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**Loyalty-Secu Electronics Co., LTD**

[www.loyalty-secu.com](http://www.loyalty-secu.com)



Add: 5th Floor,1A Building, Yunantong Industrial Park

Longhua District,Shenzhen,518109, China.

Tel: 86-755-88370149

## **Solar Surveillance Power Kit**

**LY-SPS-60AH**

### **Main Features:**

- ◆ Solar Panel: 18V/200W  
Monocrystalline silicon
- ◆ Lithium battery: 12V-60AH
- ◆ Battery type: EV MnNiCo ternary  
18650 Lithium
- ◆ Automotive grade
- ◆ Accept the solar power supply system  
customization



200W 60AH Intelligent Solar Surveillance Power Kit

## Highlights

- Equipped with the automotive grade monocrystalline silicon solar panel+ EV MnNiCo ternary 18650 Lithium battery, heat & cold resistance, temperature Detection, etc, ensure a long using life.
- With ultra low consumption ( $\mu$ A standard), no leak happens even when the battery has been idle for one year.
- Solar panel with an-reverse protection, brings nearly zero risks during the installation.
- Adopting the low voltage protection technology, avoid the frequent reboot while the cameras under low voltage mode, it largely reduced the failure rate.

### ◇ **Intelligent solar power system:**

With the realtime monitoring for the solar panel work condition ,lithium battery's work condition and the transformation of load power consumption.

- Adopting the newest PID software algorithm, achieve the Maximum power point tracking (MPPT) for the solar panel system, ensure the most effective power input.
- Intelligent solar power system , applied to t any kind of cameras(Such as LS cameras ,Hikvision,Dahua,Uniview cameras and so on)

## Solar Power Supply System Datasheet



Solar Panel Info	
Model	LY-SPS-60AH
Solar panel type	2 PCS * Monocrystalline silicon 100W
Solar panel Voltage/Consumption	18V/200W
Power tolerance	+3%
Rated voltage	17.56V
Service life	25 Years
Maximum power	60.46W
Maximum power voltage	17.56V
Maximum current	2.85A
Short-circuit current	3.45A
Open-circuit current	22.32V
Temperature coefficient of ISC	+0.04
TC of VOC	-0.38
TC of Consumption	-0.47
TC of IM	+0.04
TC of VM	-0.38
Temperature range	-40° ~ +85°
Rated current of bypass diode	12A
Load capacity	23m/s, 7.53g
Max load capacity of Surface	2400Pa
Solar panel size	1200*540*30mm
Solar panel weight	20KG(2 PCS)

<b>Lithium Battery Info</b>	
Battery model	BAT01-60AH
Battery cell	EV MnNiCo ternary 18650 Lithium
Battery capacity	Min 40Ah,Max 40.9Ah
Nominal voltage	12V
Charge/Discharge protection voltage	12.6V/9V
Normal charging current	10A
Max Charge/Discharge current	20A
Discharge temperature (Recommend)	-20°~ 60°
Charge temperature (Recommend)	-5°~45°
Solar panel types (Recommend)	18V Monocrystalline / Polycrystalline silicon solar panels, thin-film solar panels
Solar panel capacity (Recommend)	Total power load $\leq$ 100W/D, Suggest to use 100W Solar Panel Total power load $>$ 100W/D, Suggest to use 100W-200W Solar Panel
<b>Intelligent Solar power system</b>	1.Solar panel with an-reverse protection 2.Support the tracking for the Max power generation efficiency of solar panel 3.Support the realtime detection of generation voltage and generation current, and the data upload 4.Support the detection of battery capacity, and the data upload 5.Support the detection of total load's realtime current ,and the data upload 6. With the low voltage protection technology
Storage time	$\geq$ 18 months(25°)
Battery size	215*100*142mm
Battery weight	8KG

## Solar Lithium Power System Solution:



Model	Solar Panel	Lithium Battery	Scenarios for Reference
SPS-20AH	60W	20AH	Ordinary 4G camera
			IP Camera +Bridge
SPS-20AH	60W	20AH	Ordinary 4G camera/ IP Camera +Bridge/4G PTZ Camera
SPS-40AH	120W	40AH	4G PTZ Camera
			Several 4G Cameras
			IP PTZ Camera+ Bridge or Several Cameras+ Bridge
SPS-60AH	200W	60AH	1 PCS Dahua/Hikvision/Uniview IP PTZ Camera
			Several 4G PTZ Cameras+4G Cameras
			Several IP PTZ Cameras+ Bridge or Several Cameras+ Bridge
			12/24V Mini Power System(Max 10A Supply Current)
Customization	Yes	Yes	Based on client's demand

## Solar Power Supply System Installation:



**Brackets:**



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