

VideoJet XPro



- Modular digital CCTV matrix
- Highest port-density in compact 7 HU
- 6 MPEG-2 and MPEG-4 encoder cartridge
- 2 Hard disk cartridges
- Single or redundant power supply
- Transmitter and DVR operation
- GigabitEthernet, USB
- Triplex hard disk recording
- Integrated video scene analysis
- Multicasting & Internet Streaming

Designed for the toughest demands of professional CCTV, large-scale security projects and enterprise TV distribution the VideoJet XPro features unlimited flexibility and scalability. Each 7-HU XPro cabinet is available with single or redundant power supply. It has room for up to 20 VideoJet XPro cartridges providing a maximum of 160 non-multiplexed video streams.

Fully customizable the VideoJet XPro can come with any combination out of 3 different cartridge types offered. The V8 cartridge transmits 8 PAL or NTSC video channels, the VA8 in addition offers full-duplex audio channels. The HDD cartridge adds hard disks for efficient local recording and VCS's ANR high-reliability networked recording.

Highest port-density and uncompromising video quality make the VideoJet XPro a great drop-in replacement for existing multiplexers and DVRs. It provides exceptional price/performance, modularity and reliability particularly required for projects in government, retail and transportation. With VCS's VIDOS and VIDOS-NVR software, the XPro is ideal for applications with demanding specifications and long life spans.

System Overview

Each XPro video cartridge provides 8 non- multiplexed video streams simultaneously over Gigabit- Ethernet. Two different types of cartridges are available for Encoding, MPEG-2 and MPEG-4. For local recording you can add extra hard disk cartridges.

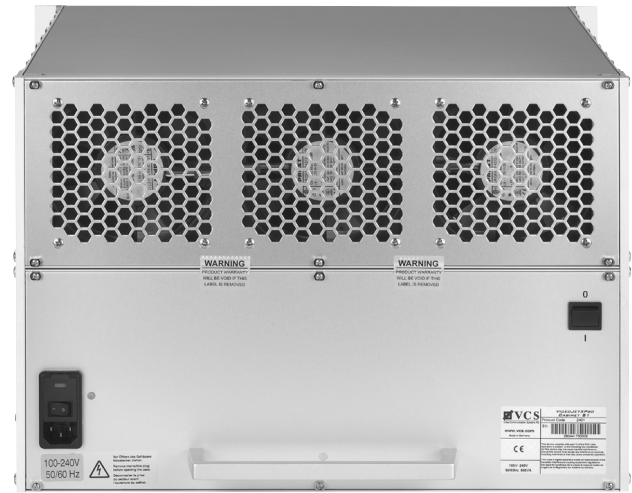
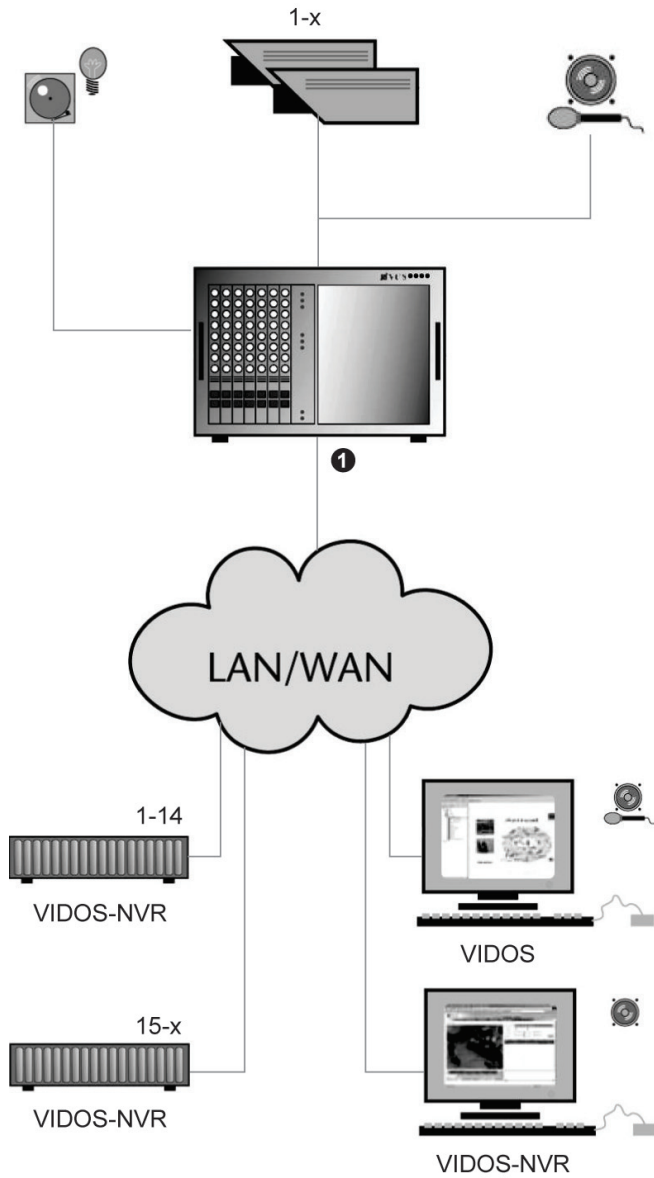
Compatible with both, PAL or NTSC sources the signal can be viewed on any standard PC using VCS software decoder VIDOS or a web browser. With one of Bosch MPEG-2 or MPEG-4 hardware decoders you can put up box to box solutions. The VA8 cartridge additionally offers a video output for local display on a CCTV monitor.

Pure video cartridge V8 is 4-U wide, the VA8 cartridge with audio is 8-U width. Also 8-U in size the HDD cartridge features two 120 GB hard disks free in allocation allowing simultaneous playback and back-up while recording.

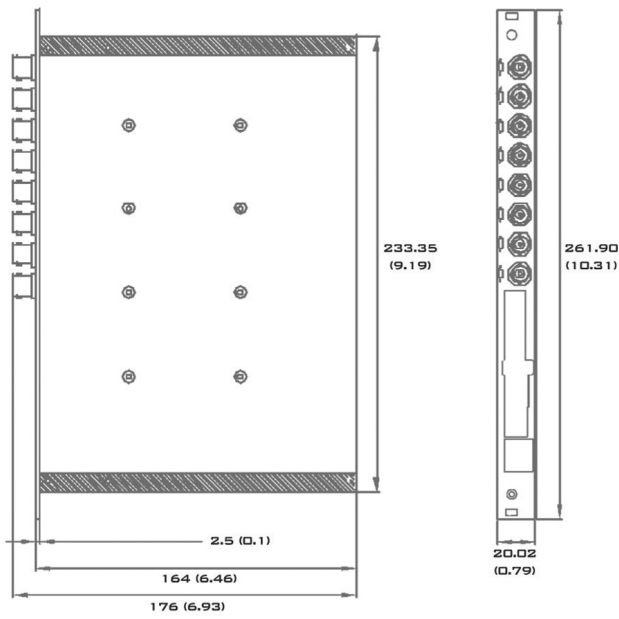
Parts Included

Quant.	Component
1	Content depending on customized configuration
1	Quick Installation Guide
1	CD-ROM with VCS software and manual

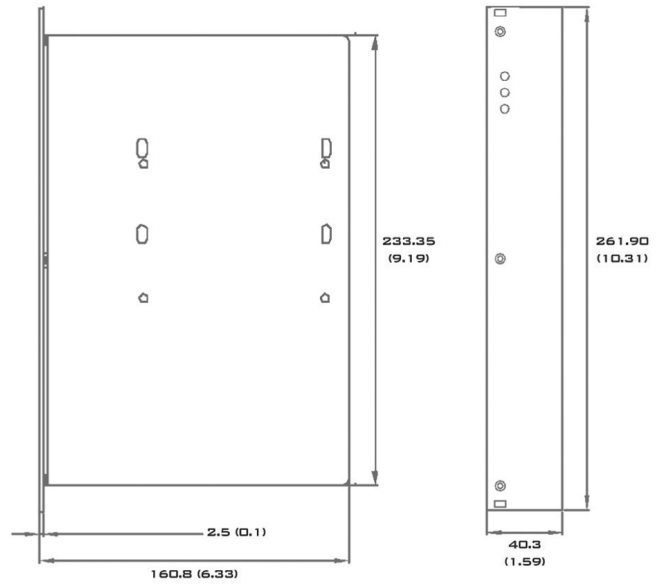
Installation/Configuration Notes



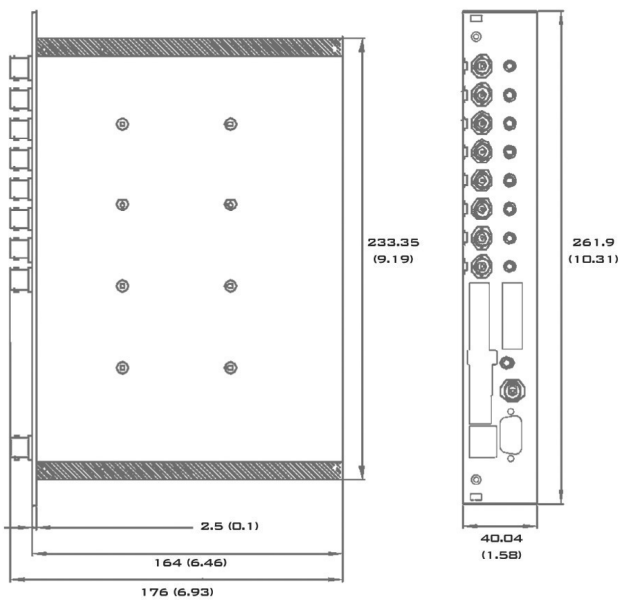
Rear view



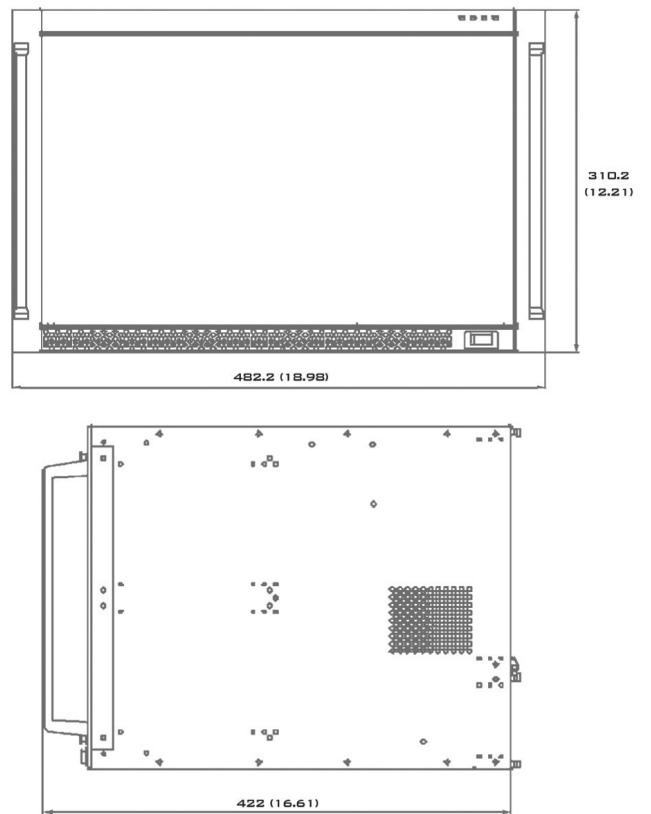
VideoJet XPro V8 Dimensions in mm (inches)



Cartridge HDD Dimensions in mm (inches)



VideoJet Xpro VA8 Dimensions in mm (inches)



Cabinets Dimensions in mm (inches)

Technical Specifications	
Electrical – Videojet Xpro V8	
Video Standards	ISO/IEC 13818-2 (MPEG-2) MP@ML; M-JPEG
Video Data Rate	1 MBit/s - 5 MBit/s per channel Constant & variable
Video Resolution	720 x 576/480 (full D1: 50 resp. 60 fields/s*) 352 x 288 (CIF: 25 resp. 30 fps*)
GOP Structure	I, IP, IPB, IPBB
Overall Delay (IP)	198 resp. 180 ms (PAL resp. NTSC)
Select. Frame Rate	1-50 resp. 60 fields/s (PAL resp. NTSC); Field/frame based coding
Multiplex Standards	ISO/IEC 13818-1 (MPEG-2)
Stream Types	Elementary (video only), program stream
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server
Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
COM Port	1x RS232/422/485, RJ45
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)
Environmental	
Input Voltage	Supplied by cabinet
Power	Max. 35 VA
Consumption	
Weight	App. 0.7 kg (1.54lbs)
Operating Temperature	0°C - 50°C (32 - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

*depends on picture content **supported with later firmware version

Electrical – Videojet Xpro Va8	
Video Standards	ISO/IEC 13818-2 (MPEG-2) MP@ML; M-JPEG
Video Data Rate	1 MBit/s - 5 MBit/s per channel Constant & variable
Video Resolution	720 x 576/480 (full D1: 50 resp. 60 fields/s*) 352 x 288 (CIF: 25 resp. 30 fps*)
GOP Structure	I, IP, IPB, IPBB
Overall Delay (IP)	198 resp. 180 ms (PAL resp. NTSC)
Select. Frame Rate	1-50 resp. 60 fields/s (PAL resp. NTSC); Field/frame based coding
Audio Standards	MPEG-1: ISO/IEC 11172-3; MPEG-2: Layer I/II; 300 Hz - 10 kHz
Audio Data Rate	256 kBit/s
Audio Sample Rate	48 kHz
Multiplex Standards	ISO/IEC 13818-1 (MPEG-2)
Stream Types	Elementary (video only), program stream
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server
Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Video Out	1x analog composite: NTSC or PAL; BNC connector 75 Ohm, 1 Vpp
Audio	8x mono line in (50 kOhm), 8x mono line out (60 mW, min. 8 Ohm), stereo jack 3.5 mm, 1 Vpp or: 8x stereo line, stereo jack 3.5 mm, 50 kOhm, 1 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	5x clamp, 30 Vpp, 1 A
COM Ports	1x RS232/422/485, RJ45, 1x RS232, 9-pin Sub-D
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)

Environmental	
Input Voltage	Supplied by cabinet
Power Consumption	Max. 40 VA
Weight	App. 1.0 kg
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

Electrical – Videojet Xpro V8-X4	
Video Standards	MPEG-4 M-JPEG
Video Data Rate	9 KBit/s - 6MBit/s
Video Resolution	720 x 576/480 (4CIF: 12 resp. 15fps) 720 x 288/346 (2CIF: 25 resp. 30fps) 352 x 288/346 (CIF: 25 resp. 30fps) 352 x 144/172 (QCIF: 25 resp 30fps)
GOP Structure	I, IP
Overall Delay (IP)	100 ms
Select. Frame Rate	up to 25 resp. 30 fps (PAL resp. NTSC); scalable video skip ratio
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server

Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
COM Port	1x RS232/422/485, RJ45
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)

Environmental	
Input Voltage	Supplied by cabinet
Power Consumption	Max. 35 VA
Weight	App. 0.7 kg (1.54lbs)
Operating Temperature	0°C - 50°C (32 - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

Electrical – Videojet Xpro VA8-X4	
Video Standards	MPEG-4 M-JPEG
Video Data Rate	9 KBit/s - 6MBit/s
Video Resolution	720 x 576/480 (4CIF: 12 resp. 15fps) 720 x 288/346 (2CIF: 25 resp. 30fps) 352 x 288/346 (CIF: 25 resp. 30fps) 352 x 144/172 (QCIF: 25 resp 30fps)
GOP Structure	I, IP
Overall Delay (IP)	100 ms
Select. Frame Rate	up to 25 resp. 30 fps (PAL resp. NTSC); scalable video skip ratio
Audio Standards	G711
Audio Data Rate	80 kBit/s per channel
Audio Sample Rate	8 kHz
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server

Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Video Out	1x analog composite: NTSC or PAL; BNC connector 75 Ohm, 1 Vpp
Audio	8x mono line in (50 kOhm), 8x mono line out (60 mW, min. 8 Ohm), stereo jack 3.5 mm, 1 Vpp or: 8x stereo line, stereo jack 3.5 mm, 50 kOhm, 1 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	5x clamp, 30 Vpp, 1 A
COM Ports	1x RS232/422/485, RJ45, 1x RS232, 9-pin Sub-D
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)

Environmental	
Input Voltage	Supplied by cabinet
Power Consumption	Max. 40 VA
Weight	App. 1.0 kg
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

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Electrical – Videojet Xpro V8-X8	
Video Standards	MPEG-4 M-JPEG
Video Data Rate	9 KBit/s - 6MBit/s
Video Resolution	720 x 576/480 (4CIF: 25 resp. 305fps) 720 x 288/346 (2CIF: 25 resp. 30fps) 352 x 288/346 (CIF: 25 resp. 30fps) 352 x 144/172 (QCIF: 25 resp 30fps)
GOP Structure	I, IP
Overall Delay (IP)	100 ms
Select. Frame Rate	up to 25 resp. 30 fps (PAL resp. NTSC); scalable video skip ratio
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server
Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
COM Port	1x RS232/422/485, RJ45
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)

Environmental	
Input Voltage	Supplied by cabinet
Power	Max. 35 VA
Consumption	
Weight	App. 0.7 kg (1.54lbs)
Operating Temperature	0°C - 50°C (32 - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

*depends on picture content **supported with later firmware version

Electrical – Videojet Xpro VA8-X8	
Video Standards	MPEG-4 M-JPEG
Video Data Rate	9 KBit/s - 6MBit/s
Video Resolution	720 x 576/480 (4CIF: 25 resp. 30fps) 720 x 288/346 (2CIF: 25 resp. 30fps) 352 x 288/346 (CIF: 25 resp. 30fps) 352 x 144/172 (QCIF: 25 resp 30fps)
GOP Structure	I, IP
Overall Delay (IP)	100 ms
Select. Frame Rate	up to 25 resp. 30 fps (PAL resp. NTSC); scalable video skip ratio
Audio Standards	G711
Audio Data Rate	80 kBit/s per channel
Audio Sample Rate	8 kHz
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server
Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Video Out	1x analog composite: NTSC or PAL; BNC connector 75 Ohm, 1 Vpp
Audio	8x mono line in (50 kOhm), 8x mono line out (60 mW, min. 8 Ohm), stereo jack 3.5 mm, 1 Vpp or: 8x stereo line, stereo jack 3.5 mm, 50 kOhm, 1 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	5x clamp, 30 Vpp, 1 A
COM Ports	1x RS232/422/485, RJ45, 1x RS232, 9-pin Sub-D
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)

Environmental	
Input Voltage	Supplied by cabinet
Power Consumption	Max. 40 VA
Weight	App. 1.0 kg
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

Specifications – Cartridge Hdd

Storage	2x 120 or 2x 300 GB IDE HD
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Environmental

Input Voltage	Supplied by cabinet
Power Consumption	Max. 48 VA
Weight	App. 1.6 kg
Operating Temperature	0°C – 50°C (32°F – 122 °F) ambient temperature
Humidity	20 – 80% atmospheric humidity (not condensing)

Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15
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Specifications - Cabinets

Power Supply	1 x integrated power supply; alternative: two redundant integrated power supplies
Input Voltage	90 - 250 VAC, 50/60 Hz
Power Consumption	Max. 600 VA
Weight	App. 3.5 kg
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temperature
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

Ordering Information**Model & Description**

XPro V8 2410

VJXPro V8 - 8 channels MPEG-2 with 1 MPEG4 channel card

XPro VA8 2420

VJXPro VA8 -8 channels MPEG-2 with 1 MPEG4 channel card,
with audio

Hardware Accessories

XPro S1 2401

19-inch cabinet for up to 160 video channels

XPro R2 2406

19-inch cabinet for up to 160 video channels

XPro HDD 2430

VJ XPro HDD - dual hard disk board with 240 GB disks

XPro HDD 2432

VJ XPro HDD - dual hard disk board with 600 GB disks

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