speeds.

CF   2 GB   Maintenance-free

Vijeo Designer   Vijeo Citect Web client

Maintenance-free Smart BOX

Magelis Smart BOX contains no rotating parts (no hard disk or fan) and is extremely rugged. The operating system and applications are located on a write-protected (by default) Compact Flash to protect against any kind of damage. Magelis Smart BOX has been certified to the most demanding standards (UL 508 for automation equipment, ATEX for explosive zones, Marine).

Based on Windows XP Embedded, the Smart BOX features readers for office applications, multimedia and email, and a Web browser. It is designed to support .net applications, Vijeo Designer (demonstration version can be expanded to unlimited version), and the Vijeo Citect SCADA supervisor's Web clients.

Universal Compact BOX

Windows XP ™ Professional

HDD   80 GB   General purpose

Vijeo Designer   Vijeo Citect

Compact BOX contains a hard disk and owes its considerable openness to Windows XP Pro. It has UL 508 certification for automation equipment.

Magelis Compact supports Vijeo Designer applications (demonstration version can be expanded to unlimited version) and can be used in tandem with the Vijeo Citect SCADA supervisor.

Magelis iDisplay

Industrial screens for BOX

Magelis iDisplay is a range of industrial screens which can be connected to PCs. The screen size has been optimized for easy integration into automation applications. Screens are available in 15" touch screen, 15" touch screen + keyboard + pointer, and 19" touch screen versions. The sizes are the same as the rest of the Magelis range. They offer IP65 protection and have a USB port on the front panel. They are connected to PCs using 2 standard cables: VGA (analog) or DVI (digital) for video and USB or RS 232 for touch screen/keyboard/pointer.

Magelis iDisplay screens can be connected to Magelis BOX (Smart BOX, Compact BOX, and Flex PC BOX) or any other PC.

Magelis Flex PC BOX

High-performance combinations

General purpose

Heavy duty

2 PCI Slots

4 PCI Slots

HDD **160 GB / 250 GB*** General purpose

* 250 GB HDD coming soon

Flash disk **15 GB** Heavy duty

2 GB of RAM

Vijeo Designer   Vijeo Citect

4 Front Panels

19" touch screen

15" touch screen + keyboard

15" touch screen

12" touch screen + keyboard

Windows XP ™ Professional

Magelis Flex PC BOX is a range of high-performance combination industrial PCs without screens. Running under Windows XP Pro and certified to the most demanding standards (UL 508 for automation equipment, UL and ATEX for explosive zones), the PCs come with the following features:

> Intel Celeron M 1.86 GHz or Core Duo 2 GHz processor
> 2 or 4 PCI slots
> RAM can be expanded up to 4 GB
> High-capacity hard disks or Flash disk
> DVD reader or reader/writer

Magelis Flex PC BOX supports Vijeo Designer applications (demonstration version can be expanded to unlimited version) and can be used in tandem with the Vijeo Citect SCADA supervisor.

Magelis Flex PC BOX options

Front panel screen options

"Front panels" are optional screens for mounting on the Flex PC BOX. They are available in 12" or 15" touch screen + keyboard + pointer, 15" touch screen, and 19" touch screen versions. The sizes are the same as the rest of the Magelis range. They offer IP65 protection and have a USB port on the front panel.

Remote screen options

Magelis Flex PC BOX can be connected to Magelis iDisplay or any other type of screen. These industrial PCs feature a DVI port (digital) for connection to up to 2 screens with excellent picture quality.

High-availability option

Magelis Flex PC BOX comes with a monitoring and alert system as standard (hard disk, temperature, etc.) and features Flash disks with no rotating parts for more demanding applications. 2 additional options are available to meet the requirements of high-availability applications:

> RAID redundant hard disk for applications requiring both high storage capacity and high levels of availability
> Integrated backup battery with management of PC power supply

Extra-wide PCI cards option

The 4 PCI slots on Magelis Flex PC BOX support the insertion of 2 cards up to 255 mm wide. An expansion kit can be used to increase this width to 340 mm.

Flex PC BOX H with 340 mm PCI expansion kit

Software used with Magelis iPC

Vijeo Designer

Human machine interface: Vijeo Designer

Magelis iPCs have a "run time" feature in order to support Vijeo Designer HMI applications. The standard demonstration version (which can only be used for 21 days) can be upgraded to allow unlimited use if a license code is purchased, without having to install any additional software.

Intelligent Data Service

Traceability and management: Intelligent Data Service

Intelligent Data Service is a Vijeo Designer option supported by Magelis iPCs. It provides traceability for processes and operator actions, as well as ensuring data integrity, in accordance with the American standard FDA-21CFR Part 11. It also acts as a kind of control panel for processes, by archiving variables and representing them graphically.

Vijeo Citect

SCADA supervisor: Vijeo Citect

Vijeo Citect Web client on Smart and Smart BOX
Based on Compact Flash, Smart and Smart BOX support Vijeo Citect Web clients. Web client licenses are managed at Vijeo Citect server level.

Vijeo Citect Lite and client/server on Smart+, Compact iPC, and Flex PC BOX
The combined Magelis iPC and Vijeo Citect software offers facilitate hardware and software implementation at the best possible price. They include the software DVD and documentation, the USB memory stick with its registered code, and support for one year. As with any Vijeo Citect license, higher-level licenses and updates are available at any time (via the stick).

Given that SCADA supervisor configurations have considerable read/write disk requirements, it is advisable to keep at least 50% of the disk available and use the Magelis iPC as a client. The server should then be installed on a dedicated server PC in a room with a protected environment.

Smart+ is the first maintenance-free Magelis iPC and combines all the options associated with the SCADA Vijeo Citect supervisor. With the ruggedness of an operator terminal and certified to the most demanding standards, this combination is able to meet the requirements of SCADA supervisor applications in the harshest of environments.

Leaflet 8 p

> Magelis iPC offers **a wide selection of** maintenance-free and high-availability PCs

> Magelis iPC **ensures operator terminal continuity** under Windows

> Magelis iPC is designed by Schneider Electric, **a leading provider of automation solutions:**
> > Global presence
> > Certifications
> > Longevity of range

> Make the most of your energy

Selection Guide Magelis iPC

Define your iPC environment

Data storage capacity			Environment		Maintenance
Storage of user data	Disk life (average) Written data < 1 GB		Temperature	Vibration and impact	
	6 cycles/ hour	60 cycles/ hour			
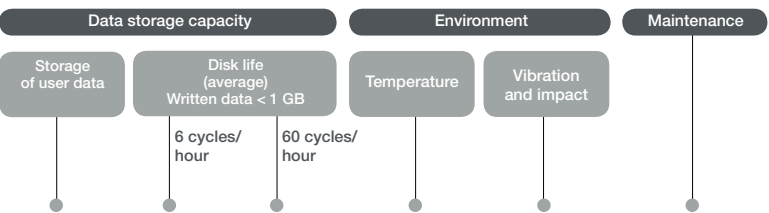
General purpose

< 160 GB	5 years	2 years	Typically > 5°C and < 50°C Less than 25% of time between > 35°C and < 50°C	Normally < 1G	Fan filter cleaning Disk replacement

General purpose

Heavy duty

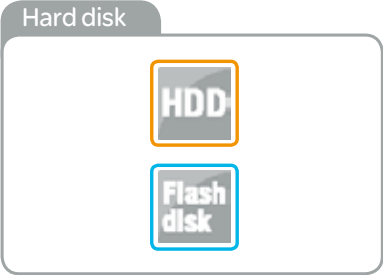| < 15 GB	10 years	10 years	Normally > 0°C and < 50°C	Normally < 2G	Fan filter cleaning
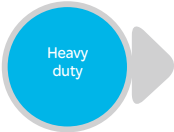
Heavy duty

Maintenance-free

< 15 GB	10 years	10 years	Normally > 0°C and < 50°C	Normally < 2G	None
No user data	No writing	No writing			

Maintenance-free

Schneider Electric

Select your configuration

| | Windows XP ™ Professional | Hard disk | Screen + PC |

General purpose

Heavy duty

Windows XP ™ Professional

Hard disk — HDD / Flash disk

Screen + PC

General purpose

Heavy duty

Windows XP ™ Professional

Hard disk — HDD / Flash disk

"All-in-one" PC

Maintenance-free

Windows XP ™ Professional

Windows XP ™ Embedded

Hard disk — Flash disk / CF

"All-in-one" PC*
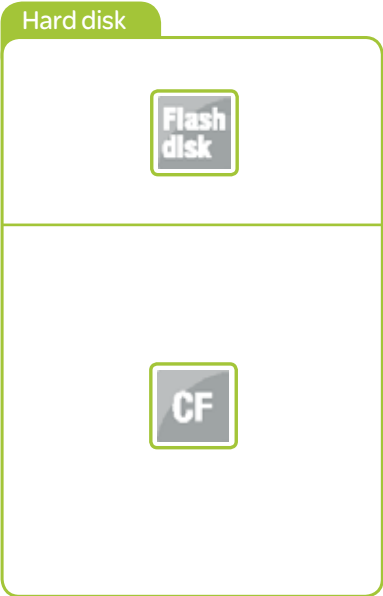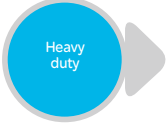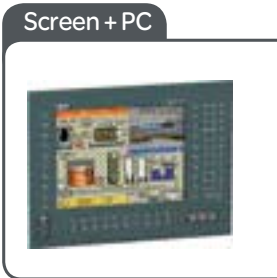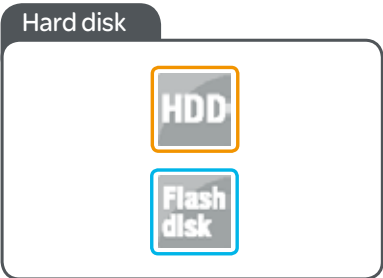
* Without fan

Magelis iPC

Front Panel + Flex BOX
12", 15", 19"
2 to 4 PCI

Flex BOX
2 to 4 PCI

Combined software

Compact
8.4", 12"
& 15" Touch, 1 PCI

Compact BOX
1 PCI

Vijeo Citect

Smart +
15" Touch

Intelligent
Data Service

Smart
8.4", 12"
& 15" Touch

Smart BOX

Vijeo Designer

Opti PC
8,4" & 15" Touch

Magelis Opti PC, Smart, Smart+, and

	Opti PC 8.4"	Opti PC 15"	Smart 8.4"	Smart 12"
Pre-installed software	Windows XP Embedded, Internet Explorer, Office and Acrobat Reader, .NET, Vijeo Designer Runtime			
Touch screen	8.4" LCD TFT	15" LCD TFT	8.4" LCD TFT	12" LCD TFT
Resolution	SVGA 800 x 600	XGA 1024 x 768	SVGA 800 x 600	
Port on front panel	—			1 x USB
Protection for front panel	IP54		IP65	
Processor	Celeron M @ 1 GHz		Celeron M @ 600 MHz	Celeron M @ 1 GHz
RAM	1024 MB		512 MB ➝ 1024 MB	
Reader/Writer	—			
Storage	CF 4 GB		CF 2 GB ➝ 4 GB	
Expansion	—		—	1 x PCMCIA 1 x type II card
Ethernet ports	1 (10/100)		2 (10/100/1G + 10/100)	
I/O ports	3 x USB, 2 x RS 232, 1 x eSATA, 1 x VGA		4 x USB, 2 x RS 232	
Certifications	UL 60950		UL 508, CSA 142, Marine DNV [2]	UL 508, CSA 142
Dimensions	254 x 188 x 69	376 x 292 x 60	230 x 177 x 65	313 x 239 x 60
iPC Compact Flash — AC / DC	HMI POC4 AE01	HMI POC7 AE01	MPCST11NAJ00T / MPCST11NDJ00T	MPCST21NAJ20T / MPCST21NDJ20T
iPC hard disk — AC / DC				
iPC Flash disk — AC / DC				
Vijeo Citect Lite 1200 I/O — AC				
Vijeo Citect Full 500 I/O — AC				

(1) License VJDSNRTMPC for Vijeo Designer Run Time unlimited to be ordered separately
(2) UL 1604 and Marine, DC only
(3) 250 GB coming soon

Compact iPC

Smart 15"	Smart+ 15"	Compact iPC 8.4"	Compact iPC 12"	Compact iPC 15"	
Demo [1], Vijeo Citect Web Client		Windows XP PRO, Vijeo Designer Run Time Demo [1]			
15" LCD TFT	15" LCD TFT	8.4" LCD TFT	12" LCD TFT	15" LCD TFT	15" LCD TFT
SGA 1024 x 768		SVGA 800 x 600	XGA 1024 x 768		
		—	1 x USB		
		Celeron M @ 1 GHz	Celeron M @ 1.5 GHz	Pentium M @ 1.6 GHz	
1024 MB		512 MB → 1024 MB		512 MB → 2 GB	1.5 MB → 2 GB
				DVD reader	
CF 4 GB	Flash disk 15 GB	Hard disk ≥ 80 GB	Hard disk ≥ 160 GB [3] or Flash disk 15 GB	Hard disk ≥ 80 GB or Flash disk 15 GB	
1 x PCMCIA 1 x type III card or 2 x type I cards		—	1 x PCMCIA 1 x type II card	1 x PCMCIA 1 x type III card or 2 x type I cards	
		2 (10/100/1G + 10/100)			
		4 x USB, 2 x RS 232	4 x USB, 1 x RS 232	4 x USB, 4 x RS 232	
UL 508, cUL, UL 1604 (Haz. Loc.), Marine DNV [2]		UL 508, CSA	UL 508, CSA, UL 1604 (Haz. Loc. Class 1, Div. 2)		
395 x 294 x 65		230 x 177 x 120	313 x 239 x 100	394 x 294 x100	
HMI PCS7 AE03					
HMI PCS7 DE03		—			
		MPCKT12NAX00N	MPCKT22NAX20N	MPCKT55NAX20N	MPCKT55NAX20N
				MPCKT55NDX20N	MPCKT55NDX20N
	HMI PSF7 AP03		MPCKT55MAX20N	MPCKT55MAX20N	
	HMI PSF7 DP03				
	HMI PSF7 APL3				MPCKT55MAX20L
	HMI PSF7 APF3				MPCKT55MAX20V

Magelis Smart BOX,
Magelis Compact PC BOX

		Smart BOX	Compact PC BOX
Pre-installed software		Windows XP PRO, Vijeo Designer Run Time Demo [1]	
Processor		Celeron M@600GHz	Celeron M@1GHz
RAM		256 MB ⟶ 1024 MB	512 Mo ⟶ 1024 MB
Storage		CF 2 GB ⟶ 4 GB	Disque Dur ≥ 80 GB
Expansion			1 x PCI
Video, Ethernet, I/O ports		1 x RGB, 2 (10/100/1G + 10/100), 4 x USB, 2 x RS232	
Certifications		UL508, CSA	UL508, CSA, UL1604 (Haz-Loc Class1, Div2.), ATEX2-22, Marine DNV [2]
Connection for iDisplay		Yes	
Dimensions		218 x 165 x 65	218 x 165 x 115
iPC Flash disk	AC	MPCSN01NAJ00T [3]	
	DC	MPCSN01NDJ00T	
iPC hard disk	AC		MPCKN02NAX00N

(1) License VJDSNRTMPC for Vijeo Designer Run Time unlimited to be ordered separately
(2) Marine DNV and Atex 2-22 for DC version only
(3) Comes with adaptor for external power supply

Magelis
Flex PC BOX

		Flex PC BOX F			Flex PC BOX H		
Pre-installed software		Windows XP PRO, Vijeo Designer Run Time Demo [1]					
Processor		Celeron M@1,86GHz	Core Duo 2Ghz		Celeron M@1,86GHz	Core Duo 2Ghz	
RAM [4]		512 MB ➜ 4 GB	1GB ➜ 4 GB	2 GB ➜ 4 GB	512 MB ➜ 4 GB	1 GB ➜ 4 GB	2 GB ➜ 4 GB
Reader/Writer		DVD reader	DVD writer		DVD writer	DVD reader	
Storage		Hard disk ≥ 160 GB [5] with RAID option or Flash disk 15 GB					
Expansion		2PCI			4PCI		
Ports Video		1 x DVI-I (RGB support)					
Ethernet ports		2 (10/100/1 G + 10/100)					
Video, Ethernet, I/O ports		1 x DVI-I (RGB support), 2 (10/100/1G + 10/100), 4 x USB, 4 x RS 232					
Certifications		UL508, cUL, UL1604 (Haz-Loc Class1, Div2.), ATEX2-22 [6]					
Connection for iDisplay		Yes					
for front panel		Yes					
Dimensions		243 x 160 x 289			243 x 205 x 289		
iPC hard disk	AC	MPCFN02NAX00N	MPCFN05NAX00N		MPCHN02NAX00N	MPCHN05NAX00N	
	DC	MPCFN02NDX00N	MPCFN05NDX00N		MPCHN02NDX00N	MPCHN05NDX00N	
iPC Flash disk	AC		MPCFN05MAX00N			MPCHN05MAX00N	
Vijeo Citect Full 500 I/O	AC			MPCFN05MAX00V			MPCHN05MAX00V

(1) License VJDSNRTMPC for Vijeo Designer Run Time unlimited to be ordered separately
(4) Management depends on operating system's capacity
(5) 250 GB coming soon
(6) Atex 2-22 for DC version only

Remote Magelis iDisplays

	15" touch screen & keyboard	15" touch screen	19" touch screen
Touch screen	15" LCD TFT		19" LCD TFT
Resolution	XGA 1024 x 768		SXGA 1280 x 1024
Port on front panel	1 x USB		
Protection for front panel	IP65		
Video ports	1 x VGA and 1 x DVI		
Touch screen ports	1 x USB and 1 x RS 232		
Line voltage	100 to 240 VAC		
Certification	UL508, CSA		
Dimensions	483 x 365 x 65	395 x 294 x 60	460 x 390 x 65
Product references	MPCNB50NAN00N	MPCYT50NAN00N	MPCYT90NAN00N

Magelis front panel for Flex PC BOX

	15" touch screen & keyboard	15" touch screen	19" touch screen
Touch screen	15" LCD TFT		19" LCD TFT
Resolution	XGA 1024 x 768		XGA 1280 x 1024
Port on front panel	1 x USB		
Protection for front panel	IP65		
Dimensions	483 x 365 x 31	420 x 320 x 31	460 x 390 x 44
Product references	MPCYB50NNN00N	MPCYT50NNN00N	MPCYT90NNN00N

> Make the most of your energy