



# SD83x1E/2E/3E

## Speed Dome Network Camera

**18x/28x/36x Zoom • Extreme Weatherproofing • WDR Pro**

VIVOTEK SD83x1E/2E/3E is a series of high performance day/night speed dome network cameras suitable for professional outdoor surveillance applications. The IP66-rated housing protects the camera body against rain and dust and the wide temperature range ensures operation under extreme weather conditions. It is especially suitable for monitoring wide open indoor/outdoor spaces such as airports, highways, and parking lots where high-level reliability and precision are always required.

The SD83x1E/2E/3E support high-performance H.264/MPEG-4/MJPEG compression technology and offer extra smooth video quality up to 60 fps @ D1 Resolution. Boasting WDR Pro technology, the SD83x1E/2E/3E can also cope with challenging lighting conditions and generate image quality similar to the capabilities of the human eye. With sophisticated pan/tilt mechanism, the camera provides fast, precise movement with continuous 360-degree pan and 90-degree tilt. Users can easily control the lens position via a mouse or a joystick to track the object of interest and set up to 128 preset positions for patrolling.

As with all VIVOTEK true day/night cameras, the SD83x1E/2E/3E feature removable IR-cut filter, maintaining clear images 24 hours a day. The built-in SD/SDHC card slot offers a convenient and portable storage option to prevent data loss in case of network disconnection. With other advanced features such as audio detection, 802.3at compliant PoE Plus and 60 fps high quality video, the SD83x1E/2E/3E are the best choices for the most demanding outdoor surveillance applications.

## Features

- > D1 SONY EXview HAD CCD Sensor
- > Up to 60 fps @ D1 Resolution
- > 18x/28x/36x Zoom Lens
- > Removable IR-cut Filter for Day & Night Function
- > 360° Continuous Pan and 90° Tilt
- > Real-time H.264, MPEG-4 and MJPEG Compression (Triple Codec)
- > WDR Pro for Unparalleled Visibility in High Contrast Environments
- > EIS (Electronic Image Stabilizer) for Ultimate Video Experience (SD83x2E/x3E)
- > Weather-proof IP66-rated Housing
- > Wide Temperature Range for Extreme Weather Conditions
- > Audio Detection for Instant Alert
- > Built-in 802.3at Compliant PoE Plus
- > 3D Privacy Masks for Private Area Protection
- > Built-in SD/SDHC Card Slot for On-board Storage

<b>Models</b>	<ul style="list-style-type: none"> <li>SD8311E/12E/13E (NTSC)</li> <li>SD8321E/22E/23E (PAL)</li> </ul>
<b>System</b>	<ul style="list-style-type: none"> <li>CPU: TI DM368 SoC</li> <li>Flash: 128MB</li> <li>RAM: 256MB</li> <li>Embedded OS: Linux 2.6</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>18x optical zoom (SD83x1E)</li> <li>28x optical zoom (SD83x2E)</li> <li>36x optical zoom (SD83x3E)</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>Lens</b>	<ul style="list-style-type: none"> <li>18x optical zoom lens, f = 4.1 ~ 73.8 mm, F1.4 (wide), F3.0 (tele), auto focus, auto-iris, focus range: 10 mm (wide) ~ 800 mm (tele) to infinity (SD83x1E)</li> <li>28x optical zoom lens, f = 3.5 ~ 98 mm, F1.35 (wide), F3.7 (tele), auto focus, auto-iris, focus range: 10 mm (wide) ~ 1500 mm (tele) to infinity (SD83x2E)</li> <li>36x optical zoom lens, f = 3.4 ~ 122.4 mm, F1.6 (wide), F4.5 (tele), auto focus, auto-iris, focus range: 10 mm (wide) ~ 1500 mm (tele) to infinity (SD83x3E)</li> <li>Removable IR-cut filter for day &amp; night function</li> </ul>
<b>Angle of View</b>	<ul style="list-style-type: none"> <li>2.8 ~ 48° (horizontal) (SD83x1E)</li> <li>2.1 ~ 55.8° (horizontal) (SD83x2E)</li> <li>1.7 ~ 57.8° (horizontal) (SD83x3E)</li> </ul>
<b>Shutter Time</b>	<ul style="list-style-type: none"> <li>1/4 sec. to 1/10,000 sec.</li> </ul>
<b>Image Sensor</b>	<ul style="list-style-type: none"> <li>1/4" SONY EXview HAD CCD Sensor</li> </ul>
<b>Minimum Illumination</b>	<ul style="list-style-type: none"> <li>0.7 Lux @ F1.4, 50IRE (SD83x1E)</li> <li>0.65 Lux @ F1.35, 50IRE (SD83x2E)</li> <li>1.4 Lux @ F1.6, 50IRE (SD83x3E)</li> </ul>
<b>Video</b>	<ul style="list-style-type: none"> <li>Compression: H.264, MJPEG &amp; MPEG-4</li> <li>Streaming: <ul style="list-style-type: none"> <li>Multiple simultaneous streams</li> <li>H.264 streaming over UDP, TCP, HTTP or HTTPS</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 activity adaptive streaming for dynamic frame rate control</li> <li>Supports 3GPP mobile surveillance</li> <li>Frame Rates: <ul style="list-style-type: none"> <li>H.264: <ul style="list-style-type: none"> <li>Up to 60/50 fps at 720x480 (SD8311E/12E/13E)</li> <li>720x576 (SD8321E/22E/23E)</li> </ul> </li> <li>MPEG-4: <ul style="list-style-type: none"> <li>Up to 60/50 fps at 720x480 (SD8311E/12E/13E)</li> <li>720x576 (SD8321E/22E/23E)</li> </ul> </li> <li>MJPEG: <ul style="list-style-type: none"> <li>Up to 60/50 fps at 720x480 (SD8311E/12E/13E)</li> <li>720x576 (SD8321E/22E/23E)</li> <li>(Up to 30/25 fps in WDR mode)</li> </ul> </li> </ul> </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 Pro</li> <li>EIS (Electronic Image Stabilization) (SD83x2E/x3E)</li> <li>Automatic, manual or scheduled day/night mode</li> <li>BLC (Backlight Compensation)</li> <li>Supports privacy masks</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> <li>G.711 audio encoding, bit rate: 64 kbps, <math>\mu</math>-Law or A-Law mode selectable</li> </ul> </li> <li>Interface: <ul style="list-style-type: none"> <li>External microphone input</li> <li>Audio output</li> </ul> </li> <li>Supports two-way audio</li> <li>Supports audio mute</li> </ul>

<b>Networking</b>	<ul style="list-style-type: none"> <li>10/100 Mbps Ethernet, RJ-45</li> <li>Onvif support</li> <li>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</li> </ul>
<b>Alarm and Event Management</b>	<ul style="list-style-type: none"> <li>Triple-window video motion detection</li> <li>Audio detection</li> <li>Three D/I and two 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>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>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>Users</b>	<ul style="list-style-type: none"> <li>Live viewing for up to 10 clients</li> </ul>
<b>Dimension</b>	<ul style="list-style-type: none"> <li>Camera: <math>\varnothing</math> 200 mm x 270 mm</li> <li>Cable length: 1330 mm</li> <li>Cable diameter: <math>\varnothing</math> 15 mm; Max width: <math>\varnothing</math> 20 mm</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>Net: 4,500 g (TBD)</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>Power</b>	<ul style="list-style-type: none"> <li>24V AC</li> <li>Power consumption: Max. 60 W</li> <li>802.3at compliance PoE plus</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: -40 ~ 55°C (AC 24V)</li> <li>Temperature: -10 ~ 55°C (PoE Plus)</li> <li>Humidity: 90% RH</li> </ul>
<b>Viewing System Requirements</b>	<ul style="list-style-type: none"> <li>OS: Microsoft Windows 7/Vista/XP/2000</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 recording 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>

Dimension

