













# Technical Specifications

## Models

· SD7313 (NTSC)

## · SD7323 (PAL)

### System CPU: Bach SoC

- · Flash: 8MB
- RAM: 64MB + 32MB
- · Embedded OS: Linux 2.6

## Pan/Tilt/Zoom

- · Pan range: 360° continuous rotation
- · Tilt range: 0° ~ 90° flip
- · Pan speed: 0.1° ~ 300°/sec
- · Tilt speed: 0.1° ~ 120°/sec
- · 35x optical zoom
- · Auto pan mode
- · Auto patrol mode

#### Lens

- · 35x optical zoom lens, f = 3.4 ~ 119 mm, F1.4 (wide), F4.2 (tele), auto-iris, focus range: 10 mm (wide), 100 mm (tele) to infinity
- Removable IR-cut filter for day & night function

### Angle of View

· 1.7° ~ 55.8° (horizontal)

#### **Shutter Time**

· 1/2 sec. ~ 1/30,000 sec. Image Sensor

SONY 1/4" Exview HAD CCD sensor in D1 resolution

## Minimum Illumination

- · 1.0 Lux (F1.4, 1/60s)
- · 1.0 Lux (F1.4, 1/50s)
- · 0.1 Lux (F1.4, 1/4s) · 0.05 Lux (F1.4, 1/2s)
- · Approx. 0.01 Lux (B/W, F1.4, 1/4s, without IR-cut filter)

## Video

- Compression: MJPEG & MPEG-4
- Streaming:

Simultaneous dual-streaming

MPEG-4 streaming over UDP, TCP, HTTP or HTTPS

MPEG-4 multicast streaming

MJPEG streaming over HTTP or HTTPS

- Supports 3GPP mobile surveillance
- Frame rates:

MPEG-4: Up to 30/25 fps at 704 x 480 (NTSC) /704 x 576 (PAL) MJPEG: Up to 30/25 fps at 704 x 480 (NTSC) /704 x 576 (PAL)

## 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 (Wide Dynamic Range)
- · EIS (Electronic Image Stabilizer)
- · Automatic, manual or scheduled day/night mode
- · BLC (Backlight Compensation)
- · Supports 3D privacy mask

## 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:

External microphone input

- Audio output
- Supports two-way audio via SIP protocol
- Supports audio mute

### Networking

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

## Alarm and Event Management

- Triple-window video motion detection
- Four 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

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

#### Users

· Camera live viewing for up to 10 clients Dimension

#### · Ø 200 mm x 270 mm

Weight

## Net: 3,800 a **LED Indicator**

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

### Power

- · 24V AC 2A 60 Hz/50 Hz
- Power consumption: Max. 45 W

## Housing

Weather-proof IP66-rated housing

### Approvals

CE, LVD, FCC, VCCI, C-Tick

# **Operating Environments**

- Temperature: -20 ~ 60 °C (-4 ~ 140 °F)
- · Humidity: 90% RH

## Viewing System Requirements

- OS: Microsoft Windows 2000/XP/Vista
- 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

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

SDK available for application development and system integration

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Speed Dome Network Camera

SD7313

35x Zoom · Outdoor · WDR · Day & Night

VIVOTEK's SD7313 (NTSC) / SD7323 (PAL) is a high performance speed dome network camera integrated with a SONY 35x zoom lens and Exview HAD CCD sensor. With its powerful zoom capability, this camera offers close-up images of distant objects in sharp detail. It is designed for professional outdoor surveillance applications where high reliability, sharp images, and weatherproofing (IP66 rated) are required.



Along with the high sensitivity SONY Exview HAD CCD sensor and incorporating a removable IR-cut filter, the SD7313/7323 is capable of detection at near infrared light region with great proficiency, drastically improving light efficiency, especially during nighttime. The WDR function enables the SD7313/7323 to generate identifiable images, overcoming the difficulties of challenging lighting conditions.

Featuring EIS (Electronic Image Stabilizer), the SD7313/7323 can mitigate the influence of vibration caused by winds or camera rotation so as to ensure stable and recognizable image quality at all times. The 3D privacy mask function guarantees that private areas are completely sheltered even when the camera pans, tilts, and zooms. When zooming in, the privacy mask will be enlarged to provide comprehensive blockage of the private area. In addition, the SD7313/7323 incorporates an SD/SDHC card slot so as to offer temporary on-board recording.

Similar to the advanced features of VIVOTEK's other cameras, the SD7313/7323 includes, 3GPP mobile surveillance, dual-codec, dual-stream, two-way audio via SIP protocol, digital I/O, 802.1X authentication for network protection, and USB joystick for remote PTZ control. With the VIVOTEK SD7313/7323, these exceptional features provide efficient operational flexibility to meet customers' needs in versatile surveillance applications both outdoors and indoors.















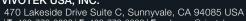








Warranty





Ver 1.0



## A Powerful Outdoor Surveillance Solution

## **Astonishing Light Sensitivity**

SD7313/7323 adopts a SONY Exview HAD CCD sensor capable of detecting and utilizing near infrared light for higher light efficiency. As a result, the sensor can provide superior image quality under poor lighting conditions compared to a conventional CCD sensor, especially during nighttime.





**Exview HAD CCD** 

## Remarkably Close-up Images of Distant Objects

Utilizing a 35x optical zoom lens, the SD7313/7323 can provide close-up images with exceptional detail and effectively extends your viewing distance. You can easily and quickly zoom in on distant objects or minute targets with unprecedented precision and quality, even when enlarged.



#### Adapted for High-contrast Lighting Conditions Clear Images 24/7

SD7313/7323 offers a WDR (Wide Dynamic Range) function that delivers identifiable images in high-contrast environments such as backlight, glare, and light reflection. By capturing and combining information from the darkest and brightest areas of the enivornment, the SD7313/7323 generates images that accurately reproduce fine details appearing in the actual scene.



Stable Image Quality during Vibration

SD7313/7323 is incorporated with the EIS (Electronic Image Stabi-

lizer) feature that maintains image quality during wind- or traffic-

induced vibration. Through correction of the image position caused

by shaking or movement, the SD7313/7323 guarantees stable and

recognizable image quality when placed in high locations, such as



**WDR** 

SD7313/7323 delivers true day & night functionality with a built-in removable IR-cut filter and IR illuminators. By day, the IR-cut filter screens out infrared light to reduce color distortion, and at night, the filter is removed and the IR illuminators are activated to enhance light sensitivity.







Night

# Maximum Protection against Natural Threats

SD7313/7323's weather-proof IP66-rated housing provides protection from extreme weather conditions, dust, and moisture. It offers total protection against contamination and withstands water jet ingress, allowing SD7313/7323 to operate outdoors without any



on a pole, or in areas with heavy traffic.









## **Seamless Protection for Private Areas**

Unlike conventional privacy masks, the coverage of SD7313/7323's 3D privacy mask changes with the camera movement so as to fully protect sensitive information or areas. When zooming in and out, the privacy mask will enlarge and shrink respectively. As a result, private areas can be completely sheltered even when the camera pans, tilts, and zooms.

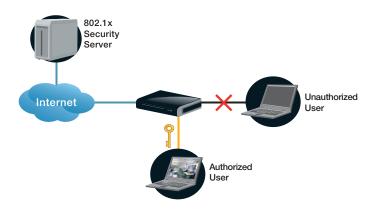




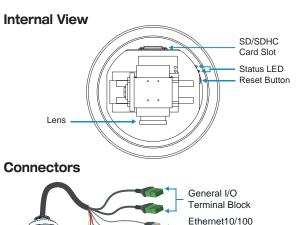
3D Privacy Mask After Zoom In

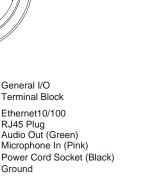
## Strong Video Access Protection

SD7313/7323 supports the 802.1X standard that authenticates the identity of each user requesting to access video images. This function prevents unauthorized or unauthenticated users from accessing important video data, providing a higher level of data security.



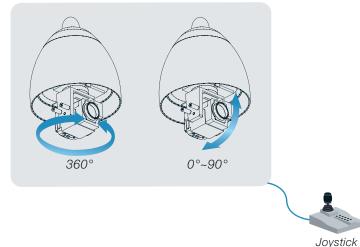
# **Physical Description**





Pan range: 360° Continuous Rotation

Tilt range: 0°~90° Flip



# **Product Features**

- SONY Exview HAD CCD Sensor in D1 Resolution
- 35x Zoom Lens
- 360° Continuous Pan and 90° Tilt
- WDR (Wide Dynamic Range) for High Contrast Environments
- Removable IR-cut Filter for Day & Night Function
- Weather-proof IP66-rated Housing
- EIS (Electronic Image Stabilizer) for the Ultimate Video Experience

RJ45 Plug

- 3D Privacy Masks for Private Area Protection
- Real-time MPEG-4 and MJPEG Compression (Dual Codec)
- Supports Dual Streams Simultaneously
- 802.1X Port-based Authentication for Network Protection
- Supports 3GPP Mobile Surveillance
- Two-way Audio via SIP Protocol
- Built-in SD/SDHC Card Slot for On-board Storage

