



Network

Bullet



## XNO-6120R/RW

2MP IR Bullet Camera with  
RoadWatch ANPR



### Key Features

- 2MP resolution
- 5.2 ~ 62.4mm (Optical 12X) motorized varifocal
- IR viewable length: 70m (229.66ft)
- Colour: 0.03Lux(F1.6, 1/30sec), BW: 0Lux(IR LED On)
- Day & Night (ICR), extremeWDR (150 dB)
- DIS with built-in Gyro sensor
- Certification: IP66, IP67, NEMA4X, IK10
- RoadWatch Application (Pre-installed and licensed)
  - Edge based ANPR
  - List Management, Smart Search, Statistics, Barrier Trigger
  - ANPR Setup Wizard
  - Integration with WAVE VMS, JSON & UTMC protocols

### Compatible Accessories (Optional)



SBP-302PM

# XNO-6120R/RW

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## Specifications

Video	
Imaging Device	1/2.8" 2MP CMOS
Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 60fps/50fps(60Hz/50Hz) / MJPEG: Max. 30fps/25fps(60Hz/50Hz)
Min. Illumination	Colour: 0.03Lux(F1.6, 1/30sec) / BW: 0Lux(IR LED On)
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)	5.2 ~ 62.4mm (Optical 12X) motorized varifocal
Max. Aperture Ratio	F1.6(Wide)~F3.0(Tele)
Angular Field of View	H: 54.58°(Wide)~5.30°(Tele) / V: 32.19°(Wide)~3.00°(Tele) / D: 61.4(Wide)~6.06(Tele)
Min. Object Distance	1.5m(4.92ft)
Focus Control	OneshotAF
Lens Type	DC auto iris
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSSDR
Wide Dynamic Range	150dB
Digital Noise Reduction	SSNR V
Digital Image Stabilization	Support
Defog	Support
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, polygonal zones - Colour: Grey/Green/Red/Blue/Black/White - Mosaic
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2~1/12,000sec)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)
Alarm I/O	Input 1ea / Output 1ea
Alarm Triggers	Network disconnect, Alarm input
Alarm Events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output
Audio In	Selectable(Mic in/Line in), Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Max. output level: 1Vrms
IR Viewable Length	70m(229.66ft)

Network	
Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG
Audio Compression	G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC: 48Kbps at 16KHz
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)
Application Programming Interface	ONVIF Profile S/G/T (Excludes RoadWatch ANPR application), SUNAPI(HTTP API), Wisenet open platform

General	
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)
Edge Storage	Pre-installed SD Card (Data storage for RoadWatch application)
Memory	1024MB RAM, 256MB Flash

Environmental & Electrical	
Operating Temperature / Humidity	-40°C~+55°C(-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -35°C
Storage Temperature / Humidity	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH
Certification	IP66/IP67, IK10, NEMA 4X
Input Voltage	PoE(IEEE802.3af, Class3), 12VDC, 24VAC
Power Consumption	PoE : Max 12.95W, 12VDC : Max. 12.5W, 24VAC : Max. 14.5W

Mechanical	
Colour / Material	Dark grey / Aluminum
Product Dimensions / Weight	Ø147.5x368.6mm(5.81"x14.51"), 2175g(4.80 lb)

RoadWatch ANPR	
ANPR Usage conditions	Urban traffic
Speed Description	Regular speed
Lane coverage	1 lane (3,6m/12ft wide)
Speed Limit	up to 90km/h (55mph)
Min/Max Forward Distance	17m (55ft) / 32m (105ft)
Max Horizontal / Vertical Angle	30°
Horizontal Offset / Camera Height	up to 9.8m (32ft)
Available Countries	Albania, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Cyprus, Czechia, Denmark, Estonia, Finland, France, Greece, Georgia, Germany, Hungary, Ireland, Iceland, Italy, Lithuania, Luxembourg, Latvia, Montenegro, North Macedonia, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Australia, New Zealand, South Africa, Azerbaijan, Uzbekistan, Kyrgyzstan, Kazakhstan, Tajikistan, Turkmenistan

## Installation Requirements

ANPR (Automatic Number Plate Recognition) Technology running on the camera will provide you with the best results when following the recommended installation requirements below.

### Vertical Angle:

30 degrees Maximum Vertical Angle

Note: Minimum and Maximum Forward Distance depend on lens zoom. Refer to each camera model specifications and manual.

Fig. 1  
Camera shown from side

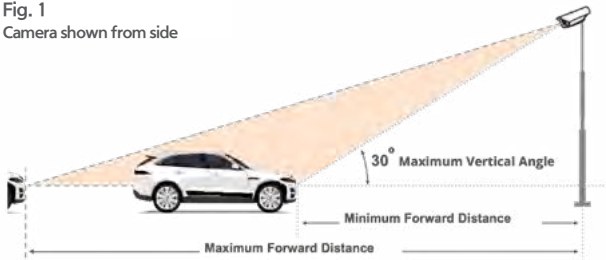
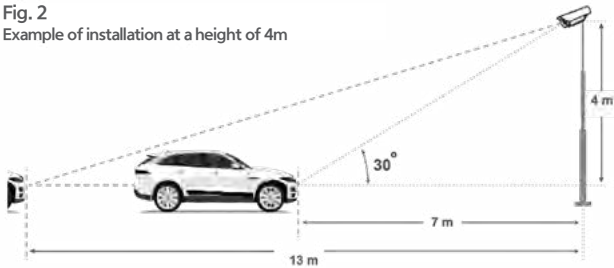


Fig. 2  
Example of installation at a height of 4m



### Horizontal Angle:

30 degrees Maximum Horizontal Angle

Note: Minimum and Maximum Forward Distance depend on lens zoom. Refer to each camera model specifications and manual.

Fig. 3  
Camera shown from top

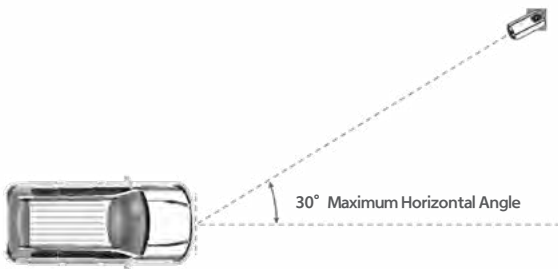
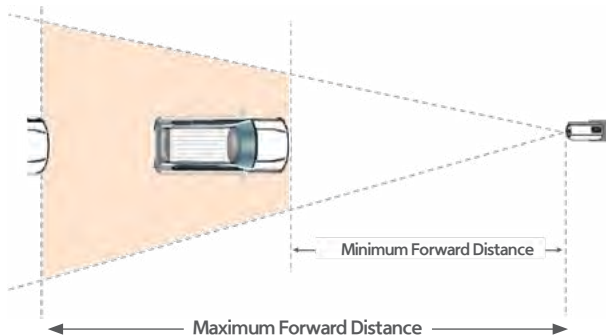
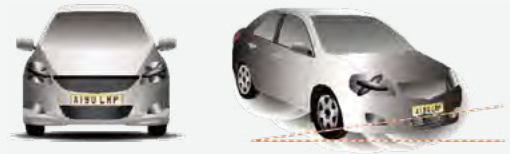


Fig. 4



### Angle:

For the best results, check the angle of your plate compared to the horizontal alignment and rotate the camera to achieve less than 5° as shown.



### Zone:

Setting recognition zone (see orange frame below) in lower half of camera view is recommended for best recognition.



### Plate Size:

All the license plates that meet the on-frame size criteria below will be recognized in the selected area. 130-300 pixels for regular EU plates.