



4G Solar-powered ANPR Camera Kit

SP111/S90B36/41L



AI



4G



Solar-Powered



1TB Storage



Battery pack is available

KEY FEATURES

All-in-One Wireless Solution

Address off-grid security challenges effortlessly with Milesight's innovative all-in-one kit, using 4G connectivity and solar energy for a fully wireless, cost-effective solution.

9 Days Battery Life Guaranteed

Even on rainy days, it can achieve up to 9 days of extended standby time, providing long-term uninterrupted reliability to safeguard every moment that matters.

Intelligent Energy-saving Operation Mode

Efficient and energy-saving, it focuses on the events you care about most. It also allows for scheduled sleep to conserve energy. Various modes (**Performance Mode / Sleep Mode / Eco Mode**) ensure the stable and secure operation of the Kit system.

Advanced AI algorithms enable precise detection and alerting of abnormal situations.

Various intelligent analyses can be applied to multiple scenarios such as vehicle monitoring, No-plate Vehicle alerts, and White/Black List Management, making the management of remote areas easier.

(ANPR, Vehicle Type, No-plate Vehicle Capture, White/Black List Management)

Rugged and sturdy waterproof design with an **IP67** rating, capable of withstanding up to level **12** winds.

4G Solar-powered ANPR Camera Kit



| Name | | 4G Solar-powered ANPR Camera (4MP) |
|--------------|-----------------------|--|
| Model | | SP111 /41L |
| Image | Image Sensor | 1/2.8" Progressive Scan CMOS |
| | Min. Illumination | Color: 0.005Lux @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 20 m (65.62 ft) |
| | S/N | >55dB |
| Lens | Lens | 6mm/16mm |
| | Mount | M12 |
| | Field of View | 6mm: H52.8°/D60.4°/V29.7° 16mm: H19.4°/D22.2°/V11° |
| Video | Max. Image Resolution | 4MP (2688*1520) |
| | Primary Stream | 60Hz/50Hz: 15fps@(2688*1520, 2304*1296, 1920*1080, 1280*720) |
| | Secondary Stream | 60Hz/50Hz: 15fps@(1280*720, 704*576, 640*480) |
| | Video Compression | H.265+/H.265(HEVC)/H.264+/H.264 |
| | Video Bit Rate | 16Kbps~16Mbps(CBR/VBR Adjustable) |
| | Privacy Masking | Up to 4 areas (Mask) |
| | ROI | Up to 8 areas |
| | Image Setting | Brightness/Contrast/Saturation/Sharpness |
| | Web Access | WIFI/VPN/Milesight VMS |

4G Solar-powered ANPR Camera Kit



| | | |
|------------------------------|---------------------------|--|
| Interface | Alarm I/O | Input *1, Output *1 |
| | Audio I/O | Input *1, Output *1 |
| | Ethernet | 1*RJ45 10M/100M Ethernet Port |
| | RS485 | 1 |
| Wireless Network | WLAN | 802.11n/802.11g |
| | Cellular | 4G LTE NA: LTE-FDD(B2/4/5/12/13/14/66/71) AU: LTE-FDD(B1/2/3/4/5/7/8/28) ; LTE-TDD(B40) JP: LTE-FDD(B1/3/8/18/19/26); LTE-TDD(B41) EU: LTE-FDD(B1/3/7/8/20/28A); LTE-TDD(B38/40/41) |
| | SIM Card | Nano SIM |
| Intelligent Analytics | ANPR Distance | 6mm: Up to 10m 16mm: Up to 20m |
| | Coverage | Up to 2 lanes |
| | Recognition Accuracy | ≥ 95% |
| | Max. Vehicle Speed | Vehicles with a speed of ≤ 70 km/h (43.5 mile/h) |
| | Attributes Identification | Vehicle Type, No-plate Vehicle Capture, White/Black List Management |
| | Country Region Supported | More than 20 countries and regions |
| | White/Black List | Up to 20,000 records inside the camera |
| System | GPS | Built-in High-accuracy GPS Module |
| | 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 |
| | Event Trigger | Intelligent Analytics, External Input, etc. |
| | Event Action | HTTP/MQTT Post, FTP Upload, SMTP Upload, SD Card Record, External Output, etc. |
| | System Compatibility | ONVIF Profile G & M & S & T, API |
| General | Working Temperature | Charging: -20 °C to 45 °C (-4 °F to 113 °F) Discharging: -20 °C to 60 °C (-4 °F to 140 °F) |
| | Working Humidity | 0~95% (Non-condensing) |
| | Power Supply | DC 12V±10% |
| | Power Consumption | Sleep Mode: 0.19 W Basic: 1.72 W (ANPR + 4G Module OFF) Max: 3.51 W (Illuminator + ANPR + 4G streaming ON) Basic: Up to 9 days of battery life in cloudy/rainy conditions (Optional up to 6 batteries. 4 batteries provide 6 days of continuous use, and 6 batteries provide 9 days of continuous use). |

4G Solar-powered ANPR Camera Kit




| | | |
|----------------------|-------------------|---|
| General | Surge Protection | 4KV |
| | Weather Proof | Up to IP67-rated for Weather-resistant Performance |
| | Camera Dimensions | 120*120*260 mm |
| | Camera Weight | 2.2kg |
| | Kit Dimensions | 1048*1150*592 mm |
| | Kit Weight | 30.8kg 34.6kg (With package) |
| Certification | EMC | CE-EMC (EN 55032,EN 55035) FCC (PART 15B) RCM (AS/NZS CISPR 32) |
| | Safety | CE-LVD (EN IEC 62368-1) RCM (AS/NZS 62368.1) |
| | FR | CE-RED (EN 300 328,EN301489-1,EN301489-17,EN 62133) FCC (Part 15.247) RCM (AS/NZS 4268,AS/CA S042.1,AS/CA S042.4,AS/NZS 2772.2) Telec (MIC Item 19 of Article 2 Paragraph 1) |
| | Environment | CE-ROHS (Directive (EU) 2015/863 amending 2011/65/EU) |
| | Protection | IP67 Wind Resistance: Level 12 (Hurricane-force) |
| | | |

| | | |
|-------------------|-----------------|--|
| Controller | Safety Features | Over-temperature, over-discharge, over-voltage and low-temperature protection of battery; overload and short circuit protection of load. |
| | Interface | M12 (8-pin) * 6: Battery Connection M12 (6-pin): Solar Panel Input M12 (4-pin): DC Input |
| | | M12 (5-pin): Output (including RS485) M12 (2-pin): Output |
| | Power Output | 9 to 12.6 VDC, Min. 18 W, Max. 25.2 W |


4G Solar-powered ANPR Camera Kit



| Name | | Modular Battery |
|-------------------|------------------------------------|---|
| Model | | B90 |
| Appearance | |  |
| Battery | Battery Type | Ternary lithium battery |
| | Battery Modules in Kit | Default: 4 units of B90; Optional: 5/6 units of B90 |
| | Battery Capacity (Energy Capacity) | 90 Wh 360 Wh (4 units of B90) |
| | Battery Capacity (Charge Capacity) | 8400mAh 33.6 Ah (4 units of B90) |
| | Rated Voltage | 10.8V |
| | Maximum Charging Voltage | 12.6V |
| | Rated Charging Current | 1680mA |
| | Rated discharge current | 1680mA |
| | Max. Charging Current | 3000mA |
| | Max. Discharge Current | 3000mA |
| | Internal Resistance | <150m Ω |
| | Charging Time | 5H/0.2C |
| | Battery Life | More than 500 cycles |
| | Operating Temperature | Charge: -20~45℃ Discharge: -20~60℃ |
| | Operating Humidity | 30% ~ 90% |
| | Storage Temperature | 0~45℃ |
| | Storage Humidity | 40% ~ 70% |
| | Port Type | M12 8-core waterproof connector |
| | Weight | 640g (Single cell battery) 730g (Single cell battery with packaging) |
| | Dimensions | 125*48*95 mm |

4G Solar-powered ANPR Camera Kit



| Name | | S90 Solar Panel Modules |
|-----------------------------------|----------------------------------|---|
| Model | | ZM90M10-24S1 |
| Appearance | |  |
| Solar Panel Modules in Kit | | Default: 1 units of S90; Optional: 2 units of S90 |
| Electrical Characteristics | Maximum Power- Pmax (W) | 90 |
| | Open Circuit Voltage - Voc (V) | 21.8 |
| | Short- Circuit Current - Isc (A) | 5.03 |
| | Voltage at Pmax -Vmp (V) | 18.79 |
| | Current at Pmax - Imp (A) | 5.03 |
| | Module Efficiency - η m (%) | 18.24 |
| | Power Tolerance (W) | 0, +4.99W |
| | Maximum System Voltage (V) | 700Vdc (IEC / UL) |
| | Maximum Series Fuse Rating (A) | 10A |
| Mechanical Specifications | External Dimensions | 585*830*30mm |
| | Weight | 5.25kg |
| | Solar Cells | Mono crystalline 182X72.8mm (4X8pcs) |
| | Front Glass | 3.2 mm tempered glass |
| | Frame | Aluminum |
| | Junction Box | IP67 |
| | Output Cables | 150cm |
| | Connector | M12-4P |
| | Mechanical Load | Front Side Max. 5400Pa, Rear Side Max. 2400Pa |

4G Solar-powered ANPR Camera Kit

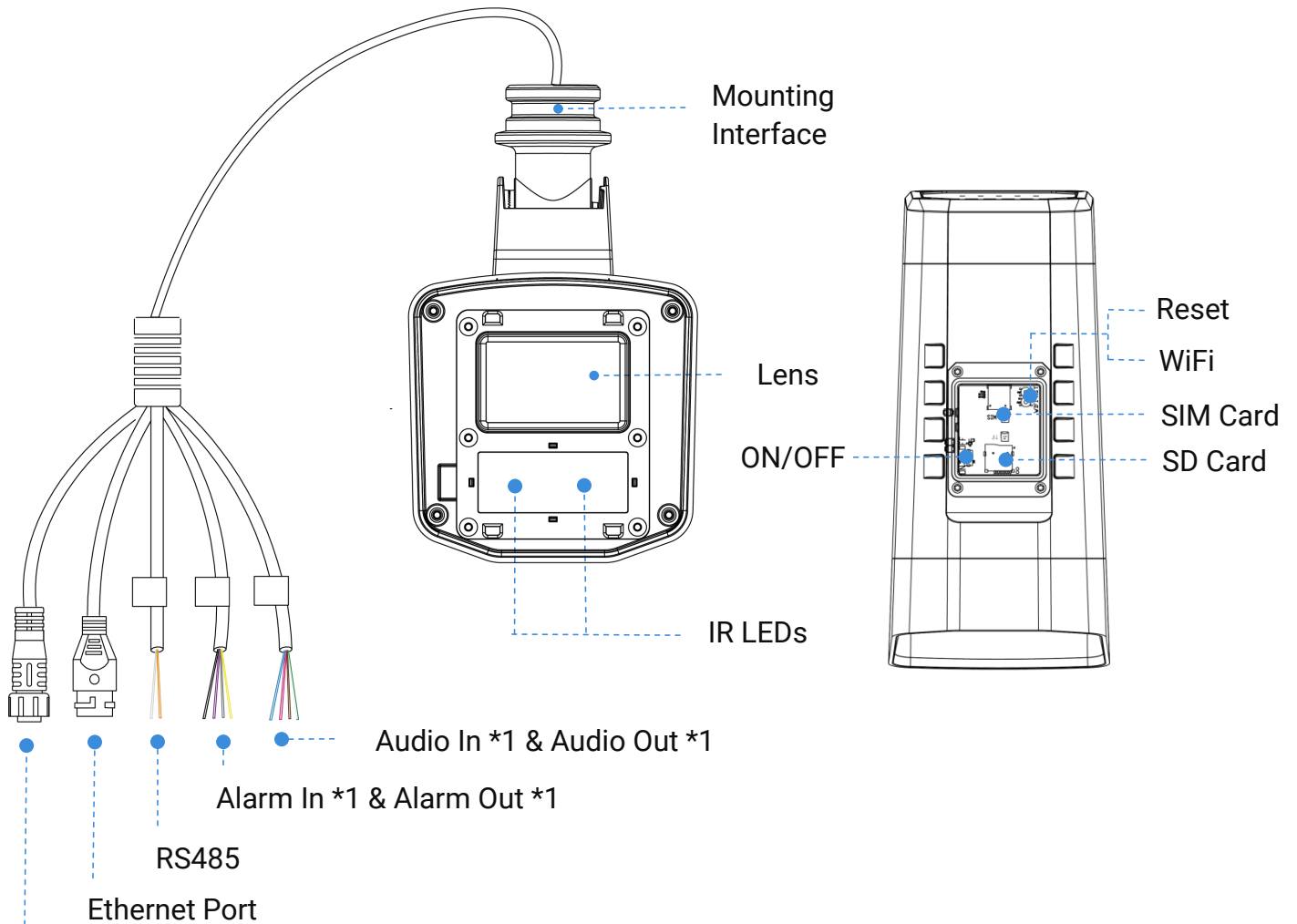


| | | |
|------------------------------------|--|------------|
| Temperature Characteristics | Pmax Temperature Coefficient | -0.350%/°C |
| | Voc Temperature Coefficient | -0.270%/°C |
| | Isc Temperature Coefficient | +0.048%/°C |
| | Operating Temperature | -40~+85°C |
| | Nominal Operating Cell Temperature(NOCT) | 45±2°C |

4G Solar-powered ANPR Camera Kit

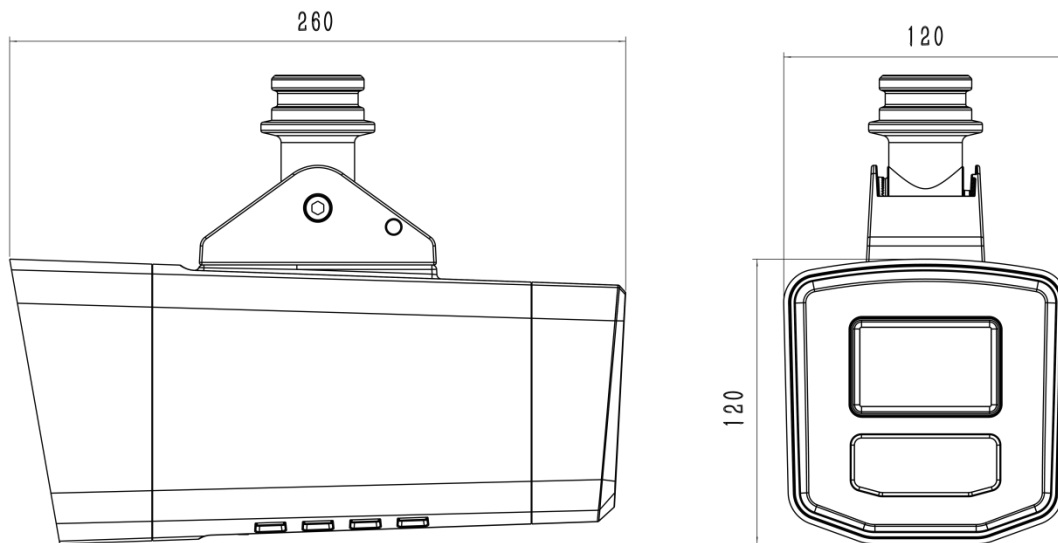


Structure Diagrams



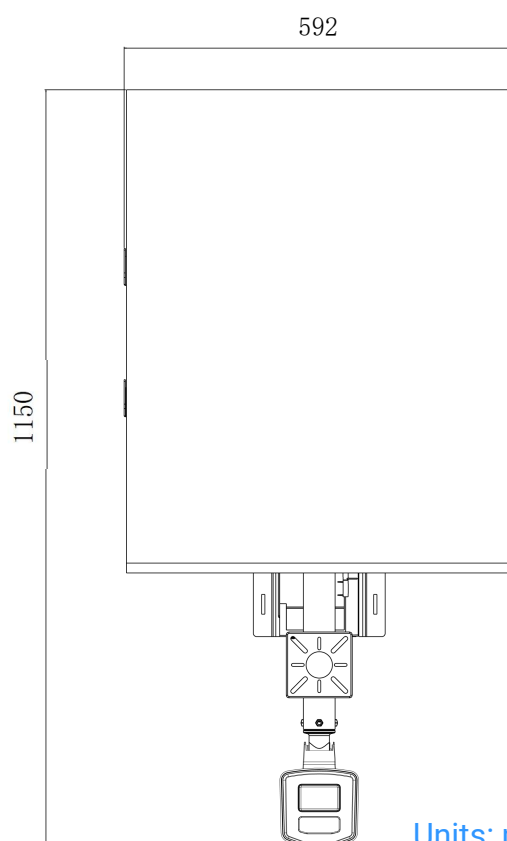
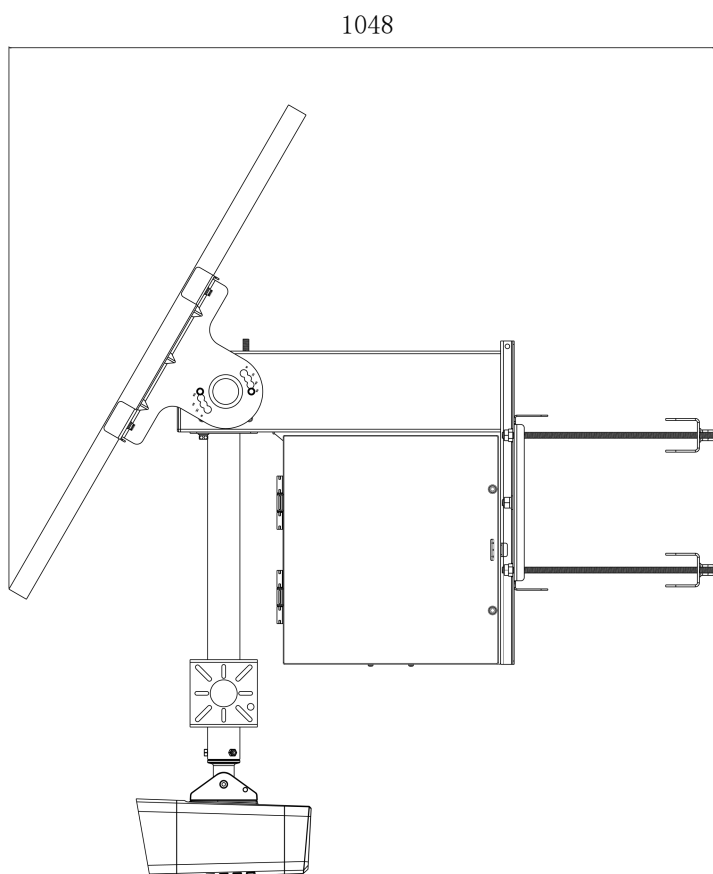
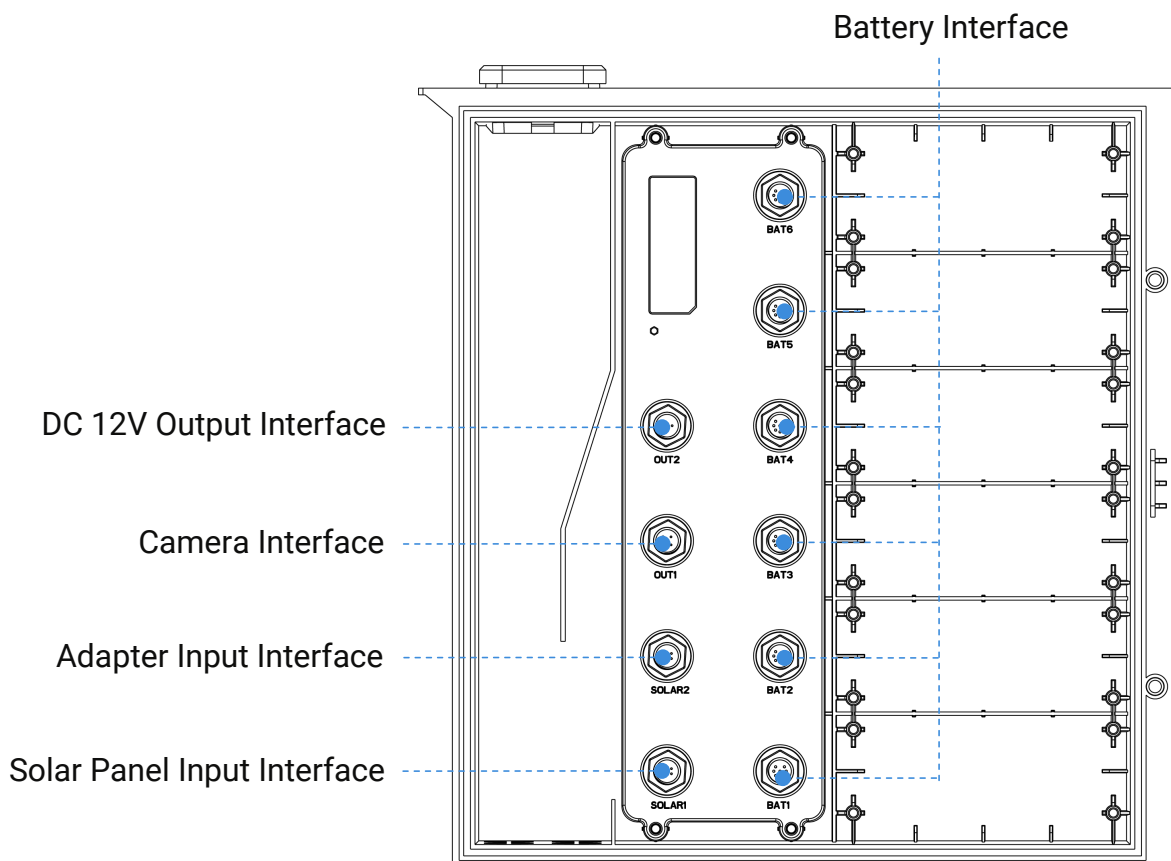
Power Supply

(used for power supply and RS485 battery information communication with the battery system)



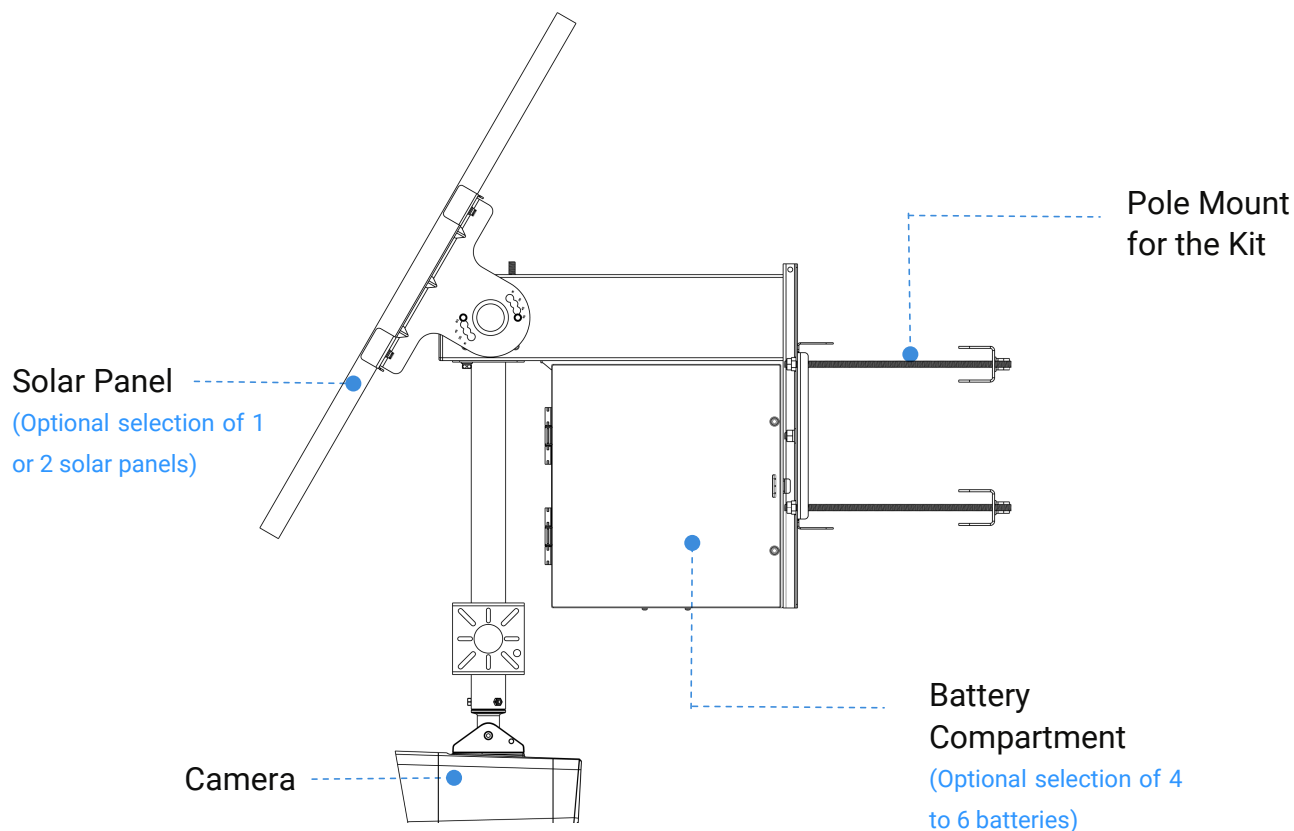
Units: mm

4G Solar-powered ANPR Camera Kit



Units: mm

4G Solar-powered ANPR Camera Kit



Accessories Support

B90 Modular Battery

Weight: 730g
Dimensions:
125*48*95 mm



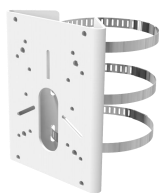
S90 Solar Panel

Weight: 5.25kg
Dimensions:
585*830*30 mm



A02 V2 Pole Mount

Weight: 1kg
Dimensions:
180*136*46 mm



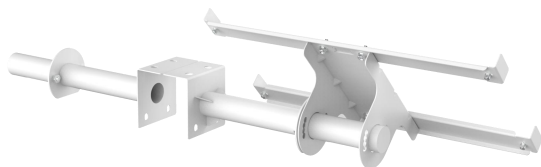
+

SA02 Wall Mount

Weight: 2.2kg
Dimensions:
150*260*400 mm



SA03 Expansion Bracket



Milesight | www.milesight.com

Contact Us: sales@milesight.com support@milesight.com

Add: Phase III, Xiamen 361024, Fujian, China
Building c09, Software Park
Tel: +86-592-5922772