



VIP X2 Dual-channel Video Encoder



- ▶ **Dual-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 model**

The VIP X2 features 2 DVD like quality MPEG-4 video signals, at up to 30 images per second, per channel, over IP networks.

This unit supports PAL/NTSC sources.

The VIP X2 is ultra-compact, so it is perfect for any application that depends on space-saving solutions.

The VIP X2 is available as audio model, providing bi-directional audio communication in parallel to video.

Besides the standard line level interfaces for both audio channels, it has integrated amplifiers to directly connect to microphone and speaker for channel1.

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 X2 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 X2 to act as a conventional DVR as well as to stream high performance live video across the network.

Dual Streaming

The VIP X2 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 X2 supports increased intelligence at the edge that includes detection of:

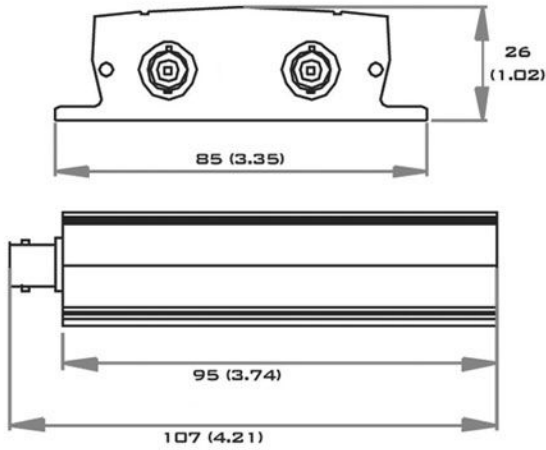
- video loss
- masking
- hooding
- defocusing
- diverted camera

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)



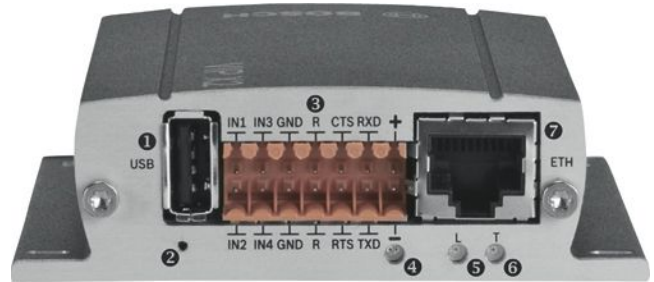
Front view VIP X2, non audio model

- 1 Video In 1
- 2 Video In 2



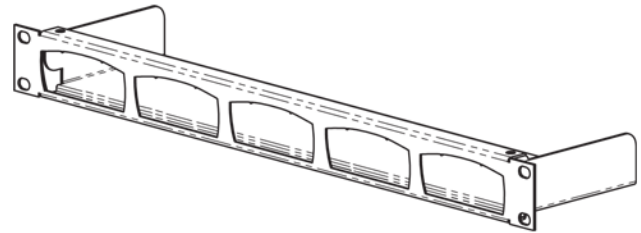
Front view VIP X2 audio model

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



Rear view all models

- 1 USB port
- 2 Reset: Factory Default
- 3 Alarm in, Relay out, Power, COM (RS 232/422/485)
- 4 LED Power
- 5 LED Link
- 6 LED Traffic
- 7 10/100 Base-T Fast Ethernet



Rack mount kit (optional)

Parts Included

| Quantity | Component |
|----------|--|
| 1 | VIP X2 Dual-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 per channel |
| 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 | 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 | 2x 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, re- lay and COM port |
| COM Port | 1x RS-232/422/485, spring clamp contacts |
| USB Port | 1x 2.0 external interface |
| Ethernet | 10/100Base-T, auto-sensing, half/full duplex, RJ-45 |
| Audio Model | |
| Audio Standard | G.711; 300 Hz - 3.4 kHz |
| Audio Data Rate | 80 kBit/s |
| Audio Sampling Rate | 8 kHz |
| Line In | Dual channel via stereo jack 3.5 mm, 9 kOhm typ., 5.5 Vpp max. |
| Line Out | Dual 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 |
| Environmental | |
| Input Voltage | 12 - 24 VDC, spring clamp contact |
| Power Consumption | Approx. 10 VA |
| Power Supply Unit | VIPXPS111022 included in the box |
| Weight | Approx. 0.2 kg (0.44 lb) |

| | |
|-----------------------|---|
| Operating Temperature | 0°C - 40°C (32°F - 104°F) 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

| | |
|---------|--|
| VIP X2 | MPEG-4 dual-stream 2 ch encoder, USB, serial I/O, alarm in and relay |
| VIP X2A | MPEG-4 dual-stream 2 ch encoder, USB, audio, 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

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|------------|---|
| VIP-X2-FS1 | VIP X2 IVMD 1.0 VCA License, valid for 2 channels |
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