



IndigoVision

Complete IP Video Security Solutions



Single Channel Encoder/ Decoder

9000 Range

A family of Video Encoders and Decoders incorporating IndigoVision's class-leading compression technology

IndigoVision's range of Single Channel Encoder/Decoder products are designed to be used with our Complete IP Video Security Solution and have class-leading H.264 compression technology built-in.

IndigoVision's Complete IP Video Security Solution allows advanced features such as Activity Controlled Framerate (ACF) and real-time analytics, available as an order option, to be deployed in the Encoders. These features reduce the bandwidth and NVR storage requirements during periods of scene inactivity and allow the user to deploy advanced analytics to identify events as they occur in real-time.

- Class-leading H.264 compression
- Full frame rate 25/30fps guaranteed
- Power-over-Ethernet for lower installation costs
- Optional full-duplex audio
- Optional built-in real time analytics
- Extended temperature option

The IndigoVision Single Channel Encoder/Decoder allows traditional analogue CCTV cameras to be integrated into an IP network to give you a complete security solution. The small form factor Single Channel Encoder/Decoder can be located close to the camera enabling flexibility in system design. Built-in Power-over-Ethernet support allows the camera to be powered directly from the network, simplifying installation and reducing costs.

The Single Channel Encoder is available as either an Encoder only or as an Encoder/Decoder providing 1 video input or output in a small footprint reducing power and cooling cost. All products have a range of digital I/O for ultra-low latency PTZ control and alarm integration.

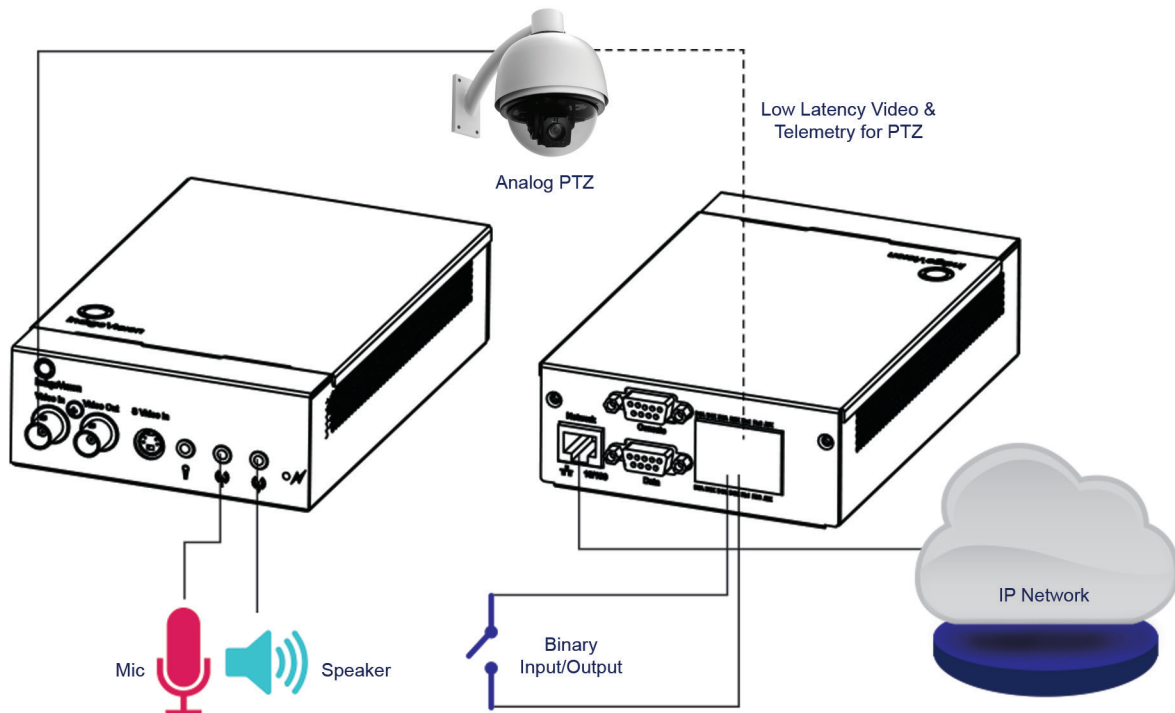
Product Codes

| Single Channel Encoder/Decoder | Encoder Only | | Encoder/Decoder | | Decoder Only |
|--|--------------|--------|-----------------|--------|--------------|
| | 9000S | 9000E | 9000S | 9000E | |
| Standard | 749116 | 769116 | N/A | N/A | N/A |
| Extended Temp. 0°C to +65°C | 749128 | 769128 | N/A | N/A | N/A |
| Extended Temp. -30°C to +65°C | 749130 | 769130 | N/A | N/A | N/A |
| Standard with Audio | N/A | N/A | 749103 | 769103 | 729103 |
| Extended Temp. with Audio 0°C to +65°C | N/A | N/A | 749126 | 769126 | N/A |
| Extended Temp. with Audio -30°C to +65°C | N/A | N/A | 749129 | 769129 | N/A |

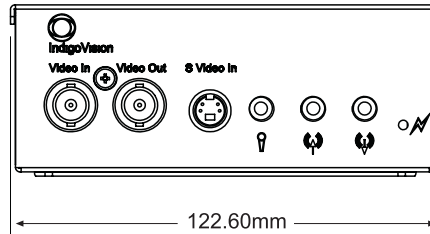
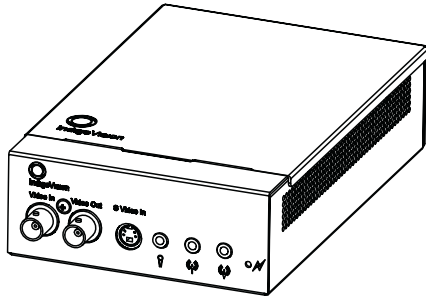
The 9000E product allows full frame rate video, at full 4SIF resolution. The 9000S product allows the camera to be recorded at full frame rate at SIF resolution, half frame rate at 2SIF and one third frame rate at 4SIF resolution.

The 9000 Encoder/Decoder decodes IndigoVision H.264 and MPEG-4 video streams.

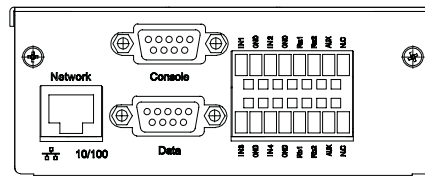
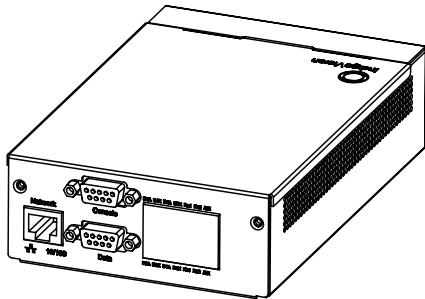
Diagram



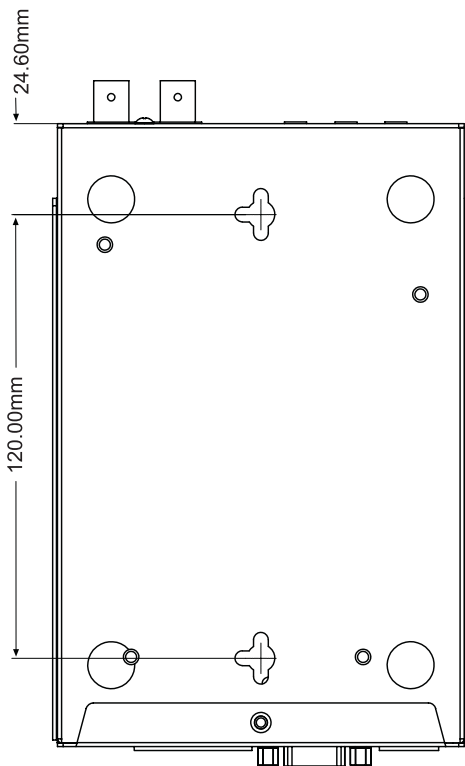
Dimensions



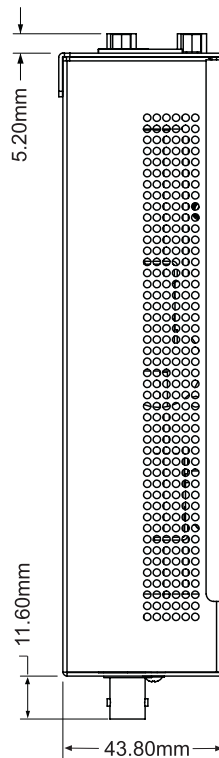
View on Front



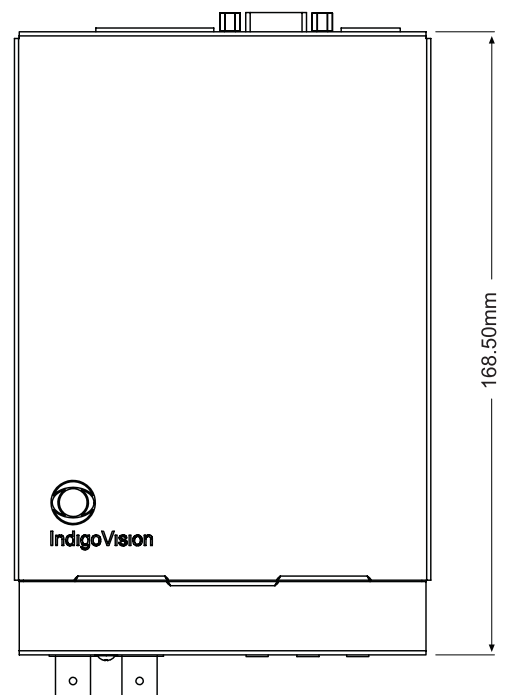
View on Back



View on Underside



View on Side



View on Top

Specification

General Specifications

| Video Performance | Full frame rate, full color: 25/30fps guaranteed | | | | | | | | | | | | | | |
|------------------------------|--|-------------------------------|--|---|---|-----|-----------|-----------|------|-----------|-----------|------|----------|----------|---|
| Video Resolution | 4SIF: 704 x 576 pixels 2SIF: 704 x 288 pixels SIF: 352 x 288 pixels (PAL) 4SIF: 704 x 480 pixels 2SIF: 704 x 240 pixels SIF: 352 x 240 pixels (NTSC) | | | | | | | | | | | | | | |
| Video Compression | Full frame rate, full color: H.264 (ISO 14496-10); 25/30fps guaranteed | | | | | | | | | | | | | | |
| Video Bit Rate | User-configurable bit rates from 32Kbps up to 6Mbps | | | | | | | | | | | | | | |
| Video Multi-Encoder | <table border="1"> <thead> <tr> <th></th> <th>A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>SIF</td> <td>3 streams</td> <td>3 streams</td> </tr> <tr> <td>2SIF</td> <td>2 streams</td> <td>2 streams</td> </tr> <tr> <td>4SIF</td> <td>1 stream</td> <td>1 stream</td> </tr> </tbody> </table> | | | A | B | SIF | 3 streams | 3 streams | 2SIF | 2 streams | 2 streams | 4SIF | 1 stream | 1 stream | You can combine one selection from column A plus one selection from column B per video channel: e.g. 2x2SIF streams plus 3xSIF streams; e.g. 1X4SIF stream plus 1x4SIF stream |
| | A | B | | | | | | | | | | | | | |
| SIF | 3 streams | 3 streams | | | | | | | | | | | | | |
| 2SIF | 2 streams | 2 streams | | | | | | | | | | | | | |
| 4SIF | 1 stream | 1 stream | | | | | | | | | | | | | |
| Video Input | NTSC/PAL video; 75 Ohms 1V p-p, standard BNC connector; S-Video | | | | | | | | | | | | | | |
| Video Output | NTSC/PAL composite video, 75 Ohms; 1V p-p, standard BNC connector. Software decode for display to PCs | | | | | | | | | | | | | | |
| Video Decode | Decode IndigoVision MPEG-4 and H.264 video streams | | | | | | | | | | | | | | |
| Audio Compression* | MPEG-4 Advanced Audio Encoding at 16 Khz sample rate & 16 bit resolution | | | | | | | | | | | | | | |
| Audio Input* | Line in 3.5mm jack. Nominal voltage: 1V p-p, 16bit, Mic 30mVp-p. Mic types: support for condenser and dynamic | | | | | | | | | | | | | | |
| Audio Output* | Line out 3.5mm jack. 1V p-p, Minimum load impedance: 32 Ohms | | | | | | | | | | | | | | |
| Binary Input/Output | 4 opto-isolated inputs; 2 solid state relay outputs | | | | | | | | | | | | | | |
| Data Input/Output | 1 Data port: RS232/RS422/RS485 up to 115.2 Kbps; 1 Data/Console port: RS232 up to 115.2 Kbps | | | | | | | | | | | | | | |
| Network Interface | IEEE802.3 and IETF standards: 10/100 Base-T Ethernet, TCP, UDP, ICMP, IGMP, SNMP, HTTP, RTP Embedded Linux firewall. Salted passwords, with MD5 encryption; Up to 16 simultaneous unicast video users plus unlimited multicast users | | | | | | | | | | | | | | |
| Time | Embedded real-time clock, NTP client | | | | | | | | | | | | | | |
| Dimensions | 167mm (depth) x 110mm (width) x 45mm (height) and 0.6Kg (excluding power supply) / 6.58in (depth) x 4.34in (width) x 1.78in (height) and 1.323lb (excluding power supply) | | | | | | | | | | | | | | |
| Regulatory | EN 55022 (1994) ITE - Class A EN 61000-3-2 (1995) - Class A EN 55024 (1998) ITE immunity standard | | EN 61000 3-3 (1995) voltage fluctuation CFR47 (1995) Part 15 subpart B -Class A | | | | | | | | | | | | |
| Electrical | Power over Ethernet (802.3af Class 0); 14/35V DC, 24V AC | | | | | | | | | | | | | | |
| | Standard | Extended Temp A | Extended Temp B | | | | | | | | | | | | |
| Electrical | 7W max | 8W max | 8W (unit) + 30W (heater) max | | | | | | | | | | | | |
| Operating Temperature | 0°C to 50°C (32°F to 122°F) | 0°C to 65°C (32°F to 149°F) | -30°C to 65°C (-22°F to 149°F) | | | | | | | | | | | | |
| Storage Temperature | -20°C to 70°C (-4°F to 158°F) | -20°C to 70°C (-4°F to 158°F) | -30°C to 70°C (-22°F to 158°F) | | | | | | | | | | | | |
| Power Supplies | Power supplies are separately orderable. Extended Temp. Option B comes with an internal heater and 24V AC/DC heater power supply included. The heater consumes 30W of power. | | | | | | | | | | | | | | |

*Audio capability is an order option on all Encoder/Decoder modules.