

SD8111/8121 Speed Dome Network Camera

12x Zoom • Day & Night • 3D Noise Reduction • WDR

VIVOTEK SD8111/21, equipped with a 12x optical zoom lens, is a high performance day/night speed dome network camera geared for professional surveillance applications, representing another significant addition to VIVOTEK's high-end H.264 network camera portfolio.

Adopting a 12x optical zoom lens and utilizing SONY'S EXView CCD sensor, this network camera allows for not only close-up images with exceptional detail from a faraway distances, but also crystal-clear, razor-sharp video of fast-moving objects without jagged edges. With a sophisticated pan/tilt mechanism, it provides fast, precise movement with endless 360-degree pan and 90-degree tilt. The user can easily control the lens position via mouse or joystick to track the object of interest and set up to 128 preset positions for patrolling.

Boasting with Wide Dynamic Range technology, SD8111/21 can cope with any challenging lighting conditions and generate image quality closer to the capabilities of the human eye. The day and night functionality also makes the SD8111/21 ideal for operating under diverse lighting conditions. When lighting conditions turn poor, the IR-cut filter will automatically disengage to accept IR illumination and improve image quality. With the new 2D & 3D noise reduction technology, environmental noise is removed to provide crystal clear nighttime video and the camera automatically switches from color to black and white, assuring optimal image quality at all times. Additional advanced features, including 3GPP mobile surveillance, two-way audio, and digital I/O for external sensors & alarms, make the VIVOTEK SD8111/21 a full-featured speed dome and a suitable solution for all levels of enterprise projects such as airports, parking lots, and shopping malls, where high-level reliability and precision are an absolute must.

Features

> SONY EXview HAD CCD Sensor in D1 Resolution

VIVOTEK

- > 12x Zoom Lens
- > 360° Continuous Pan and 190° Tilt
- > Removable IR-cut Filter for Day & Night Functionality
- Real-time H.264, MPEG-4, and MJPEG Compression (Triple Codec)
- > 3D Noise Reduction for Clear Nighttime Images
- > WDR Enhancement for Unparalleled Visibility in Extremely Bright or Dark Environments
- > Built-in SD/SDHC Card Slot for On-board Storage*

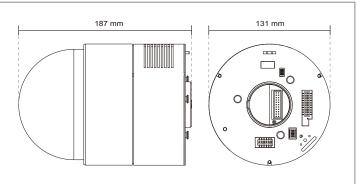
<u> </u>	pecif	IOOT	nnn
. ``		11. dl	

Pan/Tilt/ZoomPan range: 360° continuous rotation Tilt range: -10° ~ 190° flip 12x optical zoom Pan speed: 0.1° ~ 300°/sec Auto pan mode Auto pan mode Auto pantol modeCLens-12x optical zoom lens, f = 3.8 ~ 45.6 mm, F1.6 (wide), F2.8 (tele), auto-tris, focus range: 20 mm (wide), 3,000 mm (tele) to infinity Removable IR-cut filter for day & night functionCAngle of View1.7° ~ 55.8° (Horizontal)UShutter Time-1/2 sec. to 1/30,000 sec. (SD8111) 1.1.5 sec. to 1/30,000 sec. (SD8121)CImage SensorSONY 1/4° EXview HAD CCD sensor in D1 resolutionVMinimum Illumination0.1 Lux / F1.6 (Color) Streaming: Multiple simultaneous streams H.264 streaming over UDP TCP, HTTP or HTTPS H.264/MPEG-4 multicats treaming MUPEG-4 streaming over UDP TCP, HTTP or HTTPS H.264/MPEG-4 multicats treaming for dynamic frame rate control Supports activity adaptive streaming for dynamic frame rate control Supports 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121)MImage SettingsAdjustable image size, quality, and bit rate frame rate and pan and text caption overlay Hip & mirror Automatic, manual, or scheduled day/night mode at Compression: ACC, AWB, AES WDR enhanced Automatic, manual, or scheduled day/night mode at Compression: Gord Compression: ACC, AWB, AES WDR enhancedVAudioCompression: Gord pan bit rate: 47 bkps to 128 kbps G.711 audio encoding, bit rate: 47 bkps to 128 kbps G.711 audio encoding, bit rate: 44 kbps upday, upda	Models	· SD8111 (NTSC) · SD8121 (PAL)	Ν
Pan/Tilt/ZoomPan range: 360° continuous rotation Tilt range: -10° ~ 10° flip 12x optical zoom Pan speed: 0.1° ~ 300°/sec 	System	· Flash: 128MB · RAM: 128 MB	A
F1.6 (wide), F2.8 (tele), auto-iris, focus range: 20 mm (wide), 3,000 mm (tele) to infinity . Removable IR-cut filter for day & night functionAngle of View1.7° ~ 55.8° (Horizontal)U1.7° ~ 55.8° (Horizontal)Shutter Time1/2 sec. to 1/30,000 sec. (SD8111) 	Pan/Tilt/Zoom	 Tilt range: -10° ~ 190° flip 12x optical zoom Pan speed: 0.1° ~ 300°/sec Tilt speed: 0.1° ~ 120°/sec Auto pan mode 	N C
Shutter Time1/2 sec. to 1/30,000 sec. (SD8111) 1/1.5 sec. to 1/30,000 sec. (SD8121)Image SensorSONY 1/4"EXview HAD CCD sensor in D1 resolutionVMinimum0.1 Lux / F1.6 (Color) 0.01 Lux / F1.6 (B/W)VideoCompression: H.264, MJPEG & MPEG-4 	Lens	F1.6 (wide), F2.8 (tele), auto-iris, focus range: 20 mm (wide), 3,000 mm (tele) to infinity	S
1/1.5 sec. to 1/30,000 sec. (SD8121)Image SensorSONY 1/4" EXview HAD CCD sensor in D1 resolutionMinimum Illumination0.1 Lux / F1.6 (Color) 0.01 Lux / F1.6 (B/W)VideoCompression: H.264, MJPEG & MPEG-4 Streaming over UDP, TCP, HTTP or HTTPS H.264 streaming over UDP, TCP, HTTP or HTTPS H.264/MPEG-4 multicast streaming 	Angle of View	· 1.7° ~ 55.8° (Horizontal)	U
in D1 resolutionVMinimum Illumination0.1 Lux / F1.6 (Color) 0.01 Lux / F1.6 (B/W)PVideoCompression: H.264, MJPEG & MPEG-4 Streaming over UDP, TCP, HTTP or HTTPS H.264 streaming over UDP, TCP, HTTP or HTTPS H.264 streaming over UDP, TCP, HTTP or HTTPS H.264/MPEG-4 multicast streaming MJPEG streaming over HTTP or HTTPS Supports activity adaptive streaming for dynamic frame rate control Supports activity adaptive streaming for dynamic frame rate control Supports 3GPP mobile surveillance • Frame Rates: MPEG-4: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) H.264: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) MJPEG: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121)PImage SettingsAdjustable 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 masksAudioCompression: GSM-AMR speech encoding, bit rate: 4.75 kbps to 12.2 kbps MPEG-4 AAC audio encoding, bit rate: 64 kbps, μ-Law, or A-Law mode selectable • Interface: • External microphone input Audio output • Supports worway audio • Supports audio mute	Shutter Time		C
Illumination 0.01 Lux / F1.6 (B/W) P Video Compression: H.264, MJPEG & MPEG-4 Streaming: Multiple simultaneous streams H.264 streaming over UDP, TCP, HTTP or HTTPS H.264/MPEG-4 multicast streaming MJPEG streaming over HTTP or HTTPS Supports activity adaptive streaming for dynamic frame rate control A Supports activity adaptive streaming for dynamic frame rate control Supports activity adaptive streaming for dynamic frame rate control R Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) H N MPEG-4: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) M MPEG: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) A Image Settings Adjustable image size, quality, and bit rate Time stamp and text caption overlay Flip & mirror V Configurable brightness, contrast, saturation, sharpness, white balance, and exposure AGC, AWB, AES WDR enhanced A Automatic, manual, or scheduled day/night mode BLC (Backlight Compensation) BLC (Backlight Compensation) Supports privacy masks Compression: GSM-AMR speech encoding, bit rate: 16 kbps to 128 kbps G.711 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: External microphone input Audio output Supports two-way audio Supports audio mute Supports audio mute	Image Sensor		v
 Streaming: Multiple simultaneous streams H.264 streaming over UDP, TCP, HTTP or HTTPS MPEG-4 streaming over UDP, TCP, HTTP or HTTPS H.264/MPEG-4 multicast streaming MPEG streaming over HTTP or HTTPS Supports activity adaptive streaming for dynamic frame rate control Supports 3GPP mobile surveillance Frame Rates: MPEG-4: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) H.264: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) MJPEG: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) 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: 475 kbps to 12.2 kbps MPEG-4 AAC audio encoding, bit rate: 64 kbps, µ-Law, or A-Law mode selectable Interface: External microphone input Audio output Supports two-way audio Supports audio mute 			Ρ
 MPEG-4 streaming over UDP, TCP, HTTP or HTTPS H.264/MPEG-4 multicast streaming MJPEG streaming over HTTP or HTTPS Supports activity adaptive streaming for dynamic frame rate control Supports 3GPP mobile surveillance Frame Rates: MPEG-4: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) H.264: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) MJPEG: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) 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: 64 kbps, µ-Law, or A-Law mode selectable Interface: External microphone input Audio output Supports two-way audio Supports audio mute 	Video	Streaming:	A
 Supports activity adaptive streaming for dynamic frame rate control Supports 3GPP mobile surveillance Frame Rates: MPEG-4: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) H.264: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) MJPEG: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) 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 		MPEG-4 streaming over UDP, TCP, HTTP or HTTPS H.264/MPEG-4 multicast streaming	
Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) H.264: Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121)Ir M M aImage 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 masksAudio• 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: External microphone input Audio output • Supports two-way audio • Supports audio mute		 Supports activity adaptive streaming for dynamic frame rate control Supports 3GPP mobile surveillance Frame Rates: 	-
Audio Compression: GSM-AMR speech encoding, bit rate: 16 kbps to 12.2 kbps (ST1 audio encoding, bit rate: 64 kbps, µ-Law, or A-Law mode selectable Audio Compression: GSM-AMR speech encoding, bit rate: 16 kbps to 12.8 kbps G.711 audio encoding, bit rate: 64 kbps, µ-Law, or A-Law mode selectable		Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121)	
Up to 30/25 fps at 720 x 480 (SD8111) / 720 x 576 (SD8121) A Image Settings Adjustable image size, quality, and bit rate V Time stamp and text caption overlay Flip & mirror V Configurable brightness, contrast, saturation, sharpness, white balance, and exposure AGC, AWB, AES V WDR enhanced Automatic, manual, or scheduled day/night mode BLC (Backlight Compensation) Supports privacy masks Audio Compression: GSM-AMR speech encoding, bit rate: 16 kbps to 12.2 kbps MPEG-4 AAC audio encoding, bit rate: 64 kbps, u-Law, or A-Law mode selectable Interface: External microphone input Audio output Supports two-way audio Supports two-way audio		720 x 576 (SD8121)	
 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 12.8 kbps G.711 audio encoding, bit rate: 64 kbps, μ-Law, or A-Law mode selectable Interface: External microphone input Audio output Supports two-way audio Supports audio mute 		Up to 30/25 fps at 720 x 480 (SD8111) /	A
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: External microphone input Audio output Supports two-way audio Supports audio mute	Image Settings	 Time stamp and text caption overlay 	V
 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: External microphone input Audio output Supports two-way audio Supports audio mute 		sharpness, white balance, and exposure	
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: External microphone input Audio output Supports two-way audio Supports audio mute		 WDR enhanced Automatic, manual, or scheduled day/night mode BLC (Backlight Compensation) 	
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: External microphone input Audio output Supports two-way audio Supports audio mute	Audio	· Compression:	
bit rate: 16 kbps to 128 kbps G.711 audio encoding, bit rate: 64 kbps, μ-Law, or A-Law mode selectable Interface: External microphone input Audio output Supports two-way audio Supports audio mute		bit rate: 4.75 kbps to 12.2 kbps	
bit rate: 64 kbps, μ-Law, or A-Law mode selectable · Interface: External microphone input Audio output · Supports two-way audio · Supports audio mute		bit rate: 16 kbps to 128 kbps	
External microphone input Audio output · Supports two-way audio · Supports audio mute		bit rate: 64 kbps, μ-Law, or A-Law mode selectable	
 Supports two-way audio Supports audio mute 		External microphone input	
		· Supports two-way audio	
All specificatio			L_ catio

Distributed by:

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 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 Note: No SD/SDHC card slot & local storage function for Argentina.
Security	 Muilti-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	 Camera: Ø 131 mm x 187 mm Cable length: 680 mm Cable diameter: Ø 8 mm; Max width: Ø 13.5 mm
Weight	· Net: 1,500 g
Power	· 12V DC · Power consumption: Max. 11.4 W
Approvals	· CE, LVD, FCC, VCCI, C-Tick
Operating Environments	 Temperature: 0°C ~ 40°C (32°F ~ 104°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	 Installation Wizard 2 32-CH ST7501 recording software Supports firmware upgrade
Applications	 SDK available for application development and system integration
Warranty	· 24 months

Dimension



All specifications are subject to change without notice. Copyright © 2011 VIVOTEK INC. All rights reserved. P/N: 971003601



VIVOTEK INC. 6F, No.192, Lien-Cheng Rd., Chung-Ho, New Taipei City, 235, Taiwan, R.O.C. |T: +886-2-82455282 | F: +886-2-82455532 | E: sales@vivotek.com

VIVOTEK USA, INC. 2050 Ringwood Avenue, San Jose, CA 95131 |T: 408-773-8686 | F: 408-773-8298 | E: salesusa@vivotek.com

Ver. 1.2