Intelligent Intelligence Inside Video | **Progressive Scan CCD** | **Vari-focal Lens** | **Dual Streams** | **PoE**

System
· CPU: VVTK-1000 SoC
· Flash: 8MB
· RAM: 64MB
· Embedded OS: Linux 2.4

Lens
· CS-mount, vari-focal, f = 2.9 ~ 8.2 mm, F1.0, auto-iris
· IR Corrected
· Removable IR-cut filter for day & night function

Angle of view
· 26.7° ~ 69.0° (horizontal)
· 20.0° ~ 51.0° (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
· 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
  External/Internal microphone switch
· Supports two-way audio via 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
· 205.5 mm (D) x 82.1 mm (W) x 51.2 mm (H)

Weight
· 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 ~ 50 °C (32 ~ 122 °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

Warranty
· 24 months

Fixed Network Camera
IP7251
Intelligent Video · Day&Night

IP7251, the newest addition to VIVOTEK's progressive-scan product lineup, features video content analysis that can analyze video images immediately without the need for additional software. The three types of intelligent detection provide an improved ability to monitor tasks, freeing an operator from constant supervision of a camera.

Incorporating a powerful DSP (Digital Signal Processor) dedicated to performing video content analysis, the IP7251 features three reliable and powerful detection modes: tampering detection, moving object detection, and loitering detection. With tampering detection, the IP7251 is capable of detecting incidents such as shooting redirection, blocking or defocusing of cameras, or even spray-paint incidents. For the motion detection function, the IP7251 is able to distinguish between an object's motions and still backgrounds or natural movements such as swaying trees, waves, or sunsets so as to prevent false alarms due to environmental noise. By enabling the loitering detection function, an alarm will be triggered once the loitering time of a suspicious object in the predefined area (window) is longer than the preset target.

Instead of using a back-end software platform, the integration of video content analysis in the network camera itself greatly reduces server workload, network bandwidth consumption, and storage requirements. By installing the IP7251 and its intelligent detection functions, the user can effectively prevent unwanted noise from accidentally triggering an alarm, providing a more reliable surveillance solution.

VIVOTEK
BUILT WITH RELIABILITY

## An Intelligent Solution for Professional Applications

Tamper Detection

Tamper detection can detect and respond when the camera is redirected, defocused, blocked or spray-printed. It allows cameras to be installed in tampering-prone places such as transportation stations or prisons.

Alarm — Blockage
Alarm — Redirecting
Alarm — Defocusing
**Alarm** — Spray-painting
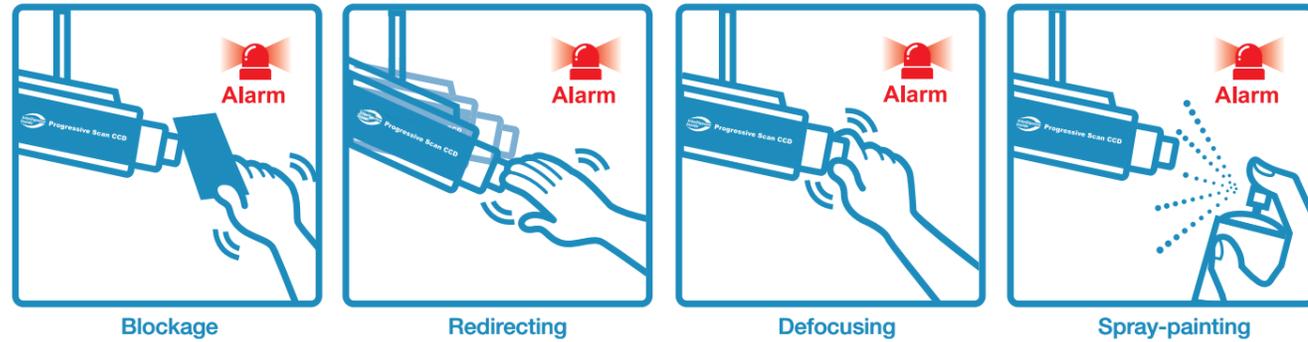
Intelligent Motion Detection

Intelligent motion detection can distinguish object motions from natural movements and trigger alarms based simply on object motions. The function, mainly for outdoor applications, can eliminate false alarm rates due to environmental noise that appears with conventional motion detection.

Alarm — Conventional Motion Detection
Alarm — Intelligent Motion Detection
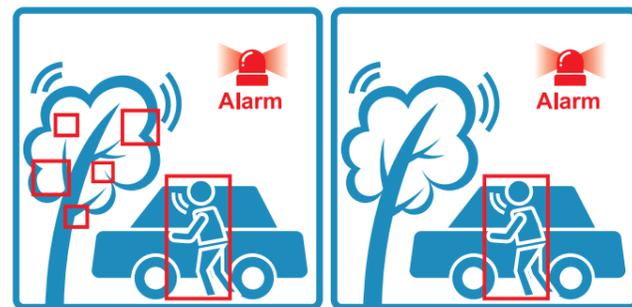
Loitering Detection

Loitering detection can detect an object or a person that has been staying in a predefined area over a given time. The function effectively prevents crimes because suspicious objects or activities are detected before damage is caused.

0:01 — Presence of Lingering Object
0:30 **Alarm** — Alarm Triggered after 30 Seconds
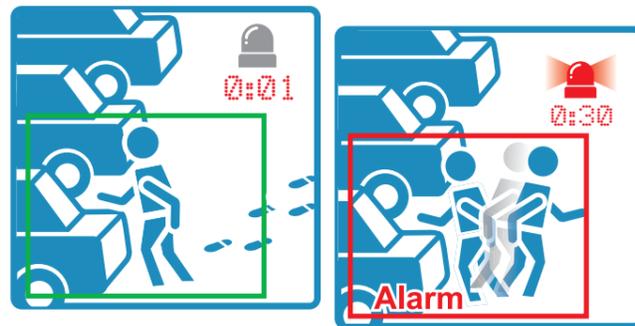
Uncompromising Image Quality at All Times

Progressive Scan CCD

Progressive scan can solve jagged edge problems when displaying moving objects, delivering razor-sharp, clear, and high-resolution images that traditional interlaced-scan techniques can not achieve.

Interlaced Scan
Progressive Scan

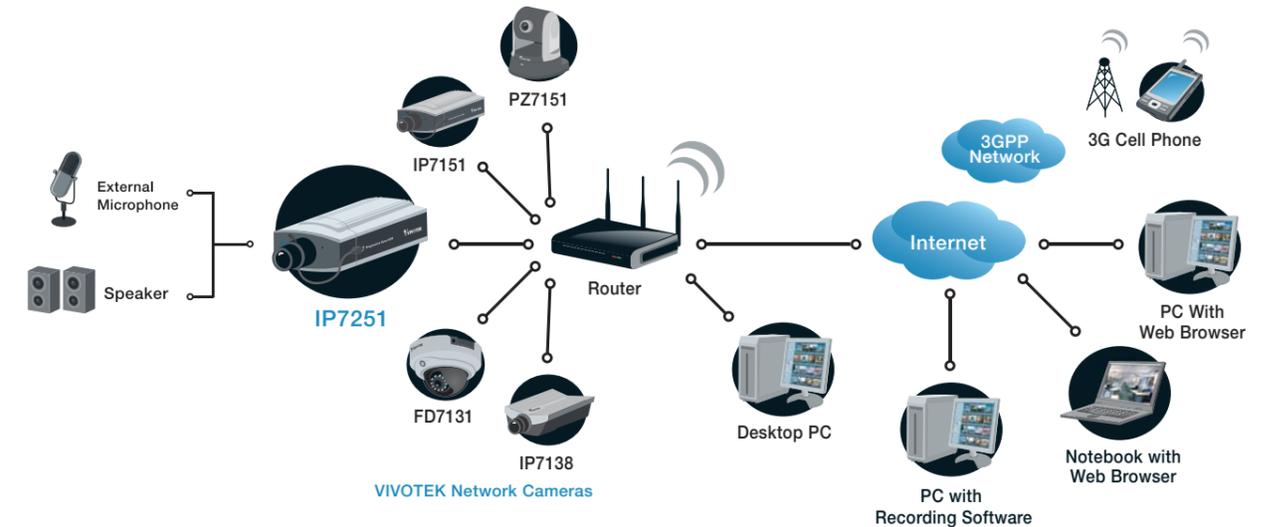### Consistent Image Quality for 24 hours

IP7251 provides day & night functionality with a built-in removable IR-cut filter. By day the IR-cut filter screens out infrared light to reduce color distortion and at night the filter is removed to accept infrared light so as to enhance camera night vision.
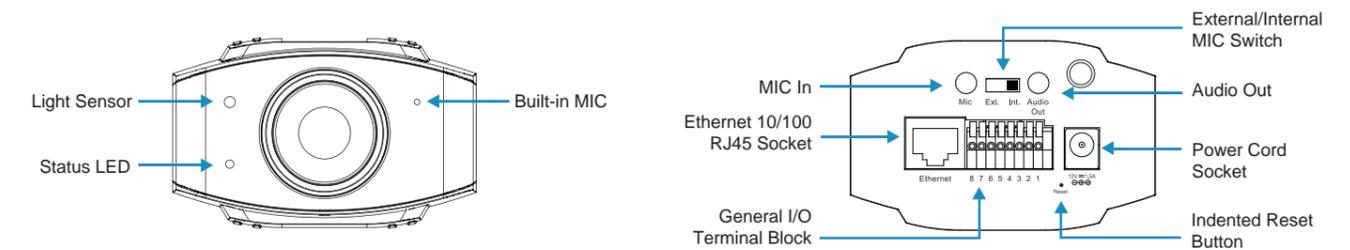
Day
Night

System Overview

PZ7151
IP7151
External Microphone
Speaker
IP7251
FD7131
IP7138
VIVOTEK Network Cameras
Router
3GPP Network
3G Cell Phone
Internet
Desktop PC
PC with Recording Software
PC With Web Browser
Notebook with Web Browser

External View

Light Sensor
Status LED
Built-in MIC

MIC In
Ethernet 10/100 RJ45 Socket
General I/O Terminal Block
External/Internal MIC Switch
Audio Out
Power Cord Socket
Indented Reset Button

Versatile Applications

Parking Lots
Stations
Schools
Retails
Warehouses

Product Features

- Embedded Video Content Analysis Capability
- Progressive Scan CCD Sensor in VGA Resolution
- 2.9 ~ 8.2 mm 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 via SIP Protocol
- Digital I/O for External Sensor and Alarm
- RS-485 Support for Scanners, Pan/Tilts
- Includes Standard 16-CH Recording software

Intelligence Inside