**Flex WATCH®**

# FW-1170VO

## H.264/MJPEG VGA Network Camera

**FlexWATCH FW-1170VO** is a cost-effective compact IP surveillance camera ideal for small and mid-size business. It delivers real time live-video at a rate of up to 30 fps in VGA mode over the TCP/IP network. FW-1170VO supports both H.264 and Motion JPEG standards at the same time, which enables to require less network bandwidth and storage space for video. Power-over-Ethernet (IEEE 802.3af) is also supported, so there's no need for power adapter and cable.

## Applications

- ✓ Franchise / Branch office Monitoring
- ✓ SOHO / Home Security
- ✓ Unmanned Facility Remote Surveillance
- ✓ Serial Device / POS integrated Application
- ✓ School / Hospital / Shopping Center

## Key Features

### Compact IP Camera with PIR Sensor
Cost-effective small IP surveillance camera
PIR sensor for detecting object in dark condition
Ideal solution for small and mid-size business

### H.264 / MJPEG Dual Streaming
Simultaneous dual-streaming
Up to 30 fps live video in VGA mode
Delivers both MJPEG & H.264 at the same time
2-way audio communication

### Superior Video Quality
Vivid live video monitoring
Flicker-free operation on moving objects

### Full Compatibility for CMS Applications
Supports CMS applications from other vendors
(Refer to our website for more information about partners)

### Channel-Specific User Permission
Channel-specific multi-level protection
Applicable to live-cast PTZ, DO and audio

### PoE (Power Over Ethernet)
Built-in PoE available optionally
Supply power over the network cable
No extra cost for power supply and cabling

FW-1170VO is a compact network surveillance camera that perfectly fits into professional surveillance and remote monitoring applications in small and mid-size business. FW-1170VO is equipped with state-of-the-art features such as MJPEG/H.264 Dual Streaming, Progressive Mode Processing, Power over Ethernet, and more.

## Compact Size with PIR Sensor

FW-1170VO's is an ideal surveillance solution for small businesses such as restaurants, offices, convenient stores, etc. for its small size. It's also cost-effective so that the owners can feel comfortable on the budget. The built-in Passive Infrared (PIR) sensor is very useful for detecting any movements even in a dark condition.

## MJPEG/H.264 Dual Streaming

FW-1170VO is not only capable of capturing video images in both MJPEG and H.264 standards at the same time, but also able to transmit both streaming videos simultaneously through the single network cable. With this technology, user can choose which video to use in accordance with user's intention. The video sizes in both MJPEG and H.264 can be combination of any supported ones.

## Power over Ethernet

FW-1170VO supports Power over Ethernet standards (IEEE-802.3af) so that it can be supplied power through the network cable. With PoE feature being used, FW-1170VO does not need any separate wires except for the network cable so users can save installation cost. PoE can also optimize flexible installation and scalability.

## Channel-Specific User Permission

FW-1170VO allows assigning different level of access permission to each video channels so that every individual's accessibility can be controlled accordingly. The multi-level permission can be applied to PTZ, DO, and audio respectively.

## Built-in Motion Detection

FW-1170VO has integrated a motion detection feature built in so that it can automatically detect any visual change in the scene, and then make predefined actions. Users can assign the actions they want to be done by FW-1170VO upon any motion detected. The screen can be logically divided into 144 areas for detection zone setup.

## Pre/Post Alarm Buffer

FW-1170VO can be configured to make it start recording the video for a predefined duration from the time it detect any event, which can be either Alarm Sensor or other events such as motion detection. It can also be configured to maintain the recorded video that stops when it receives the any event defined by users. FW-1170VO has internal buffer memory to store those Pre- and Post-Alarm videos.

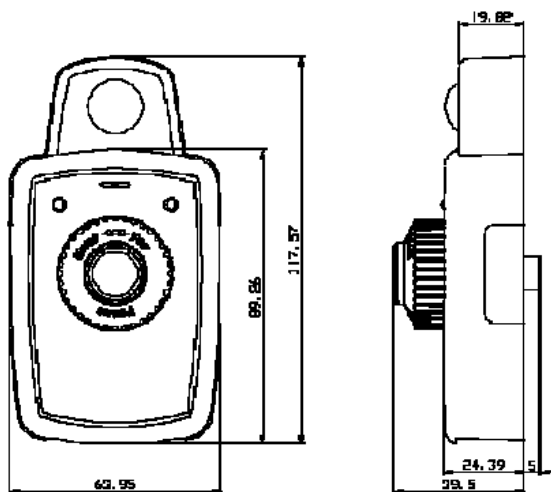## RS-232C/RS-485 and X10 Device Connectivity

FW-1170VO's serial communication port works as either RS-232C or RS485 interface as configured. It also provides the compatibility with X10 device connection so that any third party's X10 compliant peripherals can be attached to the serial port and controlled through the serial port of FW-1170VO. The serial port also can be used for dial-in modem, console, or PTZ functions.

## Versatile CMS Compatibility

FW-1173MI supports most of the CMS applications from major vendors, so that it is flexibly incorporated into any type of surveillance systems successfully. Its compatibility covers HTTP, RTP / RTSP, Unicast /Multicast transmission, etc.

For more information about the further detailed technical specification, please see the technical specification, or visit www.flexwatch.com.

## Mechanical Dimensions



## Optional Accessories



PoE Adapter

PwE Adaptor

| | | | |
|---|---|---|---|
| **Video Encoding** | MJPEG / H.264 (simultaneous dual stream) | **System Integration Features** | [Protocol]<br>HTTP, RTP/RTSP, Multicast, 3GPP, TCP/IP, ARP, ICMP, Telnet, Ftp, PPPoE, SMTP, DHCP, NTP, uPNP, and etc.<br>[SDK]<br>Open HTTP API / ActiveX for live cast with audio & PTZ<br>[Service]<br>Image upload/notification service<br>special service for POS integration |
| **Video channels** | Built-in BT-656 Video Signal | **Installation and maintenance** | Configuration: installation wizard, HTTP, telnet, console.<br>Firmware Upgrade: HTTP, telnet & ftp |
| **Compression** | H.264 & MJPEG | **System hardware** | 32bit RISC CPU / Embedded Linux / 128MByte SDRAM / 8MByte Flash |
| **Resolution** | VGA – 640x480<br>CIF - 352x240<br>QCIF – 160x112 | **Misc.** | Transmit serial input data with video<br>Support NTP server<br>Quick Time & VLC media player compatible |
| **Live Casting** | Streaming 1 video channels with full duplex live audio<br>Up to 30 fps @VGA in simplex mode | **Power** | Power Supply - SMPS 12V(800mA) AC100/240V, 50/60Hz<br>Power Consumption - DC12Volt, 600mA |
| **Audio Encoding** | 8 bit PCM, Sampling rates 8KHz, Mono Audio | **Approvals** | MIC,FCC, CE, RoHS |
| **Audio channels** | 1ch audio-in & 1ch audio-out | **Dimension / Weight** | 64 (W) x 111 (D) x 47 (H) (in mm)<br>0.16Kg without Power Supply |
| **PTZ support** | Built-in PTZ device protocol with more than 30 different PTZ protocols from Pelco, Vicon, Kalatel, Sony, Panasonic, Canon, Honeywell, etc | **External Interface** | 10/100-Base-T Ethernet (auto-sensing)<br>1 photo-coupled or 1 digital inputs (NC/NO selectable),<br>1 relay outputs<br>1 PIR input<br>1 audio input<br>2 serial ports (COM: RS-232, AUX: RS-232 or RS-485) |
| **UART support** | Console, By-pass command to control UART device<br>X10 device command to control device over power line,<br>Modem Support ( ISDN, PSTN and GSM ) | **Operating Environment** | Temperature : 32~122 $^{O}$F (0~50 $^{O}$C)<br>Humidity : 20~80% RH |
| **Alarm Management (for 1 analog channels)** | [ Trigger Condition ]<br>Video loss / Video recovered / Motion detection (144 area) / 1ch alarm inputs / Boot finished / Serial input / Schedule<br>[ Alarm Service ]<br>Image hold service (Max 15.5MByte pre-post alarm buffer)<br>Image upload through E-mail / FTP (support pre & post)<br>Notification through TCP / UDP / HTTP / 1 alarm outputs | **Image sensor** | 1/4" Optical Format CMOS type<br>Sensitivity: 1500mV/lux.sec<br>Maximum Active Pixel Resolution: 652x488<br>S/N ratio: 46dB<br>White Balance: AWB |
| **Bandwidth Management** | Frame rate control / Bandwidth control / CBR / VBR | **Lens** | Focal Length: 4.3mm<br>Back Focal Length: 63.mm<br>Aperture: F2.0<br>Angle of View: 78˚, 61˚ (diagonal) |
| **Security** | Channel-specific user password protection for live-cast, PTZ, alarm output and audio | **Image Setting** | Lens (Manual)<br>No Iris Control |
| **Dynamic IP Support** | Dynamic IP service using www.ipcctvdns.com | **Minimum illumination** | 4-10,000 Lux |
| **Software (Default Web interface)** | Live-cast, PTZ control, search through Web browser<br>(Min. PC requirement - XP, 2000, Vista / IE 6.x or later ) | | |
| **Software (FW-Manager 3.xx)** | Supports 16, 25, 36, 64, 128, 256 channels<br>(9-channel freeware available)<br>Full-featured PC NVR with matrix functionality<br>(Minimum PC requirement - XP, 2000 / Pentium 4 1.6GHz / 256MByte RAM / 64MByte video memory) | **Power Over Ethernet** | IEEE 802.3af (optional module) |