



S Series

IP9165-LPR (9-50 mm)

2MP License Plate Recognition
Camera



Technical Specifications

System Information	
CPU	Multimedia SoC (System-on-Chip)
Flash	8GB eMMC
RAM	2GB

Camera Specifications	
Image Sensor	1/2" Progressive CMOS
Max. Resolution	1920x1080
Lens Type	Vari-focal, Remote Back Focus, i-CS
Focal Length	f = 9 ~ 50 mm
Aperture	F1.5 ~ F1.6
Iris Type	DC-iris, P-iris, i-CS
Field of View	8.3° ~ 42.8° (Horizontal) 4.7° ~ 24.3° (Vertical) 9.46° ~ 48.9° (Diagonal)
Shutter Time	1/5~1/32000
WDR Technology	WDR Pro II
Day/Night	Yes
Removable IR-cut filter	Yes (Headlight filter design for Anti-Glare)
Minimum Illumination	0.01 lux @ F1.5
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)
Storage	Built-in 32GB MicroSD card for LPR images Seamless Recording to MicroSD/SDHC/SDKC card and recording to network-attached storage (NAS)

Video	
Compression	H.265, H.264, MJPEG
Maximum Frame Rate	60 fps @ 1920x1080
Maximum Streams	4 simultaneous streams
S/N Ratio	66.2 dB
Dynamic Range	140dB
Video Streaming	Adjustable resolution, quality and constant bit rate control, Smart Stream III
Image Settings	Adjustable image size, quality and bit rate; Time stamp, text overlay, flip & mirror; Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, AE speed, privacy masks; Scheduled profile settings, HLC, defog, 3DNR, EIS, video rotation, lens profile, remote focus(i-CS), Remove back focus, Scene Mode

Audio	
Audio Capability	Two-way Audio
Compression	G.711, G.726, MPEG-2 AAC-LC
Interface	External microphone input External line output

Network	
Users	Live viewing for up to 10 clients
Security	Access list, CSRF protection, digest authentication, HTTPS , IEEE 802.1x, password protection, secure boot, 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/SFTP, HTTP/HTTPS, ICMP, IGMPv3, IPv4, IPv6, 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 *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.
ONVIF	Supported, specification available at www.onvif.org

AI Analytics	
Compute Capability	SoC with built-in hardware deep learning accelerator
Application available with license	VIVOTEK ANPR

Solution Integration	
Embedded Software	VIVOTEK ANPR
VADP Package	Trend Micro IoT Security

Alarm and Event	
Event Trigger	Camera: Event notification via digital output, email, HTTP, FTP, NAS server, SD card File upload via email, HTTP, FTP, NAS server, SD card ANPR Software: Socket client, socket server, onvif event, digital output trigger, HTTP(S), FTP, send event to Milestone VMS, wiegand protocol supported
Event Action	Motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection, audio detection, shock detection, SD card life expectancy, cybersecurity events (brute force attack event, cyberattack event, quarantine event)

General	
Supported P/T/Z	DynaDome/SmartDome, Pelco D, Pelco P, Lilin, Samsung scc643 and customized
Connectors	RJ-45 cable connector for 10/100/1000Mbps Network/PoE connection Audio input Audio output AC 24V power input *1 DC 12V power input*1 Digital input *2 Digital output *2 (DO+: 12V, 50mA; DO-: 30V, Open Drain, 1A) RS485*1 BNC *1
LED Indicator	System power and status indicator
Power Input	AC 24V, DC 12V, IEEE 802.3af PoE Class 0 (Power Redundancy)
Power Consumption	DC 12V: Max. 9 W AC 24V: Max. 18 W PoE: Max. 9.06 W
Dimensions	155 (D) x 70 (W) x 61 (H) mm (w/o lens) 263 (D) x 78 (W) x 84 (H) mm (w/ lens)
Weight	680 g (w/o lens) 970 g (w/ lens)
Certifications	CE, LVD, FCC Class B, VCCI, C-Tick, UL
Operating Temperature	Start Temperature: 0°C ~ 50°C (32°F ~ 122°F) Working temperature: -10°C ~ 60°C (14°F ~ 140°F)
Humidity	90% (non-condensing)

System Requirements	
Operating System	Microsoft Windows 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

Included Accessories	
Packing Contents	Quick installation guide, lens