

# Wireless Surveillance

## TVI MC350-SD 'MiniCam'

Rapid deployment camera and wireless transmission units



Digital Barriers

The TVI MiniCam is a revolutionary option for rapid deployment of CCTV cameras – with ultra-efficient and cost-effective use of cellular networks.

It features unique TVI video streaming technology for complete control over surveillance (as well as network data costs) plus onboard storage options.

### Unlocking the flexibility of wireless surveillance

More and more organisations are turning to wireless as an alternative to the time consuming and costly installation of wired surveillance cameras. Yet modern cellular networks, while ubiquitous and providing access to increasingly large bandwidths, pose a number of technological challenges for real-time surveillance. Variability in network coverage, as well as continuous fluctuations in available bandwidth, can often lead to breakups or delays in transmission of video. In addition, the data costs associated with cellular based video can quickly become prohibitive for day to day operations.

TVI, from Digital Barriers, is a revolutionary technology for efficient transmission of video over constrained or variable bandwidth networks. Unlike conventional technologies, TVI is specifically designed to address the issues associated with sending video over such networks. It also incorporates user tools and enterprise management features for complete control over camera, footage, user access and cost. The TVI MiniCam range combines the power and flexibility of unique transmission technology with cameras and recording – all in an integral enclosure that is robust and simple to deploy.

### Practical operational benefits

TVI MiniCam units offer a unique combination of ease of deployment, remote CCTV access, and complete control over operational costs. The compact units can be installed quickly onto existing street furniture or dedicated mountings. When using a cellular network, the only connection required is a power supply – unless using optional WiFi or broadband.

The TVI system allows an operator to set bandwidth rate and picture settings (frame rates, detail levels) to a 'monitoring' mode that minimises the cost of real-time streaming. When an incident occurs, they can quickly switch to 'eyes on' mode for greater real-time detail – or an 'interrogate' mode with remote access to onboard recorded footage. Operators also have access to an 'enhance' mode at any time, allowing them to pull back detail from a video frame e.g. facial details. Low latency camera PTZ control is also available at any time.

### Product codes

TVI-MC350-SD Integrated TVI surveillance unit (camera, recording, transmission) with remote real-time/archive access

### Key Features

- Rapid deployment one piece vandal resistant design with PTZ camera, recording and transmission module
- Uniquely efficient TVI wireless (or wired) transmission for ultra-resilient real-time and archive viewing
- Complete operator control over bandwidth utilisation and costs – with instant switching between modes
- Enhance mode allows for retrieval of critical details, whilst retaining a real-time operational picture
- Up to 1TB of onboard storage with remote retrieval and enhancement of archived surveillance footage
- Seamless access to video and camera control from leading ONVIF VMS platforms (Milestone, Genetec...)
- Mobile access to real-time surveillance on standard handsets/tablets – with full mobile enhance feature

### Operational domains and installed base

The MiniCam is specifically designed for deployment in urban environments. Its integrated surveillance features, remote access and ruggedised design make it ideal for:

- Monitoring of vulnerable facilities and sites
- Street and housing estate surveillance
- Temporary surveillance e.g. events



MiniCam is built on class-leading TVI architecture for effective operational surveillance transmission, even where network bandwidth is low or variable.

TVI is designed around a server-centric architecture that is designed to overcome the typical challenges involved in distributing real-time video in low or variable bandwidth environments e.g. cellular networks.

Multiple MiniCams can be deployed to stream real-time video over cellular, WiFi or broadband ADSL bearers. Multiple users are able to view these streams simultaneously in control rooms (using ONVIF compatible video management systems) or on wireless devices.

Urban Sites



CCTV Blackspots



CNI Facilities



TVI MiniCam



TVI Manager  
User admin

Network Video Recorder (NVR)



TVI Server  
+ ONVIF Bridge



VMS (or TVI Control Center)  
Milestone, Genetec etc.



TVI Viewer  
Android, iOS Devices

### Hardware

Physical Size:	387mm (height) x 160mm (diameter)
Weight:	6kg approx. (max)
Input Voltage:	Mains operated 90-240V AC
Cameras:	1 x day/night PTZ dome camera
Storage:	Internal SSD + 2 x SDXC slots
Enclosure:	Purpose-built, universal mountings for simple deployment
IP Rating:	IP67
Antennas:	4G cellular, GPS, WiFi
Connections:	Power, audio, Ethernet

### Camera and Recording

Sensor:	Vista VPL7-WP-SM 360° PTZ dome
CCD:	1/4" Sony Super HAD II CCD (960H)
Pixels:	Total: 1028 (H) x 596 (V) Effective: 976 (H) x 582 (V)
Min Illumination:	0.1Lux (colour), 0.01Lux (mono)
PTZ Speed:	40°/sec (slow), 90°/sec (normal), 380°/sec (turbo), 380°/sec (presets)
Zoom:	22:1 optical and 16x digital
Storage:	Up to 1TB (512GB SSD + 512GB SDXC)
Recording:	TBA

### TVI Server

The TVI Server maintains 'light touch' comms with MiniCams to monitor available bandwidth in real-time, manage settings, manage encryption and stream video to mobile viewers.

System: (recommended)	2GHz Quad Core Processor, Windows Server 2008 or Linux preferred, 8GB RAM, Oracle Java JRE 1.6.0 or later
Connectivity:	Internet with sufficient bandwidth

### TVI ONVIF Bridge

The TVI ONVIF Bridge provides real-time transcoding directly into third-party video management systems. The number of streams on a single instance is determined by hardware.

System: (recommended)	2GHz Quad Core i7 Processor, Windows 7, 8GB RAM
Connectivity:	Internet with sufficient bandwidth

### TVI Viewer for mobile devices

#### H300 (for Android)

The codec is optimised to support dual core ARMv7 CPUs. Automatic network profile detection for HSPA+, CDMA, LTE.

Android OS:	Android 2.1 and above (Android 2.3 for accessing multiple cameras)
Security:	AES 256 encryption

#### H300 (for iOS)

Automatic network profile detection for HSPA+, CDMA, LTE.

iOS version:	4.3 and above
Devices:	iPhone 3GS/4/4S/5, iPad 2, iPad 3
Security:	AES 256 encryption