



# SD9394-EHL

Speed Dome Network Camera

8MP 30fps • 32x Optical Zoom • 250M Smart IR • IP66 • NEMA 4X

## Technical Specifications

### System Information

Model	SD9394-EHL
CPU	Multimedia SoC (System-on-Chip)
Flash	8 GB
RAM	2 GB

### Camera Features

Image Sensor	1/1.8" Progressive CMOS
Max. Resolution	3840x2160 (8MP)
Lens Type	32x Optical Zoom, Auto Focus
Focal Length	f = 6.5 ~ 212 mm
Aperture	F1.4 ~ F4.9
Iris Type	P-iris
Field of View	63.5° ~ 2.0° (Horizontal) 37.4° ~ 1.1° (Vertical) 70.7° ~ 2.3° (Diagonal)
Shutter Time	1 sec. to 1/100,000 sec.
WDR Technology	WDR Pro
Day/Night	Yes
Removable IR-cut Filter	Yes
IR Illuminators	Built-in IR Illuminators up to 250 meters with Smart IR, IR LED*8
Minimum Illumination	0.02 Lux @ F1.4 (Color) <0.005 Lux @ F1.4 (B/W) 0 lux with IR illumination on
Pan Speed	Preset speed: 450°/s
Pan Range	360° endless
Tilt Speed	Preset speed: 450°/s



Tilt Range	-20° to 90° (auto flip)
Preset Locations	256 preset locations 128 presets per tour
Pan/Tilt/Zoom Functionalities	32x digital zoom (4x on IE plug-in, 8x built in) Auto Pan mode Auto Patrol mode Mechanical Auto flip
Storage	Seamless Recording to MicroSD/SDHC/SDXC card and recording to network-attached storage (NAS)
Built-in Installation Aids	Remote focus, remote zoom
<b>Video</b>	
Video Compression	H.265, H.264, MJPEG
Maximum Frame Rate	30 fps @ 3840x2160
Maximum Streams	3 video streams (Up to 8 configurable profiles)
S/N Ratio	67 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constant bit rate control, Smart Stream III
Image Settings	General settings: video title and time stamp overlay, video orientation (flip, mirror), day/night settings; Illuminators: illuminators, anti-overexposure; Image settings: white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, HLM, 3DNR, EIS, scene mode (auto, deblur); Exposure: BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR; Focus; Privacy mask; Scheduled profile settings; Pixel calculator
<b>Audio</b>	
Audio Capability	Two-way audio (Full duplex)
Audio Compression	G.711, G.726, MPEG-2 AAC-LC
Audio Interface	External line input External line output
<b>Network</b>	
Users	Live viewing for up to 10 clients
Security	Access list, Account block, Audit log, Configurable password strength protection, CSRF protection, Digest authentication, HTTPS, IEEE 802.1x, Secure boot, Session timeout, Signed firmware, Trend Micro IoT Security (brute force attack event, cyberattack event, quarantine event), User access log, User account management
Protocols	802.1X, ARP, Bonjour, CIFS/SMB, DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMPv3, IPv4, IPv6, NTCIP, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2, UDP, UPnP
Interface	10 Base-T/100 Base-TX Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.
ONVIF	Profile G, S, T supported, specification available at <a href="http://www.onvif.org">www.onvif.org</a>
<b>AI Analytics</b>	
Compute Capability	SoC with built-in hardware deep learning accelerator
Vision Object Analytics	Object Detection: People, Vehicle (4-wheeled, 2-wheeled); Attribute Extraction: People (gender, clothing color, bag, hat), Vehicle (bike, bus, car, motorcycle, truck, color); Re-Search Extraction; Path Extraction
Applications	Deep learning VCA (Smart tracking advanced) Smart Motion Detection (Five-window video motion detection, People detection, Vehicle detection, Time filter), Smart Tracking Advanced, Smart VCA (Intrusion detection, Loitering detection, Line crossing detection, Face detection, Unattended object detection, Missing object detection)
<b>Solution Integration</b>	
Applications	Trend Micro IOT Security (3-year free trial)
<b>Alarm and Event</b>	
Event Trigger	Audio detection, camera tampering detection, cybersecurity events (brute force attack event, cyberattack event, quarantine event), digital input, manual trigger, motion detection, periodical trigger, recording notification, SD card life expectancy, smart tracking advanced trigger, system boot, preset reached
Event Action	Event notification via audio clip, camera link, digital output, email, HTTP, FTP/SFTP, NAS server, SD card, push notification File upload via email, HTTP, FTP/SFTP, NAS server, SD card
<b>General</b>	



Connectors	RJ-45 cable connector for 10/100Mbps Network/PoE connection Audio line input Audio line output AC/DC 24V power input Digital input *2 Digital output *1 RS-485*1
LED Indicator	System power and status indicator
Power Input	AC 24V, DC48V, IEEE 802.3 bt Class 6 PoE (Simultaneous Power Redundancy Supported)
Power Consumption	PoE Max: 51W/26W (IR on/off) DC 48V Max: 51W/26W (IR on/off) AC 24V Max: 51W/26W (IR on/off)
Dimensions	256 x 336 mm
Weight	7.3 kg
Certifications	EMC: CE (EN 55032 Class A, EN55035, EN50121-4), UKCA (BS EN 55032: 2015 +A11: 2020 , BS EN 55035: 2017), FCC (FCC Part 15 Subpart B Class A), IC (ICES-003:2020 Issue7, Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A); Safety : UKCA (BS EN 62368-1:2014+A11:2017), UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471); Environment: IK10 (IEC 62262), IP66 (IEC 60529), NEMA (NEMA 250 Type 4X); IA: BIS (IS 13252), BSMI
Operating Temperature	Starting Temperature: -40°C ~ 55°C (-40°F ~ 131°F) Working Temperature: -40°C ~ 55°C (-40°F ~ 131°F) (IR off) -40°C ~ 50°C (-40°F ~ 122°F) (IR on)
Humidity	98% RH (non-condensing)
<b>System Requirements</b>	
Operating System	Microsoft Windows 10/8/7 Mac 10.12 (Chrome only)
Web Browser	Chrome 58.0 or above Internet Explorer 10/11
Other Players	VLC: 1.1.11 or above
<b>Included Accessories</b>	
Packing Contents	Wall mount bracket, Screw pack, Screws and anchors, T10 and T25 L-wrench, Waterproof round cap, Quick installation guide, Terminal blocks (for DI/DO audio, AC/DC/GND wires, RS485), Ground wire
<b>DORI (EN 62676-4 Standard)</b>	
Detect (25PPM/ 8PPF)	Wide: 130.2 m (427.2 ft) Tele: 4774.6 m (15664.7 ft)
Observe (63PPM/ 19PPF)	Wide: 51.8 m (170.1 ft) Tele: 1527.9 m (5012.7 ft)
Recognize (125PPM 38PPF)	Wide: 25.9m (85 ft) Tele: 848.8 m (2784.8 ft)
Identify (250PPM/ 76PPF)	Wide: 12.9 m (42.4 ft) Tele: 424.4 m (1392.4 ft)

