AIoT 12X Pro Bullet Plus Network Camera

Milesight

IP67

AF Lens

DATASHEET

AIoT | AI | H.265⁺/HEVC | Starlight | Super WDR

IR | Privacy Masking | SDXC | GQST Onvif | Weather-proof

KEY FEATURES

▶ Smart IR II (Combining the High Beam and Low Beam to adjust IR intensity to fit different lighting conditions.)
▶ HLC (High Light Compensation. Improving image visibility under strong light sources.)
▶ Defog (Defog technology. Restoring clear images in hazy and foggy weather.)
▶ Integrated Cable Management (Combining the power interface, PoE port, and other interfaces in the base neatly.)
▶ Smart Stream (Bandwidth, storage and bit rate are saved with Smart Stream On, eg, H.265⁺ saves 70%~80% bandwidth that of H.264.)

Embedded IoT Technology

The embedded LPWAN technology, one of the fastest-growing IoT communication strategies, empowers wireless and relatively long-distance connection with lower power consumption. And now, the industry-leading IoT technology via LoRaWAN® is applied in Milesight 5G AIoT Camera.


Wide Area Coverage
Low Power Consumption
Wireless Transmission
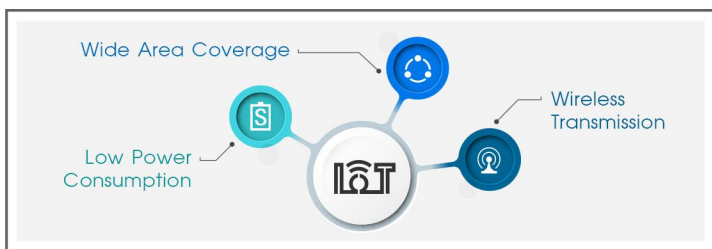
AI Video Analytics

• 8 intelligent VCA modes powered by AI engine, which can intelligently filter objects to focus on human and vehicle detection.
• People Counting technology provides high accuracy and real-time data based on AI algorithm with statistic reports.
• Face Detection function detects human faces in the monitoring scene and captures the snapshots, which greatly enhances the monitoring efficiency.

Region Entrance | Region Exiting | Human/Vehicle Detection | Advanced Motion Detection | Tamper Detection | People Counting
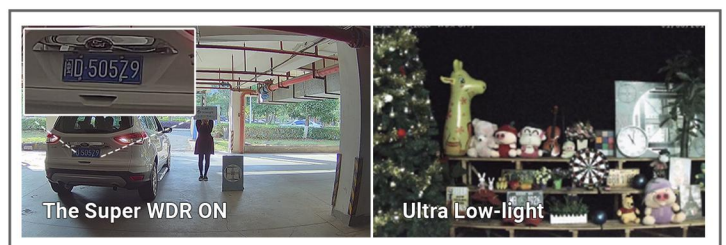Line Crossing | Loitering | Object Left | Object Removed | Face Detection

100fps

With the industry leading frame rate reaching 100fps, the cameras can easily catch images with no latency despite of the high-speed movement, which is the best choice for the demanding requirements especially for intelligent cameras.

30fps@1080P → 100fps@1080P
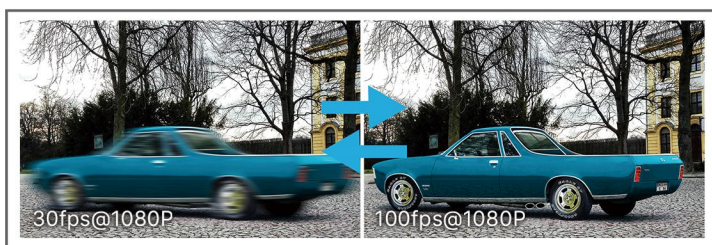
3 in 1 Super WDR Pro & 0.002Lux Ultra Low-light

140dB Super WDR Pro combines 3 frames with multiple exposures to get the optimal images especially moving subjects in high contrast lighting situations. Meanwhile, cameras can capture full-color images in extremely low-light conditions reaching 0.002Lux without extra light supplement.

The Super WDR ON | Ultra Low-light

	Model	MS-C2966-X12R(T)OPC (2MP)
Camera	Image Sensor	1/2.8" Progressive Scan CMOS
	Min. Illumination	Color: 0.002Lux@F1.2 Color: 0.005Lux@F1.6 B/W: 0Lux with IR on
	WDR	140dB Super WDR **(Super WDR Pro is optional for T Series)**
	Shutter Time	1/100000s~1s
	IR Distance	Up to 180m
	Day/Night Mode	Day/Night/Auto/Customize/Schedule
	S/N	>55dB
	Lens	5.3~64mm, 12X Optical Zoom
	Field of View	H61°~H5°/D69°~D5°/V36°~V2°
	Mount	Φ14
	Focus Control	Auto/Manual
	Aperture	F1.6~F2.8
	Iris Control	Auto
Video	Max.Image Resolution	1920x1080
	Primary Stream	60Hz: **100fps@(1920x1080)(Optional for T Series),** 60fps@(1920x1080, 1280x960, 1280x720, 704x576) 50Hz: **100fps@(1920x1080)(Optional for T Series),** 50fps@(1920x1080, 1280x960, 1280x720, 704x576)
	Secondary Stream	60Hz: 60fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x192, 320x180) 50Hz: 50fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x192, 320x180)
	Tertiary Stream	60Hz: 30fps@(1920x1080, 1280x720, 704x576, 640x480, 640x360, 320x240, 320x192, 320x180) 50Hz: 25fps@(1920x1080, 1280x720, 704x576, 640x480, 640x360, 320x240, 320x192, 320x180)
	Video Compression	H.265+/H.265(HEVC)/H.264+/H.264/MJPEG
	Video Bit Rate	16Kbps~16Mbps(CBR/VBR Adjustable)
	Privacy Masking	Up to 28 areas(24 mask areas and 4 mosaic areas)
	ROI	Up to 8 areas
	Image Setting	Brightness/Contrast/Saturation/Sharpness
Interface	Ethernet	1*RJ45 10M/100M Ethernet Port
	Audio I/O	1/1
	Alarm I/O	1/1

LoRaWAN®	Antenna	1*50 Ω SMA-Female External Antenna Connector
	Channel	8 channels simultaneously
	Demodulation	1Mhz
	Frequency Band	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923/AS923-2
	Sensitivity	-140dBm Sensitivity @292bps
	Output Power	27dBm Max
	Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
	Communication Range	Up to 15km
Network	Network Storage	NAS(Support NFS, SMB/CIFS), ANR
	Protocol	IPv4/IPv6, ARP, TCP, UDP, RTCP, RTP, RTSP, RTMP, HTTP, HTTPS, DNS, DDNS, DHCP, FTP, NTP, SMTP, SNMP, UPnP, Bonjour, SIP, PPPoE, VLAN, 802.1x, QoS, IGMP, ICMP, SSL
Audio	Audio Compression	G.711/AAC/G.722/G.726
	Audio Sampling Rate	8/16/32/44.1/48KHz
	Audio Bit Rate	16~256kbps
	Two-way Audio	Support
Intelligent Analytics	Video Analysis	Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering, Object Left, Object Removed
	Face Detection	Detect and capture faces, get real-time snapshots
	People Counting& Report	Count the number of people entering or exiting, up to 4 detection areas for regional people counting
System	Storage	Support microSD/SDHC/SDXC Card Local Storage, up to 256G
	Advanced Function	Heat Map, BLC, HLC, 2D DNR, 3D DNR, Defog, AWB, EIS, IP Address Filtering, AGC, Anti-flicker, Corridor Mode, Deblur, Watermark
	SIP/VoIP Support	Yes, Voice & Video-over-IP
	Event Trigger	IoT Sensor Alarm, Motion Detection, Network Disconnection, External Input, Audio Alarm, etc.
	Event Action	FTP Upload, SMTP Upload, SD Card Record, External Output, SIP Phone, HTTP Notification, etc.
	System Compatibility	ONVIF Profile G & Q & S & T, API
General	Working Temperature	-40℃~60℃
	Working Humidity	0~90%(Non-condensing)
	Power Supply	PoE (802.3at) / DC 12V±10%
	Power Consumption	9W MAX 15W MAX (With IR on)
	Surge Protection	4KV
	Weather Proof	Up to IP67-rated for Weather-resistant Performance (Only for camera body)
	Weight	1521g
	Dimensions	320mmX134mmX126mm 320mmX134mmX208mm (With Antennas)
	Warranty	3/5 Years

V8.01

Structure Diagrams

LoRa Antenna

IR LEDs
Lens
Light Sensor

Reset

microSD/SDHC/SDXC
Card Slot

Ethernet Port (PoE)

Alarm/Audio

DC 12V

320

98

208

134

96

ø4.5
ø4.5
96
ø4.5
ø4.5
126
134

40

40

126
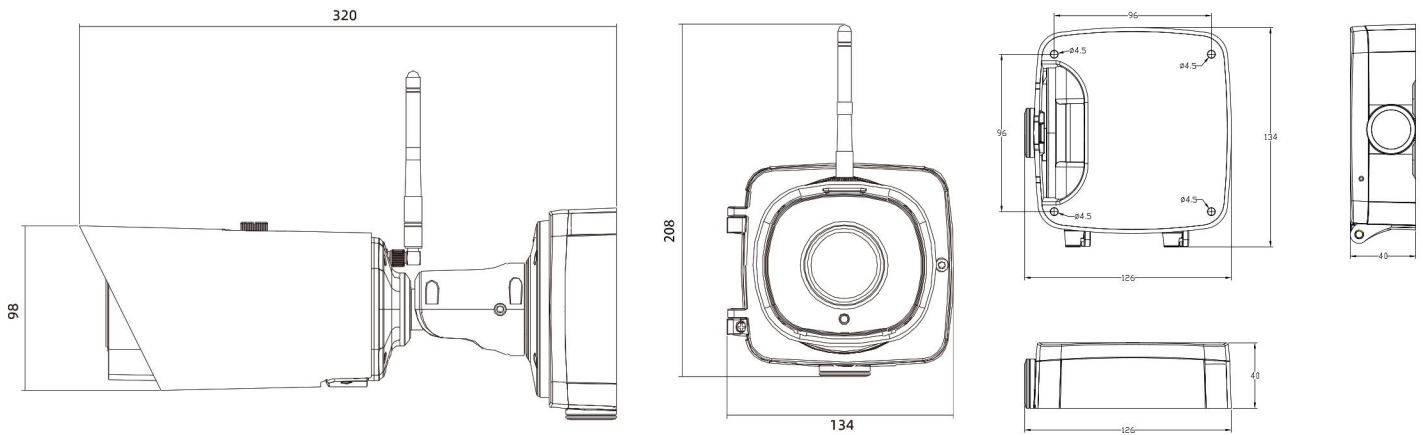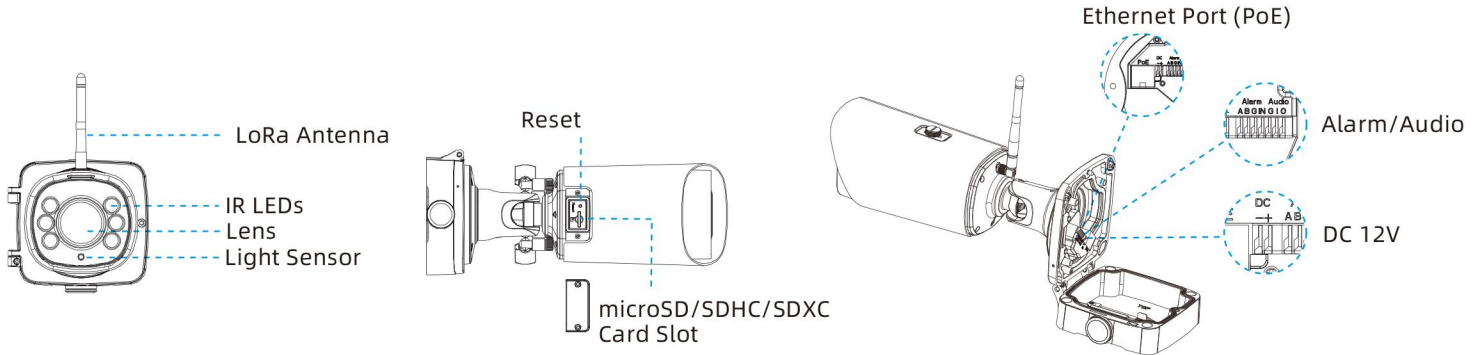
Units: mm

Accessories Support

A01 Pole Mount

Weight: 720g
Dimensions: 170*51.5*152.6mm

A03 External Corner Bracket

Weight: 900g
Dimensions: 170*152.5*76.3mm

A62 Junction Box

Weight: 510g
Dimensions: 134*126*40mm