VIP XD HD Decoder

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Invented for life

- ▶ HD 1080p and 720p decoding
- ▶ Flexible monitor layouts
- ▶ Directly drives HD monitor
- ▶ Displays VCA metadata
- ▶ Compact size and VESA mount

The VIP XD HD decoder displays high definition and standard definition video from cameras and encoders using H.264 or MPEG-4 encoding at up to 30 images per second over IP networks.

It can decode two 1080p30 streams or two H.264 720p60 streams or four H.264 720p30 streams, all at 10 Mbps. Alternatively, it can simultaneously decode six H.264 Standard Definition streams at up to 6 Mbps from fast-moving AutoDome cameras with the highest clarity. When H.264 Standard Definition streams at up to 2.5 Mbps from medium activity scenes are connected, up to twelve streams can be displayed.

The VIP XD HD decoder can drive a HD display directly, and so is ideally suited for applications with flat-screen monitor walls.

Compact in size in relation to its decoding power, VIP XD HD is perfect for any display application that requires space-saving solutions.

Control the viewing mode remotely and establish the video connections using Bosch's comprehensive video management systems.

System overview

VIP XD HD is based on the latest Intel H67 Express Chipset on a Mini-ITX board with a Core i3 CPU running at 3.1 GHz. The system has a 8 GB Flash module as boot medium for operating system and application. It uses a Gigabyte Ethernet port.

The system runs a tailored and Bosch-branded Microsoft Windows 7 Embedded operating system, and Monitor Wall software based on HD-capable VideoSDK 5, both fine-tuned for High Definition video decoding support.

The VIP XD HD decoder provides three monitor outputs, DVI-I, HDMI and DP; only one of these can be used at the same time.

The system is enclosed in a specially designed housing that comes with a pleasant silver appearance. It can be directly mounted to the back of a monitor, using the VESA mount options of 75 mm (2.953 in) or 100 mm (3.937 in).

Functions

High Performance

Transmit High Definition IP video to a high-performance VIP XD HD decoder and present it with ultimate clarity on a large, flat-screen HD monitor, for example, a high-performance 26" or 42" Bosch HD LCD monitor.

VIP XD HD is capable of decoding two full HD 1080p30 streams or two 720p60 streams or four 720p30 streams, for example, displayed in quad-view. It can handle up to six Standard Definition streams at up to 6 Mbps with full resolution and frame rate, and display it in a 3 x 2 view on a 16:9 monitor.

At a lower resolution, bit rate, or frame rate, VIP XD HD is capable of displaying up to 30 video streams in a 6 x 5 view, arranged in various selectable screen layouts.

Layouts can be switched at any time during operation, initiated by the controlling video management system. Layout switching can be based on alarm scenarios.

Decoding Performance

Encoding	Streams	Resolution	Max. bit rate
H.264 HD	2	1080p30	10 Mbps
	2	720p60	10 Mbps
	4	720p30	10 Mbps
H.264 SD	6	4CIF/480p	6 Mbps
	12	4CIF/480p	2.5 Mbps

Access Security

VIP XD HD decoders offer various security levels for accessing the network, the unit, and the data channels. System access is password-protected with two levels.

For total data protection, each video communication channel can be independently AES encrypted with 128-bit keys, once the encryption site license has been applied.

Malware Resistance

VIP XD HD has been designed to be resistant to viruses and other malware. To prevent security holes, the installed Bosch software limits transactions to operation and maintenance and the embedded operating system is tailored to the needs. No other than Microsoft and Bosch software is running on VIP XD HD. Its firewall performs at the highest security level and allows communication only for a minimum of needed services. All access is password-protected, USB storage devices are disabled, and update files are authenticated and encrypted, thus putting robustness against malicious software to the highest degree.

Easy Upgrade

Remotely upgrade the VIP XD HD decoders whenever new software becomes available. This ensures up-to-date products, thus protecting investment with little effort.

Certifications and approvals

Safety

Region	Number
	IEC 60950

Electromagnetic Compatibility

Region	Number
EU	EN55022 ITE
	EN55024 ITE
US	FCC 47 CFR Chapter 1 Part 15

Approvals

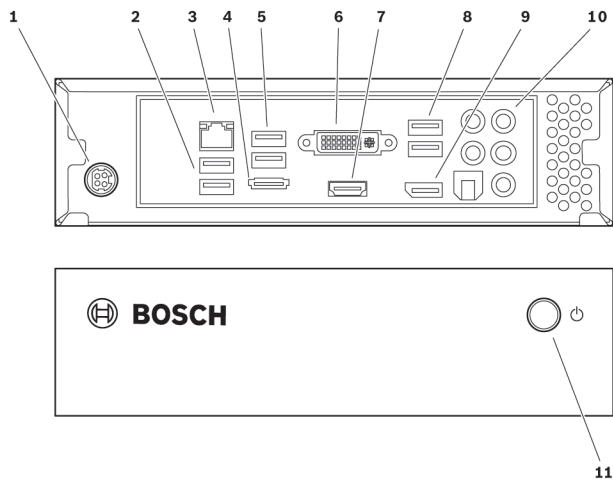| Region	Certification	
Europe	CE	VIP XD HD
USA	UL	Bosch UL online certifications directory (link)

Installation/configuration notes

Dimensions
(without stands)

217.8 mm
8.575 in

225 mm
8.858 in

58 mm
2.283 in
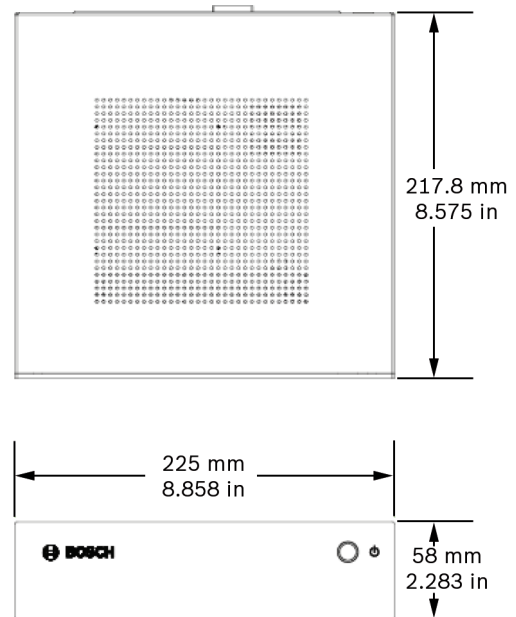
Connectors and Indicators

1	Power connector	2	2x USB
3	Ethernet port with status LEDs	4	eSATA, disabled
5	2x USB	6	DVI-I monitor output
7	HDMI monitor output	8	2x USB
9	DP monitor output	10	Audio connectors, unused
11	Power switch with integrated LED		

Parts included

Quantity	Component
1	VIP XD HD High Definition video decoder
1	International power supply unit with EU and US power cord
4	Screw-on stands
1	Monitor mounting kit
1	Installation Manual
	Adhesive MAC address labels

Technical specifications

Electrical	
Power supply	Wide-range, external, included in the box
Input voltage	100 to 240 VAC, 50/60 Hz
Power consumption	Approx. 90 W, 135 W max

Video	
Video outputs	1 of 3
• connector	DVI-I, or HDMI, or DP, no VGA support
Standards	H.264 (ISO/IEC 14496-10) MPEG-4

Data rates	
• HD	up to 20 Mbps, single stream
• SD	up to 6 Mbps per stream
GOP structure	I, IP, IBBP
Monitor Resolutions	
• DVI-I	1920 x 1200 max (WUXGA) at 60 Hz
• HDMI	1920 x 1200 max (WUXGA) at 60 Hz
• DP	2560 x 1600 max (WQXGA) at 60 Hz

Network	
Ethernet	10/100/1000 Base-T, auto-sensing, half/full duplex, RJ45
Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, HTTPS, FTP, DHCP, IGMP V2/V3, ICMP, ARP, SMTP, SNTP, SNMP (V1, MIB-II)
Encryption	TLS 1.0, SSL, AES (optional)

Control	
Software update	remote programmable
Configuration	Configuration Manager
Operation	Bosch Video Management System, Bosch Video Client

Mechanical	
Dimensions w/o stands (H x W x D)	58 x 225 x 217.8 mm (2.283 x 8.858 x 8.575 in)
Weight	Approx. 3 kg (6.6 lb)
VESA mount	75 x 75 mm or 100 x 100 mm (2.953 x 2.953 in or 3.937 x 3.937 in)

Environmental	
Operating temperature	0 °C to +40 °C (+32 °F to +104 °F) ambient temperature
Relative humidity	0 to 90% atmospheric humidity, non-condensing
Thermal value	Approx. 310 BTU/h, 460 BTU/h max

Ordering information

VIP-XDHD
HD video decoder, H.264 and MPEG-4
Order number **VIP-XDHD**

Accessories

UML-262-90 26-inch Full High-Definition LCD Monitor
26-in. 1080p LCD CCFL monitor with RGB, DVI, and HDMI inputs
Order number **UML-262-90**

UML-422-90 42-inch Full High-Definition LCD Monitor
42-in. 1080p LCD CCFL monitor with RGB, DVI, and HDMI inputs
Order number **UML-422-90**