



4G Solar-powered ANPR Road Traffic Camera

Applicable Solution:
S100B96 (or S100B55)
+ SP112 Camera+ SA02+ A02



AI



4G



Solar-Powered



1TB Storage



Battery pack is available in
S100B96(S100B55)

KEY FEATURES

Nano SIM + eSIM + Solar-powered Flexible Deployment

Deploy anywhere without power lines, fixed networks, or complex cabling. Featuring global 4G LTE connectivity, support for Nano SIM and embedded eSIM, and flexible solar kits, camera enables rapid deployment in remote, temporary, and infrastructure-critical locations.

11 Days Battery Life Guaranteed

Even on rainy days, it enables up to 11 days of license plate recognition. In standby mode with only timing snapshots, the camera can work for 342 days, offering long-term uninterrupted reliability to capture every vital moment.

Intelligent AI-powered LPR Algorithm

The 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.

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 can be shown intuitively in camera's live view and push data to back-end platform.

4G Solar-powered ANPR Road Traffic Camera



Name		4G Solar-powered ANPR Road Traffic Camera (4MP)
Model		SP112 /42L
Camera	Image Sensor	1/1.8" Progressive Scan CMOS
	Min. Illumination	Color: 0.001Lux@F1.6 B/W: 0Lux with IR on
	WDR	120dB Super WDR
	Shutter Time	1/100000s~1s
	Day/Night Mode	Day/Night/Auto/Customize/Schedule
	IR Wave Length	850nm/ 740nm
	IR Distance	Up to 50 m
	S/N	>55dB
Lens	Lens	8~32mm, 4X Optical Zoom
	Field of View	H:45.1°~14.7°; V:24.6°~8.4°; D:52.8°~16.8°
	Focus Control	Auto / Manual
	Aperture	F1.6~F1.7
	Iris Type	P-Iris
Video	Max. Image Resolution	4MP (2688*1520)
	Primary Stream	Performance Mode: 60Hz: max 30fps@(2688*1520, 2304*1296, 1920*1080, 1280*720) 50Hz: max 25fps@(2688*1520, 2304*1296, 1920*1080, 1280*720) Power Saving Mode/Standby Mode: 60Hz: max 15fps@(2688*1520, 2304*1296, 1920*1080, 1280*720) 50Hz: max 12fps@(2688*1520, 2304*1296, 1920*1080, 1280*720)
	Secondary Stream	Performance Mode: 60Hz: max 30fps@(1280*720, 704*576, 640*480) 50Hz: max 25fps@(1280*720, 704*576, 640*480) Power Saving Mode/Standby Mode: 60Hz: max 15fps@(1280*720, 704*576, 640*480) 50Hz: max 12fps@(1280*720, 704*576, 640*480)
Video	Video Compression	H.265+/H.265(HEVC)/H.264+/H.264
	Video Bit Rate	16Kbps~8Mbps(CBR/VBR Adjustable)
	Privacy Masking	Up to 8 Areas (Mask Area and Mosaic Area are optional)

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	ROI	Up to 8 areas
	Image Setting	Brightness/Contrast/Saturation/Sharpness
	Web Access	WiFi/VPN/Milesight P2P Tunnel
Audio	Audio Compression	G.711/AAC/G.722/G.726
	Audio Sampling Rate	8/16/32/44.1/48KHz
	Audio Bit Rate	16~256kbps
Interface	Alarm I/O	Input *1, Output *1
	Audio I/O	Input *1, Output *1
	Ethernet	1*RJ45 10M/100M Ethernet Port
	RS485	1
	Wiegand	1
Network	WLAN	802.11n/802.11g Note: Up to 80 m in Wi-Fi STA mode and up to 30 m in Wi-Fi AP mode
	Cellular	LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66 LTE-TDD: B38/B39/B40/B41 UMTS: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8
	SIM Card	Nano SIM
	eSIM	Support Note: Cannot be used simultaneously with physical SIM.
	Protocol	VPN(General VPN/Milesight VPN/Wireguard VPN/IPSec VPN/Tailscale VPN), Milesight P2P Tunnel, IPv4/IPv6, ARP, TCP, UDP, RTCP, RTP, RTSP, RTMP, HTTP, HTTPS, DHCP, FTP, NTP, SMTP, SNMP, SIP, QoS, IGMP, ICMP, TLS 1.2, TLS 1.3
Road Traffic Management	Max. Vehicle Speed	120km/h
	Capture Rate	99%
	Recognition Accuracy	98%
	Coverage	2 lanes
	Country/Region Supported	More than 80 countries and regions
	ANPR Distance	Up to 50m
	Attributes Identification	Plate Color, Vehicle Type, Vehicle Color, Vehicle Brand, No-plate Vehicle Capture, Vehicle Direction Detection * Vehicle Color and Plate Color identification are not supported in low-light or night conditions.
	Smart Traffic Function	Specific Lane Management, Vehicle Classification & Counting
	White/Black List	Up to 20,000 records inside the camera

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System	Work Mode	Performance Mode: Ensures optimal video image quality and AI algorithm effectiveness. Power Saving Mode: Adjusts video image quality, frame rate, bitrate, and other parameters to save power. Standby Mode: Support remote wake-up and timing snapshot tasks only.
	Wake Up Method	Call, MQTT or TCP
	GPS	Built-in High-accuracy GPS Module
	Storage	Support microSD/SDHC/SDXC card local storage (up to 1TB) with secure encryption support.
	Event Trigger	Intelligent Analytics, External Input, etc.
	Event Action	HTTP Post, FTP Upload, SMTP Upload, SD Card Record, External Output, Snapshot, Play Audio, Alarm to SIP Phone, etc.
	System Compatibility	ONVIF Profile G & M & S & T, API
General	Camera Mounting-adjustment Angle	Pan: 0°~ 360°; Tilt: -35°~ 70°
	Working Temperature	-40 °C to 60 °C (-40° F to 140° F)
	Working Humidity	0~95% (Non-condensing)
	Power Supply	DC 12V±10%
	Power Consumption	Performance Mode: Min. 2.43W, Max. 5.61W Power Saving Mode: Min. 1.93W, Max. 5.45W Standby Mode: 0.03W
	Power Manager	Supports power consumption reporting and data export.
	Surge Protection	4KV
	Weather Proof	Up to IP67-rated for Weather-resistant Performance
	Camera Dimensions	120*120*260 mm
	Weight	2.31kg
Certifications	EMC	CE-EMC (EN 55032, EN 55035), FCC (PART 15B), RCM (AS/NZS CISPR 32:2015+A1(2020))
	RF	CE-RED (EN 301 489-1, EN301 489-17, EN301 489-19, EN301 489-52, EN 301 908-1, EN 301 908-3, EN 301 908-13, EN 301511, EN 303413, EN 300328, EN50663, EN62479), FCC(PART 15.247), RCM(AS/CA S042.1, AS/CA S042.4, AS/NZS 2772.2)
	Safety	CE-LVD (EN IEC 62368-1), RCM(ASNZS 62368)
	Environment	CE-ROHS (Directive (EU) 2015/863 amending 2011/65/EU), IP67(IEC 60529), IK10(IEC 62262)



4G Solar-powered ANPR Road Traffic Camera



Name		S100 Solar Power System	
Model		S100B55	S100B96
Appearance			
Solar Panel Modules in Kit		Default: 1 units; Optional: 2 units	
Charge	PV Power	100W	
	PV Input Voltage	18V	
	Material	Monocrystalline silicon	
Energy Storage	Battery Type	NMC	
	Battery Capacity	50AH	90AH
	Total Energy	555Wh	962Wh
	Battery Life	Performance Mode: 5 days Power Saving Mode: 6.5 days Standby Mode: 197 days (*Without video transmission)	Performance Mode: 9 days Power Saving Mode: 11 days Standby Mode: 342 days (*Without video transmission)
	Deep Cycles	> 1000	
	Nominal Voltage	11.1V	
Discharge	Output Voltage	9~12.6V DC	
	Maximum Output Current	10A	
	Discharge Depth	95%DOD	
Function	Battery Heating	Charging current > 2A and lower than -5℃ turns on	
	Protection Type	Overcurrent/ Overvoltage/ Short Circuit/ Undervoltage/ Temperature	
	Charging Temperature Range	0℃~60℃	
	Discharging Temperature Range	-20℃~65℃	
	Status Indicator	LED (charging status, battery status, output status)	
Interface	Communication	RS485	
	Output Method	M14 5-pin Connector	

Milesight

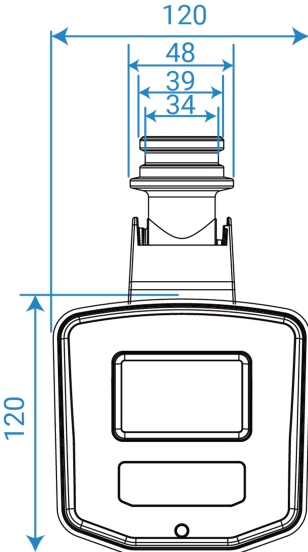
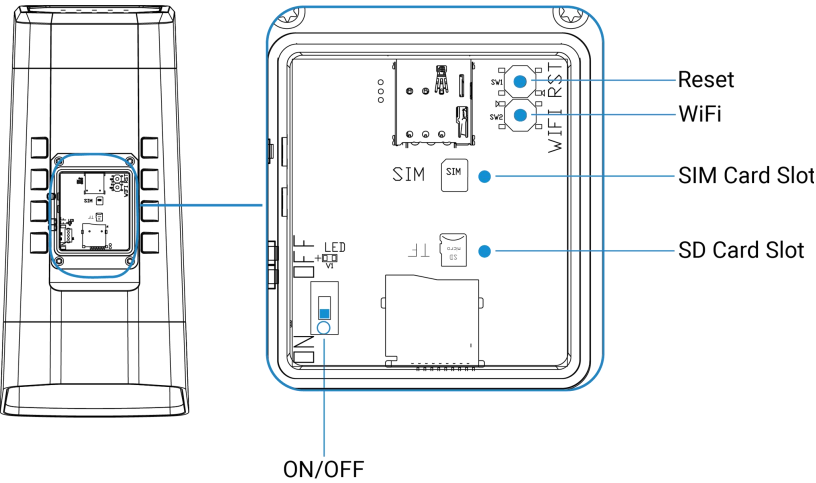
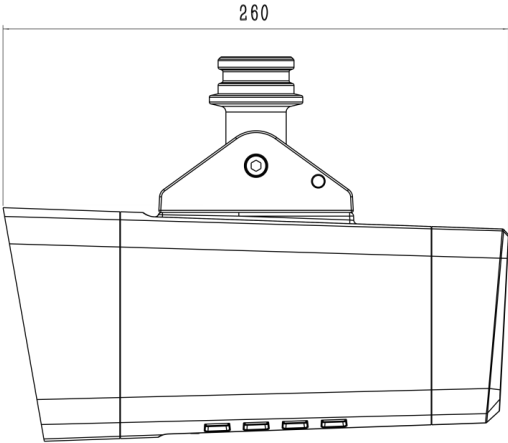
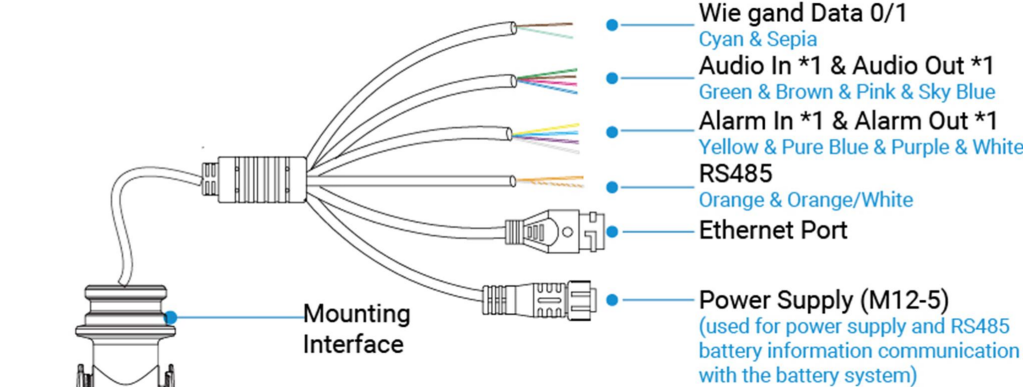
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	Output Line Length	1.5m	
	Supported Cables	Dual Device Power Splitter Cable (M14-> M14*2) Bridge Data & Power Cable (M14-> RS485 & DC Output) Main Power Cable (M14-> M12)	
General Parameters	Waterproof	IP66	
	Humidity Range	4-100% (no condensation)	
	Cooling Method	Natural Heat Dissipation	
	Hazardous Material Classification	9	
	Shell Material	Galvanized Steel + Plastic	
	Fixed Way	Hanging Rod / Wall Mounting	
	Product Dimensions	765*630*69 mm 825*690*105 mm (with Package)	765*630*112.5 mm 825*690*140 mm (with Package)
	Weight	13kg	16kg
	Warranty	2 years	
	Certificate	UN38.3/MSDS/CE/ROHS	



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S100B55

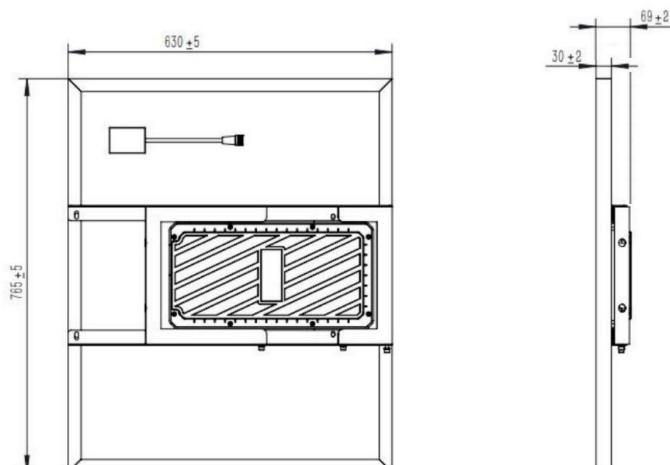
Weight: 13kg

Dimensions:

765*630*69 mm

825*690*105 mm

(with Package)



S100B96

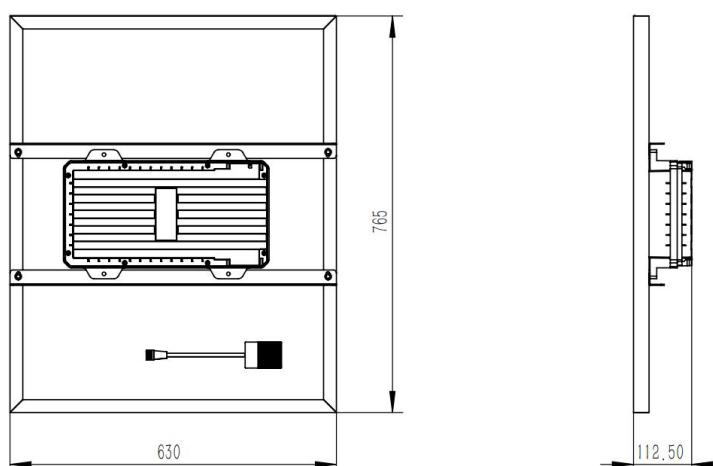
Weight: 16kg

Dimensions:

765*630*112.5 mm

825*690*140 mm

(with Package)



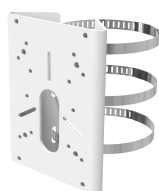
Accessories Support

A02 V2 Pole Mount

Weight: 1kg

Dimensions:

180*136*46 mm



SA02 Wall Mount

Weight: 2.2kg

Dimensions:

150*260*400 mm



S100 Expansion Module

Model: SA100



Solar Power System Bracket

Model: BJ-N

Weight: 3.5kg

Dimensions: 220*217.5*30 mm



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