



Technical Parameters

Solar input	Solar input <40VDC
AC input	100-240VAC input, 50/60Hz
Battery(customer provided)	DC12V, support lead-acid battery; If Li-Ion/Li-Polymer, Lithium Phosphate/LiFePO4 battery, need customization
PWM power control module	Solar and DC12V input(default solar priority);
	support DC12V battery charging and discharging;
	solar control: PWM controller;
	If solar input, charging current 30A max.
	If AC input, charging current 5A max(default 2A);
	Load: load 150W max.(PoE output+DC12V output+ itself consumption)
DC power module	100-240VAC input, DC12V 200W
Voltage booster	12-24VDC input, DC52V output, 120W max. for PoE switch
DC output	DC output 3 channel, can control remotely, voltage is equivalent battery voltage DC output single channel current 3A max.
RS232	Standard RS232 interface
RS485	Standard RS485 interface
Alarm input	3 channels, dry-connector input channel 1 is default for the door open/closed detected;
Alarm output	1 channel, dry-connector output
10/100 network port	1*10/100Base-TX
Reset key	>5s press recovery to factory default

Product Description

Model 05 is an all-in-one outdoor smart box solution, combining power management, remote monitoring, and network control in a compact design. Featuring a built-in smart control card and supporting our V5 software platform, users can easily monitor and manage the box's status, power inputs, and alarms in real time.

It supports both solar and AC inputs, with customizable input priority. When solar input drops, AC power takes over; if both fail, the battery powers the system—ensuring continuous operation with minimal setup.

Inside, the unit integrates an 8-port PoE switch and a 5-inch LCD touchscreen, allowing quick access to settings like IP configuration and DC output control. The screen displays vital information including IP address, solar/battery status, and alarm alerts for easy local management.

Additional features include a door sensor that triggers software alarms if the box is opened unexpectedly. With an operating temperature range of -20°C to 70°C, Model 05 is built for reliable performance in harsh environments.

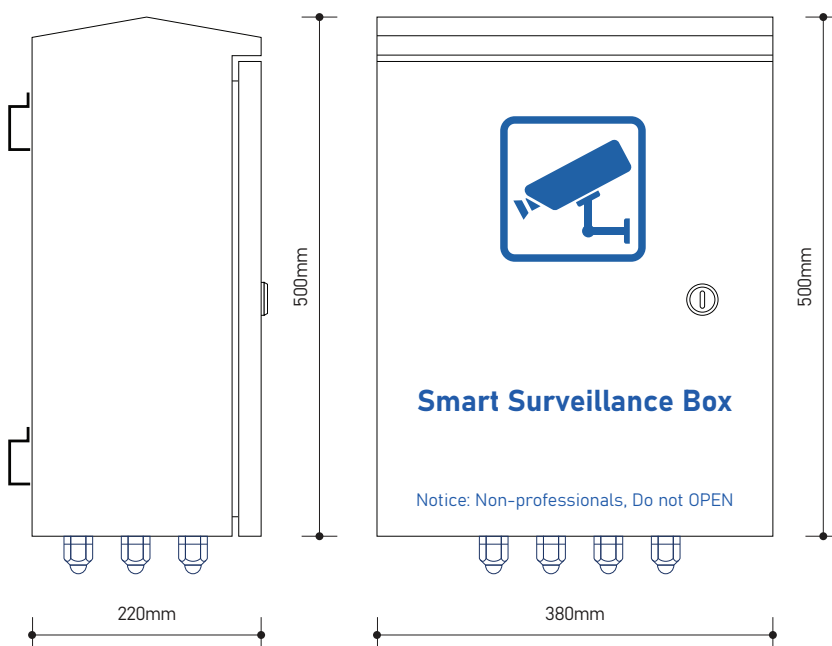


LCD screen	Size: 5.0 inches
	Resolution ratio:800*480
Waterproof connector	12*PG7 waterproof connector
Working temperature	-20°C~70°C
Storage temperature	-40°C~85°C
Humidity	0~95%(No condensation)
Dimension(H×W×D)	500mm×380mm×220mm
Protect level	IP66
Material	Metal
Colour	White
Net-weight	15KG

Switch Specifications

Consumption	Self consumption<10W. PoE output 120W max.
Downlink ports	1-8 ports: 10/100Base-TX 30W PoE. RJ45(IEEE802.3af/at)
Uplink ports	9~10 ports: 1000M SFP slots
Working mode	Extend: 1-8 ports Max. 250m transmission, 1-8 ports are isolated, only can communicate with the uplink ports; restrain the network storm; close flow control. Default: common switch. VLAN: 1-8 ports are isolated, only can communicate with the uplink ports; restrain the network storm; close flow control.
Switch fabric	5.6Gbps
Through put	4.2Mpps
Buffer	12KB
MAC address table	4K
Protection	Surge: 6KV, standard: IEC61000-4-5 ESD: 6KV: contact / 8KV: air, standard: IEC61000-4-2

Structure



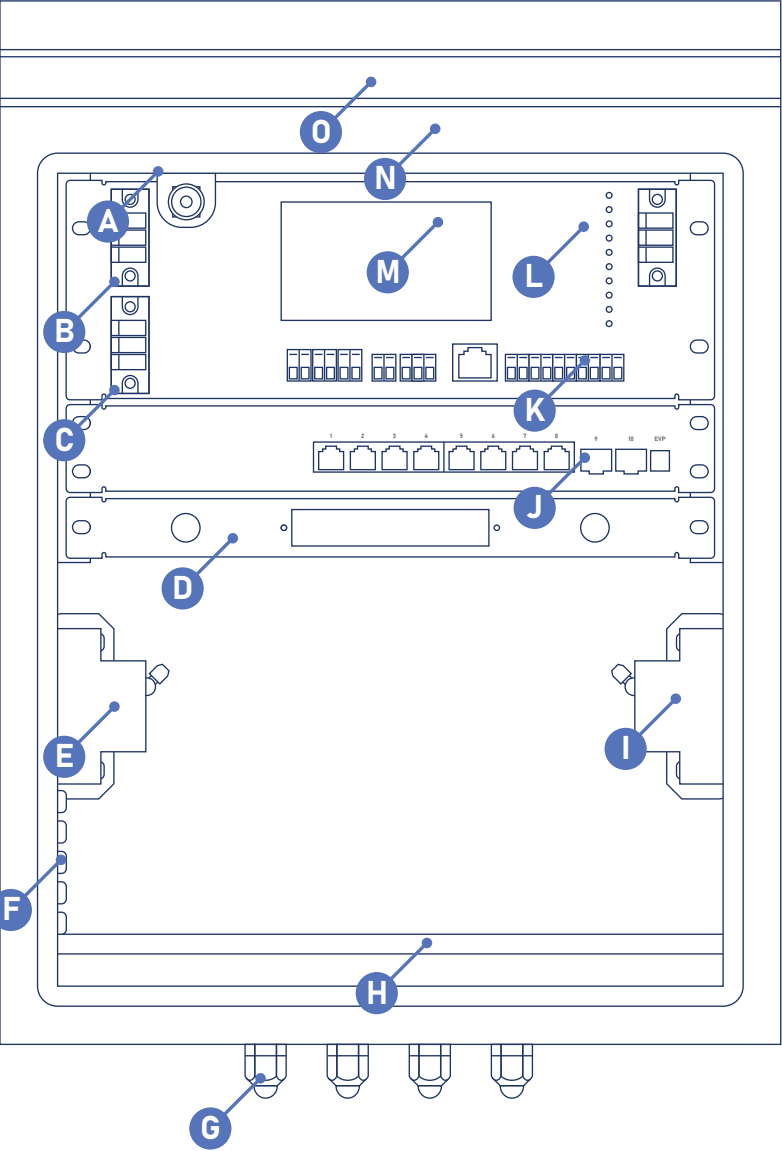
Features & Benefits

- All in one solution
- Smart control card with software
- Support our V5 software platform for customers to monitor and managed the outdoor boxes, check the outdoor box working status.
- Solar input and AC input, customer only need to connect with solar panel and battery, that means when the solar input down, the AC will power for the whole box and battery, when the solar and AC input down, the battery will power for the whole box. And customer can set the input priority.
- Integrated the 8 ports PoE switch inside
- Integrated the 5 inch LCD touch screen inside, for the touch screen, you can do some simple setting in the screen with your finger, like open/close DC output, revise the IP address. In the screen, it will display box information on it, like box IP address, serial number, solar input information, battery information, input and output, alarm information...
- From the LCD screen, you can get the box information more easier and convenient.
- Door sensor, when someone open the door, the software will alarm automatically, remind customer to check the outdoor box.
- The working temperature is about -20 to 70 degree.

Applicable scenarios

- CCTV, Security, Telecom, Street light, Transportation, Smart City, Base station, Fire alarm, Network solution, Desert, Forest, Subway, Garden, Highway, Access control and so on projects.

Technical Diagram



A	Door Open Detector
B	Solar Input
C	Battery Input
D	Fibre Tray 4* SC
E	AC 2P Circuit Breaker
F	Grounding Array
G	Waterproof Connector
H	Tray
I	AC 2P Circuit Breaker
J	Switch
K	Control Unit
L	MPPT (MPL2420)
M	5 Screen
N	Lamp
O	Fan



Example Part Number
Description
Solar & AC Powered Smart Box Series - 5 inch screen 500mm×380mm×220mm - Model 05
Part Number