

Wireless Surveillance

TVI IP350-SDV

Real-time surveillance streaming and four channel NVR



Digital Barriers

The TVI IP350-SDV video streaming and archiving unit delivers usable video and stereo audio over a range of bearers, including low/variable bandwidth networks. With its unique TVI technology and connections for up to 4 IP cameras, IP350 combines real-time streaming, secure edge recording and complete flexibility.

Not all wireless video solutions are created equal

The TVI surveillance distribution platform is a world-class solution for streaming and accessing video over low or variable bandwidth networks. In comparison to other video encoding technologies, such as H.264 or MPEG, TVI provides a higher quality, lower latency and more resilient approach to real-time video and audio transmission. TVI combines a proprietary video codec and an ultra-efficient, adaptive approach to managing the underlying network bearer. This results in far more usable live video.

The IP350 combines a local four channel NVR with remote streaming of real-time and archived video, bringing the flexibility of IP cameras and integral edge recording to the powerful TVI platform. It is designed to work with leading IP camera brands, including Axis, Bosch, Panasonic and Pelco, with power-over-Ethernet (PoE) for simplicity of deployment. With its ability to use a range of network bearers, including an inbuilt 3G/LTE modem for efficient cellular comms, IP350 delivers 'surveillance anywhere'.

Practical operational benefits

From its origins in mission-critical surveillance, TVI is now the proven platform of choice for a range of surveillance applications – from tactical and mobile operations to rapid deployment cameras and video surveillance as a service (VSaaS) installations. It was developed from the outset to provide seamless access to video and audio from almost any location – and distribute to control rooms as well as mobile devices. Its ability to exploit cellular, Wi-Fi and wired networks means it can be used to deploy cameras quickly without the need for specialist infrastructure.

By combining local recording, remote access and video from PoE IP cameras, the IP350 presents the operator with a real-time surveillance picture – and the ability to access enhanced resolution imagery as situations require. This includes real-time and archived footage as well as individual frames of interest. The TVI platform also offers an exceptional level of control over network utilisation, with the ability to set maximum bandwidth remotely.

Product codes

TVI-IP350-SDV Real-time streaming unit with local recording of up to four channels

Key features

- Supports 4 IP PoE camera inputs with simultaneous local archiving of all four channels (streaming of one)
- Ultra resilient real-time video and audio streaming over low or variable bandwidths (9Kbps to 1Mbps)
- Local NVR recording in H.264/MPEG4/MJPEG format to a max resolution of 720 x 576 (D1) at 25/30 fps
- Removable HDD/SDD with Fragile Watermarking and capacity to record up to 31 days across 4 channels
- Built-in cellular modem (CDMA/EV-DO/GPRS/EDGE/UMTS/HSPA+/LTE) and Wi-Fi (via external USB dongle)
- Vibration resistance and heat dissipating fanless design for reliable vehicle based operation
- Simple web based configuration of cameras and NVR with remote control of streaming/recording settings

Operational domains and installed base

TVI technology is deployed by organisations in the law enforcement, military and transportation domains, as well as by those responsible for securing public spaces. With its range of hardware and software devices, TVI is ideal for use in a range of static and dynamic operating scenarios:

- Vehicle-based and mobile operations
- Transportation surveillance
- Rapidly deployed surveillance cameras

Vibration resistant, fanless design for transportation applications



IP350 is designed around the class-leading TVI platform for assured, operationally effective surveillance distribution

Hardware

Physical Size:	L274mm x W188mm x H65mm
Operating Temp/Humidity:	-20°C to +55°C
Input Voltage Range:	9V-36V DC, with ignition delay on/off control
Power Consumption:	30W (approx.), plus camera power
Enclosure:	IP30, (MIL-STD-810G vibration and shock)
Fittings:	Suspending Kit included
Video Input Format:	4 channel IP video input H.264/MPEG4/MJPEG at up to 30 fps
Camera Interoperability:	Acti, Arecont, Axis, Bosch, Ganz IP, Ganz IP Pixel Pro, Grandeye, Grandstream, Iqinvision, Messoa, Mobotix, Panasonic, Pelco, Sanyo, VSII + ONVIF
Audio:	Dependent on IP camera models
Recording:	Up to a maximum of 720 x 576 (D1) at 25/30 fps in H.264/MPEG4/MJPEG format on removable 2.5" HDD/SSD drive (continuous or on event)

Software

Viewers Supported:	TVI Control Center (Windows PC) and TVI Mobile Viewers (Android and iOS), local monitor – current TVI channel (HDMI/VGA/DVI-D)
Video Frame Sizes Supported:	Up to 720 x 576 (D1)
High Resolution Image Retrieval:	Enhanced definition (up to 720 x 576) over user-definable areas via high quality JPEG

Connectors

Camera Input:	4 x IP cameras via RJ45 (IEEE 802.3af), class 0 PoE with OVP
Audio Input:	Via IP cameras
Monitor Output:	1 x HDMI, 1 x DVI-D, 1 x VGA (current TVI channel feed)
Cellular Antenna:	1 x SMA antenna
Wi-Fi Antenna:	1 x USB external dongle (optional)
Cellular SIM:	1 x standard SIM carrier via removal of front panel (network agnostic)
Power (DC Input):	1 x 3-pin terminal block DC socket (with ignition delay on/off control)
External Power (DC Output):	1 x 2-pin terminal block (12V DC, max 1A)
COM Ports:	1 x RS232, 1 x RS232/RS422/RS485
Compact Flash:	1 x via removal of front panel

Communications

Cellular Connectivity:	Built-in CDMA/EV-DO/GPRS/EDGE/UMTS/HSPA+/LTE module
Wi-Fi Connectivity:	Via external USB dongle
PTZ Connectivity:	Via IP cameras
Bandwidths Supported:	9Kbps to 1Mbps

Security

Encryption:	Built-in AES 256 encryption in addition to support for IP Sec VPN connections
Archiving:	Fragile Digital Watermarking of recordings

Ratings and Regulatory Approvals

E-Mark:	ISO7637-2 level III
CE/FCC:	Class A level