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# Shenzhen Loyalty-Secu Technology Co., LTD

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## Solar Surveillance Power Kit

**LY-SPS-20AH**

### Main Features:

- ◆ Solar Panel: 18V/60W Monocrystalline silicon
- ◆ Lithium battery: 12V-20AH
- ◆ Battery type: EV MnNiCo ternary 18650 Lithium
- ◆ Automotive grade
- ◆ 3 Year Warranty
- ◆ Accept the solar power supply system customization



Solar Powered CCTV systems are popular and energy saving among worldwide which needs remote surveillance view monitoring of inaccessible or large outdoor site which does not equipped with power supply facilities (eg agriculture, large scale park, industrial, construction sites)

Thanks to the generous gift of the nature, solar power technology brings the entire surveillance camera system to be installed and operated independently without the need for an external power supply.

## Highlights

- **No Wire, No Hassle, Wiring Cost and Trouble Saving**
- **Reliable & Independent for Remote Site Monitoring**
- **Quick and Fast Deployment**
- **Intelligent and high performance solar power system:**
  1. 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.
  2. With ultra low consumption ( $\mu$ A standard), no leak happens even when the battery has been idle for one year.
  3. Solar panel with an-reverse protection, brings nearly zero risks during the installation.
  4. Adopting the low voltage protection technology, avoid the frequent reboot while the cameras under low voltage mode, it largely reduced the failure rate.
  5. With the realtime monitoring for the solar panel work condition, lithium battery work condition and the transformation of load power consumption.
  6. Adopting the newest PID software algorithm, achieve the Maximum power point tracking (MPPT) for the solar panel system, ensure the most effective power input.
  7. Intelligent solar power system , applied to t any kind of cameras(Such as LS cameras ,Hikvision, Dahua,Uniview cameras and so on)

## Solar Surveillance Power Kit Datasheet:



Solar Power Kit	
Solar Power Kit Include Items	1PCS Solar Panel, 1 PCS Lithium Battery 1 Set Bracket, 1 Set Install Screws
Solar Power Kit Carton Size	75*67*23CM
Solar Power Kit GW	18KG
Solar Power Kit Model	LY-SPS-20AH
Solar Panel Info	
Solar panel type	Monocrystalline silicon 60W
Solar panel Voltage/Consumption	18V/60W
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	590*679*30mm
Solar panel weight	7.2KG

Lithium Battery Info	
Battery model	BAT01-20AH
Battery cell	EV MnNiCo ternary 18650 Lithium
Battery capacity	Min 20Ah,Max 20.6Ah
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 ≤100W/D, Suggest to use 50W Solar Panel Total power load >100W/D, Suggest to use 50W-100W Solar Panel
<b>Intelligent Solar power system</b>	<ol style="list-style-type: none"> <li>1.Solar panel with an-reverse protection</li> <li>2.Support the tracking for the Max power generation efficiency of solar panel</li> <li>3.Support the realtime detection of generation voltage and generation current, and the data upload</li> <li>4.Support the detection of battery capacity, and the data upload</li> <li>5.Support the detection of total load's realtime current ,and the data upload</li> <li>6. With the low voltage protection technology</li> </ol>
Storage time	≥18 months(25°)
Battery size	125*100*142mm
Battery weight	2.5KG

### Solar Power System Workable Solution:



Model	Solar Panel	Lithium Battery	Scenarios for Reference
SPS-20AH	60W	20AH	Ordinary 4G camera
			IP Camera +Bridge
SPS-30AH	60W	30AH	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

## 60W 20AH Solar Power Kit

### Includes Items:



1 PCS 18V 60W Solar Panel



1 PCS 12V 20AH Lithium Battery



1 Set Solar Power Kit Bracket



1 Set Install Screws

### Solar Power Kit Package:



Solar Power Kit Inside Packing





## Solar Power Supply System Installation:

# 60W Solar Power Kit Quick Installation



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