

Wireless Surveillance

TVI IP100-SD

One channel real-time surveillance streaming and NVR



Digital Barriers

The TVI IP100-SD video streaming unit delivers usable video and stereo audio over cellular, mesh, Wi-Fi, satellite, and low bandwidth, high latency networks.

All-in-one encoder with 4G LTE modem, 256bit AES encryption, NVR and the ability to adjust bandwidth to fit your monthly cell phone plan.

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 IP100 is a compact unit combining a one channel NVR with remote streaming of real-time and archived video, bringing the flexibility of IP cameras and 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 4G/LTE modem for cellular comms, IP100 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 specialized infrastructure.

By combining local recording, remote access and video from PoE IP cameras, the IP100 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 utilization, with the ability to set maximum bandwidth remotely.

Product codes

TVI-IP100-SD One channel real-time streaming unit with one channel local recording

Key features

- Supports one IP camera with simultaneous local archiving and one channel real-time streaming
- Ultra resilient real-time video and audio streaming over low or variable bandwidths (9Kbps to 1Mbps)
- **Predict monthly data usage with the capability to set maximum bandwidth transmission.**
- 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
- Built-in cellular modem (CDMA/EV-DO/GPRS/EDGE/UMTS/HSPA+/LTE) and Wi-Fi (via external USB dongle)
- 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 organizations 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
- Rapidly deployed surveillance cameras
- Expansion of existing surveillance systems

Vibration resistant with fanless design and a compact enclosure measuring just 7.8" x 5.7" x 1.65"



IP100 is designed around the class-leading TVI platform for assured, operationally effective surveillance distribution

Hardware

Physical Size:	7.8"W x 5.7"D x 1.65"H
Operating Temp/Humidity:	-4°F to +131°F
Input Voltage Range:	24V DC
Power Consumption:	TBC (plus camera power)
Enclosure:	Aluminium, heat dissipating design
Fittings:	Optional wall mount, VESA mount, rack mount and DIN rail mount
Video Input Format:	1 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

Software

Viewers Supported:	TVI Control Center (Windows PC) and TVI Mobile Viewers (Android and iOS) , local monitor – current TVI channel (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:	1 x IP camera via RJ45 (IEEE 802.3af), class 0 PoE with OVP
Audio Input:	Via IP cameras
Monitor Output:	1 x DVI-D, 1 x VGA (current TVI channel feed)
Cellular Antenna:	1 x SMA antenna
Wi-Fi Antenna:	1 x internal antenna
Cellular SIM:	1 x standard SIM carrier, accessed via bottom panel (network agnostic)
Power (DC Input):	1 x 2-pin terminal block DC socket
COM Ports:	2 x RS232/RS422/RS485
Compact Flash:	1 x CD, accessed via bottom panel

Communications

Cellular Connectivity:	Built-in CDMA/EV-DO/GPRS/EDGE/UMTS/HSPA+/LTE module
Wi-Fi Connectivity:	Built-in 802.11 b/g/n module
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:	TBD
CE/FCC:	Class A level