BOSCH
Invented for life

VIP X1 Single-channel Video Encoder

▶ **Single-channel encoder**

▶ **High-quality MPEG-4
@ full D1/4CIF/2CIF/Half D1/CIF/QCIF**

▶ **USB and iSCSI recording**

▶ **Storage-efficient Dual Streaming**

▶ **Ultra-compact size**

▶ **Multicast & Internet streaming**

▶ **Alarm inputs & relay output**

▶ **FastEthernet interface**

▶ **Serial data port**

▶ **Audio and PoE models**

The VIP X1 features DVD like quality MPEG-4 video, at up to 30 images per second, over IP networks.
This unit supports PAL/NTSC sources.
The audio models of the VIP X1 provide bidirectional audio communication in parallel to video. Besides the standard line level interface, built in amplifiers allow direct connection to microphone and speaker.
The VIP X1 Power-over-Ethernet models can be power-fed via the network cable.
The VIP X1 provides Dual Streaming. It is able to generate two independently configurable MPEG-4 video streams. The VIP X1 is ultra-compact, so it is perfect for any application that depends on space-saving solutions.

Functions

Viewing

The video can be viewed on a PC using VIDOS, the Bosch comprehensive video management system, or in a simple Web browser such as Internet Explorer. It can also be integrated into other video management systems using the Bosch Video SDK.
By routing the IP video to a high performance VIP XD video decoder or a VIDOS Monitor Wall you can present the video with ultimate clarity on an analog CCTV or large, flat-screen VGA monitor or TV.

Recording

The VIP X1 offers unparalleled recording options - locally on a USB hard disk, network-attached utilizing iSCSI devices, and of course centrally using Network Video Recorders. The iSCSI RAID5 storage enables the VIP X1 to act as a conventional DVR as well as to stream high performance live video across the network.

Dual Streaming

The VIP X1 uses Dual Streaming to generate two independent IP video streams per channel. This allows viewing and recording at two different quality levels to save disk space and bandwidth. On alarm, it may send out email with JPEG images attached.

Increased intelligence

The VIP X1 supports increased intelligence at the edge that includes detection of:
- video loss
- masking
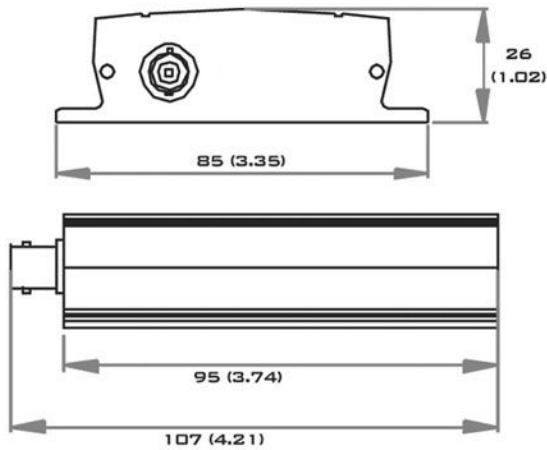- hooding
- defocusing
- diverted camera

These detection features provide tamper detection for various unified picture causes.
More advanced video content analysis (VCA) applications are offered with Bosch's Intelligent Video Motion Detection

(IVMD) as additional licensable option, giving VCA directly at the video input.

These powerful devices represent the cutting edge of high performance Video over IP for CCTV today.

Installation/Configuration Notes

Dimensions in mm (inches)

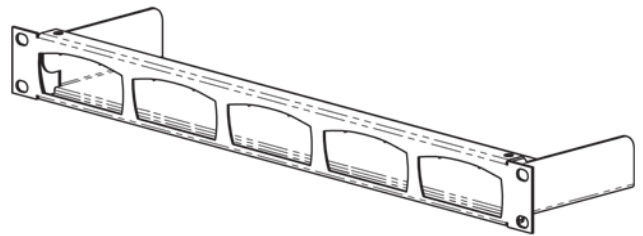*Front view VIP X1, non audio models*

1   Video In 1

Front view VIP X1 audio models

1	Video In 1	3	Microphone In , Speaker Out
2	Line In	4	Line out

Rear view all models

1	USB port	5	LED Link
2	Reset: Factory Default	6	LED Traffic
3	Alarm in, Relay out, Power, COM (RS232/422/485)	7	10/100 Base-T Fast Ethernet
4	LED Power		

Rack mount kit (optional)

Parts Included

Quantity	Component
1	VIP X1 Single-channel Video Encoder
1	International plug-in power supply
1	RS-232 null modem cable
1	Quick Installation Guide
1	CD-ROM containing manual, software and tools

Technical Specifications

Electrical

Video Standards	MPEG-4; JPEG
Video Data Rate	9.6 Kbps - 6 Mbps
Video Resolution	704 x 576/480 (4CIF/D1: 25/30 IPS) 704 x 288/240 (2CIF: 25/30 IPS) 464 x 576/480 (2/3 D1: 25/30 ips) 352 x 576/480 (Half D1: 25/30 IPS) 352 x 288/240 (CIF: 25/30 IPS) 176 x 144/120 (QCIF: 25/30 IPS)
GOP Structure	I, IP
Overall Delay	MPEG-4: 120 ms
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMPv2/v3, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Configuration Manager, Web browser

Interfaces

Video In	1x analog composite: NTSC/PAL; BNC connector 75 Ohm switchable, 0.7 - 1.2 Vp-p
Alarm In	4x (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	1x, 30 Vp-p, 2 A
Connectors	14 position spring clamp contact for alarm, relay and COM port
COM Port	1x RS-232/422/485, spring clamp contacts
USB Port	1x 2.0 external interface
Ethernet	10/100 Base-T, auto-sensing, half/full duplex, RJ-45

Audio Models — VIP X1A, VIP X1AP

Audio Standard	G.711; 300 Hz - 3.4 kHz
Audio Data Rate	80 kBit/s
Audio Sampling Rate	8 kHz
Line In	Single channel via stereo jack 3.5 mm, 9 kOhm typ., 5.5 Vpp max.
Line Out	Single channel via stereo jack 3.5 mm, 16 Ohm min., 3 Vpp max.
Microphone In	CombiCon plug, 2kOhm typ., 2.8 Vpp max. -20dB, supply 2.3 V typ.
Speaker Out	CombiCon plug, 4 Ohm min., 6 Vpp max., power RMS 1 W

PoE Models — VIP X1P, VIP X1AP

Power-over-Ethernet (PoE)	802.11af, class 2
Output power	2,5 W max., spring clamp contacts

Environmental

Input Voltage	12 - 24 VDC, spring clamp contact
Power Consumption	Approx. 6 VA
Power Supply	VIPXPS111022 included in the box
Weight	Approx. 0.17 kg (0.37 lb)
Operating Temp	0ºC - 50ºC (32ºF - 122ºF) ambient temperature
Humidity	20 - 80%, atmospheric humidity (not cond.)
Complies with	CE: IEC 60950; UL 1950; AS/NZS 3548; EN 55103-1, -2; EN 50130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

Ordering Information

Model | Description

VIPX1
 MPEG-4 dual-stream 1 ch encoder, USB, serial I/O, alarm in, relay

VIP-X1A
 MPEG-4 dual-stream 1 ch transmitter, USB, audio, serial I/O, alarm in, relay

VIP-X1P
 MPEG-4 dual-stream 1 ch transmitter, USB, PoE, serial I/O, alarm in, relay

VIP-X1AP
 MPEG-4 dual-stream 1 ch transmitter, USB, audio, PoE, serial I/O, alarm in, relay

Accessories

VIPRMK1HU
 VIP X/10/1000 Rack Mount Kit (5 units in 1HU)

VIPXPS111022
 Power supply

DVA-12T-04050RA
 iSCSI RAID5, 12 bay 1.5 TByte net capacity (4 hard drives installed)

DVA-12T-12050RA
 iSCSI RAID5, 12 bay, 5.5 TByte net capacity (12 hard drives installed)

Software Options

VIP-X1-FS1
 VIP X1 IVMD 1.0 VCA License