



- Tampering Detection
- Moving Object Detection
- Loitering Detection



IP7251 Fixed Network Camera

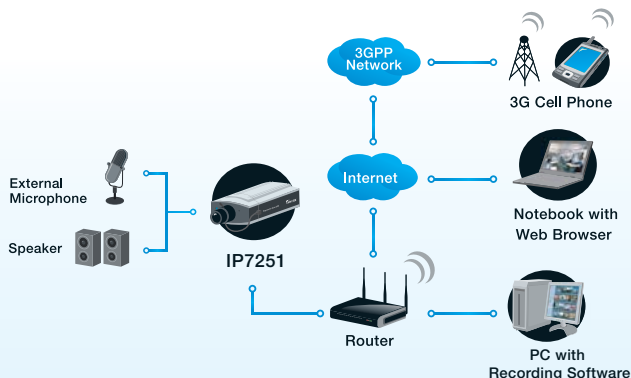
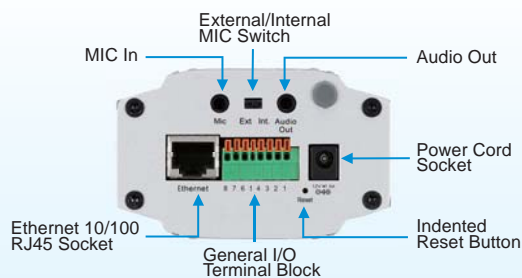
Intelligent Video · Day & Night

IP7251, a new addition to VIVOTEK's progressive-scan product lineup, features video content analysis that can analyze video images immediately without using additional software. It comes with three types of intelligent detection that provides improved sensitivity. With IP7251, monitoring tasks are made easier with correct information. Incorporating a powerful DSP (Digital Signal Processor) dedicated to performing video content analysis, IP7251 features three reliable and powerful detections including tampering detection, moving object detection, and loitering detection. With tampering detection, IP7251 is capable of detecting incidents such as shooting redirection, blocking or defocusing of cameras, or even spray-paint incidents. For motion detection function, IP7251 is able to distinguish between the object's motions and still backgrounds or natural movements such as swaying trees, waves or sunset. By enabling the loitering detection, alarms will be triggered once the dwelling time of a suspicious object in the predefined area (window) is longer than the given time. Instead of using a back-end software platform, the integration of video content analysis greatly reduces server workload, network bandwidth consumption, and storage requirement. With the intelligent detection function, IP7251 effectively prevents unwanted noises from accidentally triggering an alarm, providing a more reliable surveillance solution.

Features

- Embedded Video Content Analysis
- SONY Progressive Scan CCD Sensor in VGA Resolution
- 2.9~8.2mm Vari-focal, Auto-iris Lens
- Removable IR-cut Filter for Day & Night Function
- Real-time MPEG-4 and MJPEG Compression (Dual Codec)
- Supports Dual Streams Simultaneously
- Built-in 802.3af Compliant PoE (Power over Ethernet)
- Two-way Audio by SIP Protocol
- Digital I/O for External Sensor and Alarm
- RS-485 Interface for Scanners, Pan/Tilts

System Overview



Specifications

System

- CPU: VVTK-1000 SoC
- Flash: 8MB
- RAM: 64MB
- DSP: TI DM642
- Embedded OS: Linux 2.4

Lens

- CS-mount, vari-focal, $f=2.9\text{ mm} \sim 8.2\text{ mm}$, F1.0, auto-iris
- IR Corrected
- Removable IR-cut filter for day & night function

Angle of view

- $26.7^\circ \sim 69.0^\circ$ (horizontal)
- $20.0^\circ \sim 51.0^\circ$ (vertical)

Shutter Time

- 1/30 sec. to 1/15000 sec.

Image Sensor

- SONY 1/4" Progressive scan CCD sensor in VGA resolution

Minimum Illumination

- 1.0 Lux/F1.0

Video Content Analysis

- Camera tampering detection
- Intelligent moving object detection
- Moving object loitering detection

Video

- Compression: MJPEG & MPEG-4
- Streaming:
 - Simultaneous dual-streaming
 - MPEG-4 streaming over UDP, TCP, or HTTP
 - MPEG-4 multicast streaming
 - MJPEG streaming over HTTP
- Supports 3GPP mobile surveillance
- Frame rates :
 - MPEG-4: Up to 30/25 fps at 640x480
 - MJPEG: Up to 30/25 fps at 640x480

Image settings

- Adjustable image size, quality, and bit rate
- Time stamp and text caption overlay
- Flip & mirror
- Configurable brightness, contrast, saturation, and sharpness
- AGC, AWB, AES
- Automatic or manual day/night mode
- Backlight compensation (BLC)
- Supports privacy masks

Audio

- Compression:
 - GSM-AMR speech encoding, bit rate: 4.75 kbps to 12.2 kbps
 - MPEG-4 AAC audio encoding, bit rate: 16 kbps to 128 kbps
- Interface:
 - Built-in microphone
 - External microphone input
 - Audio output
- Supports two-way audio by SIP protocol
- Supports audio mute

Networking

- 10/100 Mbps Ethernet, RJ-45
- Protocols: IPv4, TCP/IP, HTTP, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, and PPPoE

Alarm and Event Management

- Triple-window video for motion detection
- One D/I and one D/O for external sensor and alarm
- Event notification using HTTP, SMTP, or FTP
- Local recording of MP4 files

Security

- Multi-level user access with password protection
- IP address filtering

Users

- Camera live viewing for up to 10 clients

Dimension (including lens)

- 205.5 mm (D) x 82.1 mm (W) x 51.2 mm (H)

Weight (including lens)

- Net: 545 g

LED Indicator

- System power and status indicator
- System activity and network link indicator

Power

- 12V DC
- 24V AC
- Power consumption: Max 7.5 W
- 802.3af compliant Power over Ethernet

Approvals

- CE, LVD, FCC, VCCI, C-Tick

Operating Environments

- Temperature: $0^\circ \sim 50^\circ\text{C}$ ($32^\circ \sim 122^\circ\text{F}$)
- Humidity: 20 % ~ 80 % RH

Viewing System Requirements

- OS: Microsoft Windows 2000/XP/Vista
- Browser: Internet Explorer 6.x or above
- Cell phone: 3GPP player
- Real Player: 10.5 or above
- Quick Time: 6.5 or above

Installation, Management, and Maintenance

- Installation Wizard 2
- 16-CH recording software
- Supports firmware upgrade

Applications

- SDK available for application development and system integration

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