



## Technical Specifications

<b>Models</b> <ul style="list-style-type: none"> <li>SD7313 (NTSC)</li> <li>SD7323 (PAL)</li> </ul>	<b>Audio</b> <ul style="list-style-type: none"> <li>Compression: <ul style="list-style-type: none"> <li>GSM-AMR speech encoding, bit rate: 4.75 kbps to 12.2 kbps</li> <li>MPEG-4 AAC audio encoding, bit rate: 16 kbps to 128 kbps</li> </ul> </li> <li>Interface: <ul style="list-style-type: none"> <li>External microphone input</li> <li>Audio output</li> <li>Supports two-way audio via SIP protocol</li> <li>Supports audio mute</li> </ul> </li> </ul>
<b>System</b> <ul style="list-style-type: none"> <li>CPU: Bach SoC</li> <li>Flash: 8MB</li> <li>RAM: 64MB + 32MB</li> <li>Embedded OS: Linux 2.6</li> </ul>	<b>Networking</b> <ul style="list-style-type: none"> <li>10/100 Mbps Ethernet, RJ-45</li> <li>Protocols: IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS and 802.1X</li> </ul>
<b>Pan/Tilt/Zoom</b> <ul style="list-style-type: none"> <li>Pan range: 360° continuous rotation</li> <li>Tilt range: 0° ~ 90° flip</li> <li>35x optical zoom</li> <li>Pan speed: 0.1° ~ 300°/sec</li> <li>Tilt speed: 0.1° ~ 120°/sec</li> <li>Auto pan mode</li> <li>Auto patrol mode</li> </ul>	<b>Alarm and Event Management</b> <ul style="list-style-type: none"> <li>Triple-window video motion detection</li> <li>Four D/I and one D/O for external sensor and alarm</li> <li>Event notification using HTTP, SMTP or FTP</li> <li>Local recording of MP4 file</li> </ul>
<b>Lens</b> <ul style="list-style-type: none"> <li>35x optical zoom lens, f = 3.4 ~ 119 mm, F1.4 (wide), F4.2 (tele), auto-iris, focus range: 10 mm (wide), 1,000 mm (tele) to infinity</li> <li>Removable IR-cut filter for day &amp; night function</li> </ul>	<b>On-board Storage</b> <ul style="list-style-type: none"> <li>SD/SDHC card slot</li> <li>Stores snapshots and video clips</li> </ul>
<b>Angle of View</b> <ul style="list-style-type: none"> <li>1.7° ~ 55.8° (horizontal)</li> </ul>	<b>Security</b> <ul style="list-style-type: none"> <li>Multi-level user access with password protection</li> <li>IP address filtering</li> <li>HTTPS encrypted data transmission</li> <li>802.1X port-based authentication for network protection</li> </ul>
<b>Shutter Time</b> <ul style="list-style-type: none"> <li>1/2 sec. to 1/30,000 sec. (SD7313)</li> <li>1/1.5 sec. to 1/30,000 sec. (SD7323)</li> </ul>	<b>Users</b> <ul style="list-style-type: none"> <li>Live viewing for up to 10 clients</li> </ul>
<b>Image Sensor</b> <ul style="list-style-type: none"> <li>SONY 1/4" EXview HAD CCD sensor in D1 resolution</li> </ul>	<b>Dimension</b> <ul style="list-style-type: none"> <li>Ø 200 mm x 270 mm</li> </ul>
<b>Minimum Illumination</b> <ul style="list-style-type: none"> <li>0.05 Lux / F1.4 (Color)</li> <li>0.01 Lux / F1.4 (B/W)</li> </ul>	<b>Weight</b> <ul style="list-style-type: none"> <li>Net: 3,800 g</li> </ul>
<b>Video</b> <ul style="list-style-type: none"> <li>Compression: MJPEG &amp; MPEG-4</li> <li>Streaming: <ul style="list-style-type: none"> <li>Simultaneous dual streams</li> <li>MPEG-4 streaming over UDP, TCP, HTTP or HTTPS</li> <li>MPEG-4 multicast streaming</li> <li>MJPEG streaming over HTTP or HTTPS</li> </ul> </li> <li>Supports 3GPP mobile surveillance</li> <li>Frame rates: <ul style="list-style-type: none"> <li>MPEG-4: Up to 30/25 fps at 704x480 (NTSC) / 704x576 (PAL)</li> <li>MJPEG: Up to 30/25 fps at 704x480 (NTSC) / 704x576 (PAL)</li> </ul> </li> </ul>	<b>LED Indicator</b> <ul style="list-style-type: none"> <li>System power and status indicator</li> <li>System activity and network link indicator</li> </ul>
<b>Image Settings</b> <ul style="list-style-type: none"> <li>Adjustable image size, quality, and bit rate</li> <li>Time stamp and text caption overlay</li> <li>Flip &amp; mirror</li> <li>Configurable brightness, contrast, saturation, sharpness, white balance and exposure</li> <li>AGC, AWB, AES</li> <li>WDR (Wide Dynamic Range)</li> <li>EIS (Electronic Image Stabilizer)</li> <li>Automatic, manual or scheduled day/night mode</li> <li>BLC (Backlight Compensation)</li> <li>Supports 3D privacy masks</li> </ul>	<b>Power</b> <ul style="list-style-type: none"> <li>24V AC 2A 60 Hz/50 Hz</li> <li>Power consumption: Max. 45 W</li> </ul>
	<b>Housing</b> <ul style="list-style-type: none"> <li>Weather-proof IP66-rated housing</li> </ul>
	<b>Approvals</b> <ul style="list-style-type: none"> <li>CE, LVD, FCC, VCCI, C-Tick</li> </ul>
	<b>Operating Environments</b> <ul style="list-style-type: none"> <li>Temperature: -20 ~ 60 °C (-4 ~ 140 °F)</li> <li>Humidity: 90% RH</li> </ul>
	<b>Viewing System Requirements</b> <ul style="list-style-type: none"> <li>OS: Microsoft Windows 2000/XP/Vista</li> <li>Browser: Mozilla Firefox, Internet Explorer 6.x or above</li> <li>Cell Phone: 3GPP player</li> <li>Real Player: 10.5 or above</li> <li>Quick Time: 6.5 or above</li> </ul>
	<b>Installation, Management, and Maintenance</b> <ul style="list-style-type: none"> <li>Installation Wizard 2</li> <li>32-CH ST7501 central management software</li> <li>Supports firmware upgrade</li> </ul>
	<b>Applications</b> <ul style="list-style-type: none"> <li>SDK available for application development and system integration</li> </ul>
	<b>Warranty</b> <ul style="list-style-type: none"> <li>24 months</li> </ul>

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## Speed Dome Network Camera

# SD7313

35x Zoom · Outdoor · WDR · Day & Night



VIVOTEK's SD7313 (NTSC) / SD7323 (PAL) is the latest 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 sensitivity, 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 Stabilization), 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 surveillance applications both outdoors and indoors.



VIVOTEK INC.  
6F, No.192, Lien-Cheng Rd., Chung-Ho, Taipei County, Taiwan  
T: +886 2 82455282 | F: +886 2 82455532 | E: sales@vivotek.com

VIVOTEK USA, INC.  
470 Lakeside Drive Suite C, Sunnyvale, CA 94085 USA  
T: 408-773-8686 | F: 408-773-8298 | E: salesusa@vivotek.com

Ver 1.4



## The Ultimate in Outdoor Surveillance

### 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.



Conventional CCD



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.



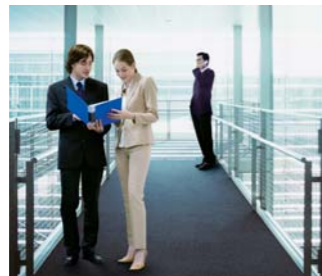
35x Zoom

### Adapted for High-contrast Lighting Conditions

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 environment, the SD7313/7323 generates images that accurately reproduce fine details appearing in the actual scene.



Normal



WDR

### Clear Images 24/7

SD7313/7323 delivers true 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 enhance light sensitivity.



Day



Night

### Stable Image Quality during Vibration

SD7313/7323 is incorporated with the EIS (Electronic Image Stabilizer) 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 on a pole, or in areas with heavy traffic.



Normal



EIS

### 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 worries.



### 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.



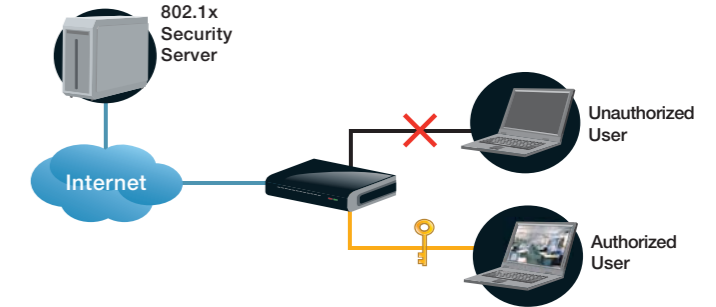
Normal



3D Privacy Mask After Zoom In

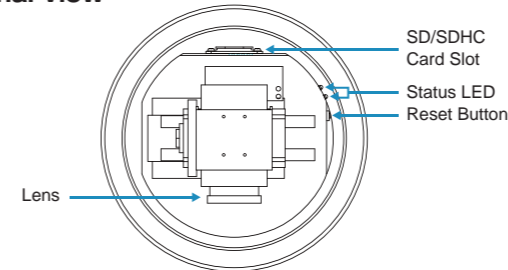
### Strong Video Access Protection

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.

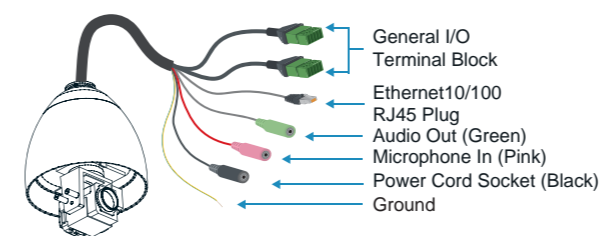


## Physical Description

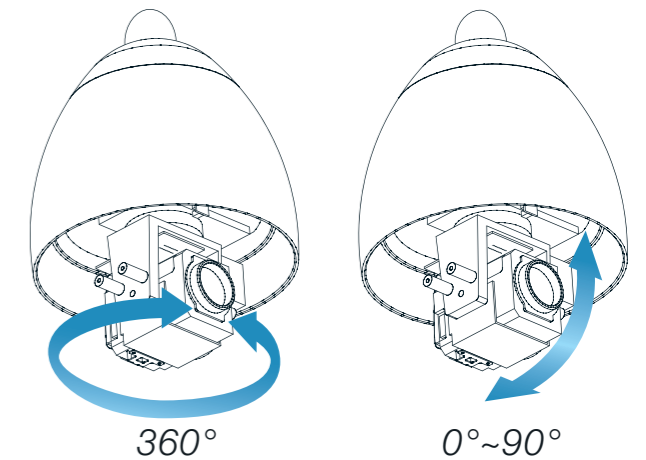
### Internal View



### Connectors



Pan range: 360° Continuous Rotation  
Tilt range: 0°~90° Flip



## Product Features

- SONY EXview HAD CCD Sensor in D1 Resolution
- WDR (Wide Dynamic Range) for High Contrast Environments
- 35x Zoom Lens
- 360° Continuous Pan and 90° Tilt
- Removable IR-cut Filter for Day & Night Function
- Real-time MPEG-4 and MJPEG Compression (Dual Codec)
- Dual Streams Simultaneously
- Weather-proof IP66-rated Housing
- EIS (Electronic Image Stabilizer) for Ultimate Video Experience
- 3D Privacy Masks for Private Area Protection
- 3GPP Mobile Surveillance
- Two-way Audio via SIP Protocol
- Built-in SD/SDHC Card Slot for On-board Storage

