

Solar wireless communication gateway SP-G datasheet

SUN POWER OWNER, SOLAR POINT OPTIONS.

Product description

The solar wireless communication gateway communicates with the solar optimizer wirelessly, and can receive the data blocks collected by the solar optimizer and issue system configuration commands to the solar optimizer. At the same time, it communicates with the server continuously through 4G and Wifi, uploading the collected data blocks and receiving the configuration commands issued by the server. In a breakthrough, the gateway adopts a 1500V system withstand voltage and a fully sealed design, which can obtain electricity from the solar modules.



Features introduction

POWERED BY SOLAR MODULE

The product meets the withstand voltage design of the 1500V system, and also meets the IP67 protection level. It can take power from the solar module at any potential difference in the power station, ensuring the optimal communication state while saving power

FLEXIBLE NETWORKING

Realize the independent networking and real-time communication of up to 500 solar optimizers, and also meet the requirement of adding or removing a single node optimizer to the network. The communication channel supports customization to prevent the gateway from being interfered by other wireless frequencies in the working environment

LONG WORKING YEARS

Selected reliable components, double standard test conditions, daily working current is less than 50mA, rated power is less than 0.5W, and strive to guarantee the same working life as solar modules

WIDE RANGE OF COMMUNICATION METHODS

Support 4G (SIM card, eSIM) and WIFI multiple ways to establish stable TCP communication with the server. IP address, port number, communication interval support customization.

EMBEDDED SMART MODULE

The communication gateway is embedded with a solar optimizer circuit, which can complete the power generation data collection of the power supply solar module. At the same time, you can turn on or shut off the output of the power supply solar module

EXCELLENT COMMUNICATION ABILITY

In solar power station, the 2.4GHz frequency band can communicate with solar optimizers within a radius of 50m~100m to maintain a packet loss rate of less than 1%.

Specification list

1.Size	158x150x37mm
2.Server communication method	4G/WIFI
3.Optimizer communication method	2.4GHz
4.Maximum number of nodes	500
5.eSIM /SIM	√
6.Weight	600g
7.Inlet length (customizable)	300mm(+)/300mm(-)
8.Outlet length (customizable)	300mm(+)/300mm(-)
9.Connector	MC4/MC4 compatible
10.Protection level	IP68
11.Intelligent optimization function	Monitoring and Shut down

Electrical parameter list

1.Rated power	<0.5W
2.Working current	<50mA
3.Range of working temperature	-40°C~+85°C
4.Input voltage range	-0.3~50V
5.Maximum input current	20A
6.Maximum input power	700W
7.Communication method	wireless
8.Maximum communication distance	100m
9.Maximum system voltage	1500V
10.Current detection accuracy	±0.1A
11.Voltage detection accuracy	±0.2V
12.Temperature detection accuracy	±2°C