

# AI Road Traffic PTZ Bullet Plus Camera



IP66

AF Lens

DATASHEET

NDAA

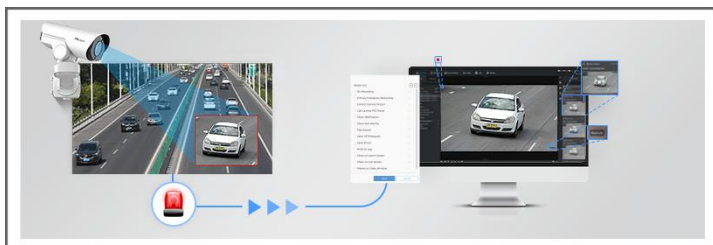


## KEY FEATURES

- ▶ Superior Image Quality (Starlight Sensor, Smart IR II Technology, 4K Video Viewing Experience and high frame rate are supported for an excellent image quality.)
- ▶ PTZ Auto Tracking (Perform Pan/Tilt/Zoom to track the moving objects in a proper size automatically.)
- ▶ Evidence Camera Linkage (Link with any regular cameras to capture the overview snapshots as evidence.)
- ▶ LPR Smart Search (Relevant videos can be found quickly by searching for only a portion of the target suspect vehicle's features, such as vehicle type & color, plate color, plate number, direction and etc.)
- ▶ 60fps/90fps High Frame Rate (Camera can easily catch images with no latency despite of the high-speed movement.)

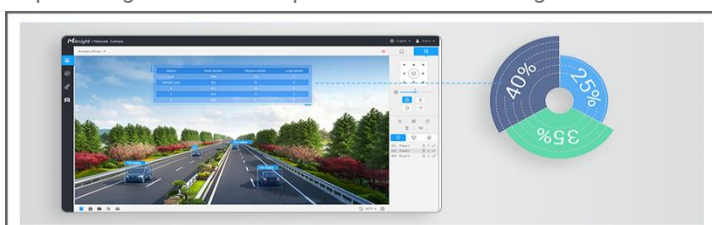
## Traffic Violation Detection

AI-based road traffic cameras accurately detect and alert violation events such as No-plate Vehicle Detection, Specific Lane Detection, Reverse Driving Detection, Black/White List Detection and Vehicle Event Detection based on recognized vehicle features.



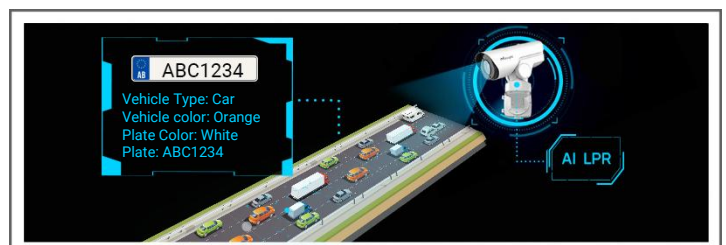
## Traffic Flow Statistics

Traffic flow statistics greatly enhance traffic management capabilities. The vehicle counting result based on vehicle type, vehicle make and various vehicle features can be shown intuitively in camera's live view and the camera can also generate useful report insights to aid in improved decision-making.



## Intelligent AI-powered LPR Algorithm

The AI Road Traffic PTZ Bullet Plus Camera can not only recognize vehicle plates in real time, but also identify more vehicle features, like vehicle type, color, etc., generating reliable traffic insights to improve safety and mobility.



## 30fps@4K

Providing 4K HD resolution with frame rate of 30fps, the camera performs well in catching detailed image regardless of the moving speed.



# AI Road Traffic PTZ Bullet Plus Camera



Camera	Model	TS2967-X12TPE (2MP)	TS2967-X23TPE (2MP)
	Image Sensor	1/2.8" Progressive Scan CMOS	
	Min. Illumination	Color: 0.005Lux@F1.6 B/W: 0Lux with IR on	Color: 0.005Lux@F1.5 B/W: 0Lux with IR on
	Shutter Time	1/100000s~1s	
	Digital Zoom	16X	
	Day/Night Mode	Day/Night/Auto/Customize/Schedule	
	Illumination Distance	Up to 50m	Up to 90m
	S/N	>55dB	
Lens	Lens	5.3~64mm, <b>12X</b> Optical Zoom	5~117mm, <b>23X</b> Optical Zoom
	Field of View	H61°~H5°/D69°~D5°/V36°~V2°	H60°~H3°/D69°~D4°/V35°~V2°
	Zoom Speed	Approx 4s (Wide-Tele)	Approx 6s (Wide-Tele)
	Focus Control	Auto/Semi-Auto/Manual	
	Minimum Working Distance	1000/1500mm (Wide/Tele)	
	Aperture	F1.6~F2.8	F1.5~F3.5
	Iris Control	Auto	
Road Traffic Management	Max. Vehicle Speed	120km/h	
	Recognition Accuracy	>95%	
	Coverage	2 lanes	
	Country Region Supported	More than 80 countries and regions	
	ANPR Distance	Up to 40m	Up to 70m
	Attributes Identification	Plate Color, Vehicle Type, Vehicle Color, Vehicle Brand, No-plate Vehicle Capture, Vehicle Direction	
	Smart Traffic Function	Evidence Camera Linkage, Vehicle Counting Based on Vehicle Type, Specific Lane Management	
	White/Black List	Up to 20,000 records inside the camera	
	LPR Smart Search	Support	
PTZ	Pan Range/Pan Speed	360°endless / Pan Manual Speed: 0.1°~50°/s, Pan Preset Speed: 50°/s	
	Tilt Range/Tilt Speed	-45°~30° / Tilt Manual Speed: 0.1°~30°/s, Tilt Preset Speed: 30°/s	
	Proportional Zoom	Support	
	Preset Quantity	300	
	Patrol	8 Patrols, up to 48 presets each patrol	
	Pattern	4 Patterns	
	Power Off Memory	Support	
	Other Function	Auto Scan, Auto Home, Preset Freezing, 3D Positioning, PTZ Limits, Initial Position	

# AI Road Traffic PTZ Bullet Plus Camera



Video	Max.Image Resolution	1920x1080
	Primary Stream	60Hz: <b>90fps@(1920x1080)</b> , 60fps@(1920x1080, 1280x960, 1280x720, 704x576) 50Hz: <b>90fps@(1920x1080)</b> , 50fps@(1920x1080, 1280x960, 1280x720, 704x576)
	Secondary Stream	60Hz: 60fps@(704x576, 640x480, 640x360, 352x288, 320x240) 50Hz: 50fps@(704x576, 640x480, 640x360, 352x288, 320x240)
	Tertiary Stream	60Hz: 30fps@(1920x1080, 1280x720, 704x576, 640x480, 640x360, 320x240) 50Hz: 25fps@(1920x1080, 1280x720, 704x576, 640x480, 640x360, 320x240)
	Video Compression	H.265+/H.265(HEVC)/H.264+/H.264/MJPEG
	Video Bit Rate	16Kbps~16Mbps(CBR/VBR Adjustable)
	Privacy Masking	Up to 8 Areas (Mask Area and Mosaic Area are optional)
	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	2/2
	RS485	Support
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
System	Storage	Support microSD/SDHC/SDXC Card Local Storage, up to 1TB
	Advanced Function	BLC, HLC, 2D DNR, 3D DNR, Defog, AWB, IP Address Filtering, AGC, Anti-flicker, Corridor Mode, Deblur, Watermark
	SIP/VoIP Support	Yes, Voice & Video-over-IP
	Event Trigger	Black/White List, Attributes Event, Motion Detection, Network Disconnection, External Input, Audio Alarm, etc.
	Event Action	FTP Upload, SMTP Upload, SD Card Record, External Output, SIP Phone, White LED, PTZ Motion, HTTP Notification, etc.
	System Compatibility	API, MQTT, HTTP, TCP, ONVIF Profile G & M & S & T
General	Working Temperature	-40℃~60℃
	Working Humidity	0~95%(Non-condensing)
	Power Supply	PoE (802.3at) / DC 12V/3A±10%
	Power Consumption	Min.: 10.87W (DC 12V), 13.4W(PoE) Max.: 21.38W (DC 12V), 25.3W(PoE)
	Weather Proof	Up to IP66-rated for Weather-resistant Performance
	Weight	2.9Kg
	Dimensions	110mmX337mmX220mm

# AI Road Traffic PTZ Bullet Plus Camera



	Warranty	2 Years / 3 Years (Optional)
Certifications	EMC	CE-EMC (EN 55032, EN 55035), FCC (PART 15B)
	Safety	CE-LVD (EN IEC 62368-1)
	Environment	CE-ROHS (Directive (EU) 2015/863 amending 2011/65/EU)

# AI Road Traffic PTZ Bullet Plus Camera



	Model	TS4467-X20RPE (4MP)	TS5367-X12PE (5MP)
Camera	Image Sensor	1/1.8" Progressive Scan CMOS	1/2.8" Progressive Scan CMOS
	Min. Illumination	Color: 0.002Lux@F1.6 B/W: 0Lux with IR on	Color: 0.008Lux@F1.6 B/W: 0Lux with IR on
	Shutter Time	1/100000s~1s	
	Digital Zoom	16X	
	Day/Night Mode	Day/Night/Auto/Customize/Schedule	
	Illumination Distance	Up to 100m	Up to 50m
	S/N	>55dB	
Lens	Focal Length	6.4~128mm, <b>20X</b> Optical Zoom	5.3~64mm, <b>12X</b> Optical Zoom
	Zoom Speed	Approx 5s (Wide-Tele)	Approx 4s (Wide-Tele)
	Field of View	H60°~H3°/D67°~D4°/V37°~V1°	H57°~H4°/D69°~D5°/V44°~V1°
	Focus Control	Auto/Semi-Auto/Manual	
	Minimum Working Distance	1000/1500mm (Wide/Tele)	
	Aperture	F1.6~F4.0	F1.6~F2.8
	Iris Control	Auto	
Road Traffic Management	Max. Vehicle Speed	120km/h	
	Recognition Accuracy	>95%	
	Coverage	2 lanes	
	Country Region Supported	More than 80 countries and regions	
	ANPR Distance	Up to 80m	Up to 40m
	Attributes Identification	Plate Color, Vehicle Type, Vehicle Color, Vehicle Brand, No-plate Vehicle Capture, Vehicle Direction Detection	
	Smart Traffic Function	Evidence Camera Linkage, Vehicle Counting Based on Vehicle Type, Specific Lane Management	
	White/Black List	Up to 20,000 records inside the camera	
	LPR Smart Search	Support	
PTZ	Pan Range/Pan Speed	360°endless / Pan Manual Speed: 0.1°~50°/s, Pan Preset Speed: 50°/s	
	Tilt Range/Tilt Speed	-45°~30° / Tilt Manual Speed: 0.1°~30°/s, Tilt Preset Speed: 30°/s	
	Proportional Zoom	Support	
	Preset Quantity	300	
	Patrol	8 Patrols, up to 48 presets each patrol	
	Pattern	4 Patterns	
	Power Off Memory	Support	
	Other Function	Auto Scan, Auto Home, Preset Freezing, 3D Positioning, PTZ Limits, Initial Position	

# AI Road Traffic PTZ Bullet Plus Camera



Video	Max. Image Resolution	2688x1520	2592x1944
	Primary Stream	60Hz: 60fps@(2688x1520, 2304x1296, 1920x1080, 1280x720) 50Hz: 50fps@(2688x1520, 2304x1296, 1920x1080, 1280x720)	60Hz: 30fps@(2592x1944), 30fps@(2048x1536), 30fps@(1920x1080, 1280x960, 1280x720, 704x576) 50Hz: 25fps@(2592x1944), 25fps@(2048x1536), 25fps@(1920x1080, 1280x960, 1280x720, 704x576)
	Secondary Stream	60Hz: 30fps@(704x576, 640x480, 640x360, 352x288, 320x240) 50Hz: 25fps@(704x576, 640x480, 640x360, 352x288, 320x240)	60Hz: 30fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x192, 320x180) 50Hz: 25fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x192, 320x180)
	Tertiary Stream	60Hz: 30fps@(1920x1080, 1280x720, 704x576, 640x480, 640x360, 320x240) 50Hz: 25fps@(1920x1080, 1280x720, 704x576, 640x480, 640x360, 320x240)	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 8 Areas (Mask Area and Mosaic Area are optional)	
	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	2/2	
	RS485	Support	
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	
System	Storage	Support microSD/SDHC/SDXC Card Local Storage, up to 1TB	
	Advanced Function	BLC, HLC, 2D DNR, 3D DNR, Defog, AWB, IP Address Filtering, AGC, Anti-flicker, Corridor Mode, Deblur, Watermark	
	SIP/VoIP Support	Yes, Voice & Video-over-IP	
	Event Trigger	Black/White List, Attributes Event, Motion Detection, Network Disconnection, External Input, Audio Alarm, etc.	
	Event Action	FTP Upload, SMTP Upload, SD Card Record, External Output, SIP Phone, White LED, PTZ Motion, HTTP Notification, etc.	
	System Compatibility	API, MQTT, HTTP, TCP, ONVIF Profile G & M & S & T	



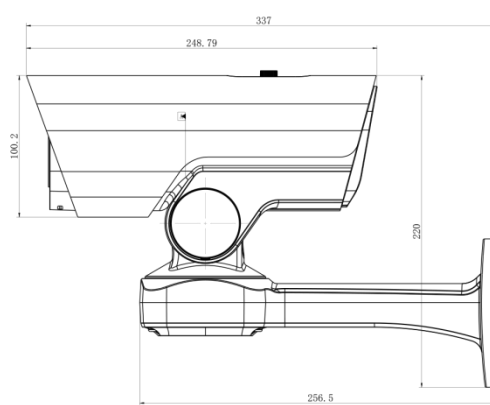
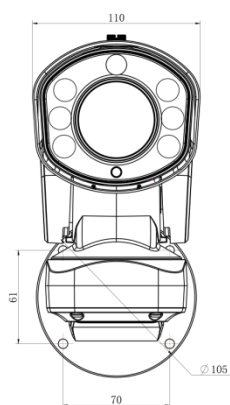
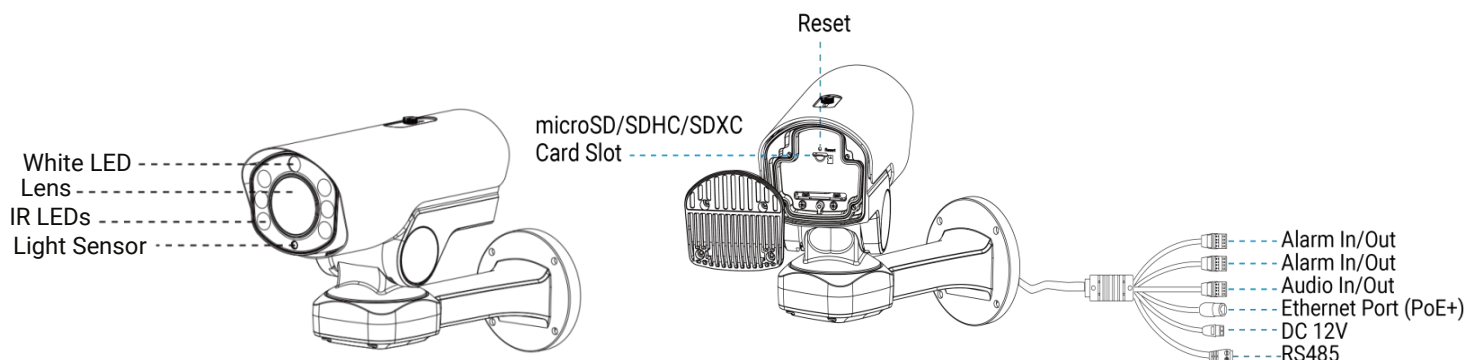
# AI Road Traffic PTZ Bullet Plus Camera



General	Working Temperature	-40℃~60℃	
	Working Humidity	0~95%(Non-condensing)	
	Power Supply	PoE (802.3at) / DC 12V/3A±10%	
	Power Consumption	Min.: 11.53W (DC 12V), 13.82W(PoE) Max.: 21.96W (DC 12V), 25.9W(PoE)	Min.: 10.78W (DC 12V), 14W(PoE) Max.: 19.92W (DC 12V), 21.7W(PoE)
	Weather Proof	Up to IP66-rated for Weather-resistant Performance	
	Weight	2.9Kg	
	Dimensions	110mmX337mmX220mm	
	Warranty	2 Years / 3 Years (Optional)	
Certifications	EMC	CE-EMC (EN 55032, EN 55035), FCC (PART 15B)	
	Safety	CE-LVD (EN IEC 62368-1)	
	Environment	CE-ROHS (Directive (EU) 2015/863 amending 2011/65/EU)	



## Structure Diagrams



Units: mm

## Accessories Support

### A02 V2 Pole Mount

Weight: 1kg

Dimensions: 180\*136\*46mm



### A03 External Corner Bracket

Weight: 900g

Dimensions: 170\*152.5\*76.3mm



### A62 Junction Box

Weight: 510g

Dimensions: 134\*126\*40mm

