





TNO-7180RLP

High-speed License Plate Capture Camera











Key Features

- 3MP, Color Global Shutter Sensor
- 6.8~120mm(18x) motorized varifocal
- H.265, H.264, MJPEG codec
- Maximum 60fps@3MP all resolutions (H.265, H.264, MJPEG)
- \bullet Edge Storage Pre-installed with 32GB Micro SD to support 10,000 LPR images
- WiseStreamII support
- HPoE, 12VDC
- IR Viewable Length 50m(164.04ft)
- IP66, IK10, NEMA 4X, NEMA TS 2(2.2.8, 2.2.9)
- Wisenet Road AI application (Pre-installed)
- License/Number Plate Recognition
- Make/Model/Color Recognition
- Black/White list notification
- Smart Search (LP/NP, Country, brand, model, color)

^{*}POE power supply is not included, must be purchased separately if required



TNO-7180RLP

High-speed License Plate Capture Camera







Specifications

Video	TNO-7180RLP	
Imaging Device	1/1.8" CMOS, Global shutter	
Resolution	3M: 2048x1536, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240 2M: 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	
Max. Framerate	3M: H.265/H.264: Max. 55fps/50fps(55Hz/50Hz), MJPEG: Max. 5fps(55Hz/50Hz) 2M: H.265/H.264: Max. 60fps/50fps(60Hz/50Hz), MJPEG: Max. 5fps (60Hz/50Hz)	
Min. Illumination	Color 0.1 Lux (1/30sec, gain 48dB)	
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, $720x480(N)$, $720x576(P)$ for installation USB: Micro USB Type B, $1280x720$ for installation	
Lens		
Focal Length (Zoom Ratio)	6.8~120mm(18x) motorized varifocal	
Max. Aperture Ratio	F1.6(Wide)~F4.13(Tele)	
Angular Field of View	H: 54.5°(Wide)~3.4°(Tele), V: 42.3°(Wide)~2.5°(Tele)	
Min. Object Distance	2m (6.5ft)	
Focus Control	Simple focus, Focus save	
Lens Type	DC auto iris	
Operational		
Camera Title	Displayed up to 85 characters	
Day & Night	Auto(ICR)	
Backlight Compensation	BLC, SSDR	
Digital Noise Reduction	SSNRV	
Digital Image Stabilization	not support	
Defog	Not Support	
Motion Detection	8ea, polygonal zones	
Privacy Masking	6ea, Rectangle zones - Color: Grey/Green/Red/Blue/Black/White	
Gain Control	Support	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
LDC	Not Support	
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/25 ~ 1/12,000sec) / Global Shutter mode	
Video Rotation	Flip, Mirror	
Analytics	Analytics events - Motion detection, Tampering, Virtual line(Crossing/Direction), Virtual Area(Loitering/Intrusion/Enter/Exit, Appear/Disappear)	
Serial Interface	RS-485(Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell)	
Alarm I/O	4 configurable I/O ports	

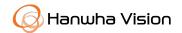
Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com Hanwha Vision is formerly known as Hanwha Techwin.



Alarm Triggers	Analytics, Network disconnect, Alarm input	
Alarm Events	When alarm trigger occurred - File upload(image): e-mail/FTP - Notification: e-mail - Recording: NAS recording at event triggers - Alarm output - Handover: PTZ preset, send message by HTTP/HTTPS/TCP	
Audio In	Selectable(mic in/line in)	
Audio Out	Line out	
IR Viewable Length	WiseIR 50m (164ft)	
Network		
Ethernet	RJ-45(10/100/1000BASE-T)	
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG	
Smart Codec	Manual(5ea area), WiseStream II	
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR	
Streaming	Unicast(20 users) / Multicast Multiple streaming (Up to 10 profiles)	
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QOS, PIM-SM, UPnP, Bonjour, LLDP, SRTP	
Security	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate(Hanwha Techwin root CA) Secure boot/OS/Storage, Verify firmware forgery TPM 2.0 with FIPS 140-2 level2	
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform v3.60	
Consul		
General		
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish,, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek	
Web Viewer	Supported OS: Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Recommended Browser: Google Chrome Supported Browser: MS Explore11, MS Edge, Mozilla Firefox(Window 64bit only), Apple Safari(Mac OS X only)	
	X Office	
Edge Storage	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled)	
Edge Storage Memory Environmental & Electrical	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled)	
Memory Environmental & Electrical	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled)	
Memory Environmental & Electrical Operating Temperature / Humidity	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled) 2048MB RAM, 256MB Flash Normal: -40°C~+55°(-40°F ~ +131°F) / Intermittent: -40°C~+60°C(-40°F ~ +140°F) Cold start: -40°C Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C(+165°F)	
Memory Environmental & Electrical Operating Temperature / Humidity Storage Temperature / Humidity	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled) 2048MB RAM, 256MB Flash Normal: -40°C~+55°(-40°F ~ +131°F) / Intermittent: -40°C~+60°C(-40°F ~ +140°F) Cold start: -40°C Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C(+165°F) Less than 95% RH(Non-condensing)	
Memory Environmental & Electrical Operating Temperature / Humidity Storage Temperature / Humidity Certification	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled) 2048MB RAM, 256MB Flash Normal: -40°C~+55°(-40°F ~ +131°F) / Intermittent: -40°C~+60°C(-40°F ~ +140°F) Cold start: -40°C Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C(+165°F) Less than 95% RH(Non-condensing) -50°C~+60°C / Less than 95% RH(Non-dondensing)	
Memory Environmental & Electrical Operating Temperature / Humidity Storage Temperature / Humidity Certification Input Voltage	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled) 2048MB RAM, 256MB Flash Normal: -40°C~+55°(-40°F ~ +131°F) / Intermittent: -40°C~+60°C(-40°F ~ +140°F) Cold start: -40°C Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C(+165°F) Less than 95% RH(Non-condensing) -50°C~+60°C / Less than 95% RH(Non-dondensing) IP66, IK10, NEMA 4X, NEMA TS 2(2.2.8, 2.2.9) HP0E(IEEE802.3bt type3, Class6), 12VDC	
Memory Environmental & Electrical Operating Temperature / Humidity Storage Temperature / Humidity Certification Input Voltage Power Consumption	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled) 2048MB RAM, 256MB Flash Normal: -40°C~+55°(-40°F ~ +131°F) / Intermittent: -40°C~+60°C(-40°F ~ +140°F) Cold start: -40°C Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C(+165°F) Less than 95% RH(Non-condensing) -50°C~+60°C / Less than 95% RH(Non-dondensing) IP66, IK10, NEMA 4X, NEMA TS 2(2.2.8, 2.2.9) HP0E(IEEE802.3bt type3, Class6), 12VDC ** HP0E injector not included PoE: Max 50W, Typical 27W	
Memory Environmental & Electrical Operating Temperature / Humidity Storage Temperature / Humidity	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled) 2048MB RAM, 256MB Flash Normal: -40°C~+55°(-40°F ~ +131°F) / Intermittent: -40°C~+60°C(-40°F ~ +140°F) Cold start: -40°C Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C(+165°F) Less than 95% RH(Non-condensing) -50°C~+60°C / Less than 95% RH(Non-dondensing) IP66, IK10, NEMA 4X, NEMA TS 2(2.2.8, 2.2.9) HP0E(IEEE802.3bt type3, Class6), 12VDC ** HP0E injector not included PoE: Max 50W, Typical 27W	
Memory Environmental & Electrical Operating Temperature / Humidity Storage Temperature / Humidity Certification Input Voltage Power Consumption Mechanical	Micro SD/SDHC/SDXC 1slot (32GB Card preinstalled) 2048MB RAM, 256MB Flash Normal: -40°C~+55°(-40°F~+131°F) / Intermittent: -40°C~+60°C(-40°F~+140°F) Cold start: -40°C Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C(+165°F) Less than 95% RH(Non-condensing) -50°C~+60°C / Less than 95% RH(Non-dondensing) IP66, IK10, NEMA 4X, NEMA TS 2(2.2.8, 2.2.9) HP0E(IEEE802.3bt type3, Class6), 12VDC ** HP0E injector not included P0E: Max 50W, Typical 27W 12VDC: Max 47.5W, Typical 25W	

Hanwha Vision is formerly known as Hanwha Techwin.





Wisenet Road AI LPR/ANPR/MMCI	2	
Solution	City Traffic Observation	Highways
Speed Description	Regular Speed	High Speed
Lane Coverage	Up to 2 lanes	Up to 2 lanes
Speed limit	Up to 120kmh (75mph) for 2 lanes	Up to 200kmh (125mph) for 2 lanes
Min. Forward Distance	16m (52ft)	27m (90ft)
Max. Forward Distance	46m (150ft)	46m (150ft)
Max. Horizontal Angle	25°	15°
Max. Vertical Angle	25°	15°
Horizontal Offset	Up to 7m (24ft)	Up to 4m (12ft)
Camera Height	Up to 7m (24ft)	Up to 7m (24ft)
Vehicle Recognition	Make: 70+ Model: 600+ Color: 11	Make: 70+ Model: 600+ Color: 11
Available Countries	Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mexico, Moldova, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Krabe Emirates, United Kingdom, United States of America, Uzbekistan	Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mexico, Moldova, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweder Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Arab Emirates, United Kingdom, United States of America, Uzbekistan

 $^{^{\}star\star}$ NOTE: For US version, lane coverage is up to 1 lane and speed limit is up to 100mph



TNO-7180RLP

High-speed License Plate Capture Camera





CAD Unit:mm [inch]

