## Technical Specifications

### System
- CPU: Multimedia SoC
- Flash: 128MB
- RAM: 256MB
- Embedded OS: Linux 2.6

### Lens
- IP8151: CS-mount, vari-focal, f = 3.1~8 mm, F1.2, auto iris
- IP8151P: CS-mount, vari-focal, f = 3.1~8 mm, F1.2, P-iris
- Removable IR-cut filter for day & night function

### Field of View
- 35.2~86.7° (horizontal)
- 26.5°~64.4° (vertical)
- 43.9°~110.3° (diagonal)

### Shutter Time
- 1/5 sec. to 1/40,000 sec.

### Image Sensor
- 1/3" CMOS sensor in 1280x1024 resolution

### Minimum Illumination
- 0.04 Lux / F1.2 (Color)
- 0.001 Lux / F1.2 (B/W)

### Video
- Compression: H.264, MJPEG & MPEG-4
- Streaming:
  Multiple simultaneous streams
  H.264 streaming over UDP, TCP, HTTP or HTTPS
  MPEG-4 streaming over UDP, TCP, HTTP or HTTPS
  MPEG-4 multicast streaming
  MJPEG streaming over HTTP or HTTPS
- Supports activity adaptive streaming for dynamic frame rate control
- Supports ePTZ for data efficiency
- Supports 3GPP mobile surveillance
- Frame rates:
  H.264: Up to 30 fps at 1280x1024
  MPEG-4: Up to 30 fps at 1280x1024
  MJPEG: Up to 30 fps at 1280x1024
- Interface:
  BNC connector for video output
  NTSC/PAL video output switch
  Focus assist button (IP8151P only)

### Image Settings
- Adjustable image size, quality and bit rate
- Time stamp and text caption overlay
- Flip & mirror
- Configurable brightness, contrast, saturation, sharpness, white balance and exposure
- AGC, AWB, AES
- WDR enhanced
- Automatic, manual or scheduled day/night mode
- BLC (Backlight Compensation)
- 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
  G.711 audio encoding, bit rate: 64 kbps, μ-Law or A-Law mode selectable
- Interface:
  Built-in microphone
  External microphone input
  Audio output
  External/Internal microphone switch
- Supports two-way audio
- Supports audio mute

### Networking
- 10/100 Mbps Ethernet, RJ-45
- Onvif support
- Protocols: IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP and 802.1x

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

### On-board Storage
- SD/SDHC card slot
- Stores snapshots and video clips
  **Note: No SD/SDHC card slot & local storage function for Argentina.*

### Security
- Multi-level user access with password protection
- IP address filtering
- HTTPS encrypted data transmission
- 802.1X port-based authentication for network protection

### Users
- Live viewing for up to 10 clients

### Dimension
- 154 mm (D) x 72 mm (W) x 62 mm (H)

### Weight
- IP8151 Net: 670 g (Without lens)
- IP8151P Net: 675 g (Without lens)

### LED Indicator
- System power and status indicator
- System activity and network link indicator

### Power
- 12V DC
- 24V AC
- Power consumption: Max. 3.6 W
- 802.3af compliant Power-over-Ethernet (Class 2)

### Approvals
- CE, LVD, FCC, VCCI, C-Tick, UL

### Operating Environments
- Temperature: -10 ~ 50 °C ( 14 ~ 122 °F)
- Humidity: 90% RH

### Viewing System Requirements
- OS: Microsoft Windows 7/Vista/XP/2000
- Browser: Mozilla Firefox, 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
- RS-485 interface for scanners, pan/tilts
- Installation Wizard 2
- 32-CH ST7501 recording software
- Supports firmware upgrade

### Applications
- SDK available for application development and system integration

### Warranty
- 36 months



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Ver 1.2

SUPREME
A NEW DEFINITION OF HD

1.3MP | Night Visibility | WDR Enhanced | Day/Night | SD/SDHC Card | PoE

# Fixed Network Camera
# IP8151/51P

Supreme Night Visibility • Full Frame Rate • WDR Enhanced

VIVOTEK IP8151/51P represent the next-generation in video quality in network cameras. As part of VIVOTEK's SUPREME Series, the cameras feature the utmost in picture clarity through utilization of SONY's latest sensor technology, dubbed "Exmor™", which enables the camera to capture exceptional details during daytime, as well as to offer unparalleled visibility under low-light conditions through its Supreme Night Visibility feature. Additional value-added functions that give users more flexibility and efficiency of use include WDR Enhancement, which allows users to identify image details in extremely bright and dark environments.

The IP8151P model features a number of additional premium features, giving users more flexibility and efficiency of use. The advanced P-Iris lens controls the iris using the built-in stepping motor with extreme precision via software control to maintain the iris opening at an optimal level at all times, resulting in superior sharpness, depth of field, and image quality. The IP8151P is also equipped with a Focus Assist button, assisting the user to optimally adjust the camera focus. When pressing the Focus Assist button on the camera unit, an indicator display will be shown on the screen with detailed focusing information. Keeping the button pressed will enable zooming in on the target area for fine tuning, resulting in better usability as well as picture clarity.

Both the IP8151 and IP8151P also feature a myriad of other high-end features such as SD/SDHC card slot*, PoE, and multiple streams, making it the ideal choice for the most demanding monitoring applications. By providing the best quality sharp, smooth video, plus exceptional performance in low-light conditions, the IP8151/51P can secure a variety of sites such as retail stores, school campuses, and much more.

* No SD/SDHC card slot & local storage function for Argentina. * Exmor is a trademark of Sony.

BUILT WITH RELIABILITY

## Supreme Night Visibility

SONY's Exmor™, the most well known back-illuminated CMOS technology, has been used in consumer electronics such as digital cameras and digital camcorders and has proven to be a great success in capturing video in low light conditions. Thus, VIVOTEK IP8151/51P, which feature this sensor specifically designed for the security market, can surpass the performance of traditional cameras in low light environments. Traditionally, megapixel cameras require more light to achieve the picture clarity for object identification. With 1.3 megapixel being the most popular megapixel camera standard today, VIVOTEK has explored how to achieve better image quality and usability through integration of the latest technologies.

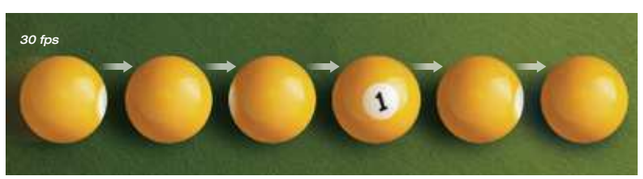
SUPREME
A NEW DEFINITION OF HD

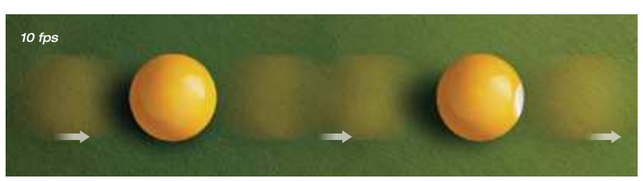


*Exmor is a trademark of Sony.

## Full Frame Rate at 1.3 Megapixel

The frame rate of traditional megapixel cameras are limited to only 10~15 fps due to hardware limitations. However, the IP8151/51P are able to transmit 1.3 Megapixel resolution video at 30 fps compressed with H.264. The ability to view and record at a full frame rate brings many potential benefits. For example, if an object or person passes through the camera view at a high speed, a 10 fps camera might only capture 1 frame including the target, making identification difficult if that frame does not contain adequate information. However, under the same circumstances, an IP8151/51P can capture 3 frames of the target, including details at multiple instances when the event occurs.

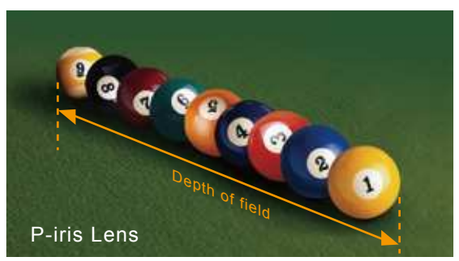



## Enhanced Clarity

***The benefits of P-iris Lens (IP8151P only):***

- Configurable iris
- Applicable depth of field
- Optimal image quality





## WDR Enhanced

When filming in high-contrast light conditions where backlighting or glare is present—as is often found around building entrances, in ATMs, or near windows—both dark and bright areas lose detail. WDR Enhanced technology compensates for the unbalanced lighting, restoring detail throughout the field of view, so as to give user unparalleled visibility to identify images.

With WDR Enhanced

Without WDR Enhanced

## Applications

### *Traffic Surveillance*

In traffic monitoring, the most important thing is to see the details of fast-moving cars. IP8151/51P are capable of capturing fast-moving vehicles by the ability to record 30 fps at 1.3-megapixel resolution. With supreme night visibility, IP8151/51P can still capture moving vehicles under low-light circumstances.

### *Campus*

With high sensitivity & day/night function, IP8151/51P are also capable of campus monitoring. When there are true black areas, IR illuminators can be installed to avoid "black spots" of security. The high sensitivity further increases the range of IR, making IP8151/51P the perfect choices of campus monitoring.

With IR Light

Without IR Light

## Product Features

# IP8151/51P Fixed Network Camera

**Supreme Night Visibility • Full Frame Rate • WDR Enhanced**

- 1.3-megapixel CMOS Sensor
- Supreme Night Visibility
- Up to 30 fps @ 1280x1024 (1.3MP)
- 3.1 ~ 8 mm Vari-focal, Auto-iris Lens (IP8151)
  3.1 ~ 8 mm Vari-focal, P-iris Lens (IP8151P)
- Removable IR-cut Filter for Day and Night Function
- Built-in Focus Assist Button for Precise Focus Adjustment (IP8151P only)
- Supports WDR Enhancement for Unparalleled Visibility in Extremely Bright or Dark Environments
- Real-time H.264, MPEG-4 and MJPEG Compression (Triple Codec)
- Multiple Simultaneous Streams
- Built-in SD/SDHC Card Slot for On-board Storage*
- Built-in 802.3af Compliant PoE
- CS- or C-mount Adjustment Ring for Flexible Lens Installation

* No SD/SDHC card slot & local storage function for Argentina.

▲ Auto-iris Lens (IP8151)

▲ P-iris Lens (IP8151P)

ONVIF