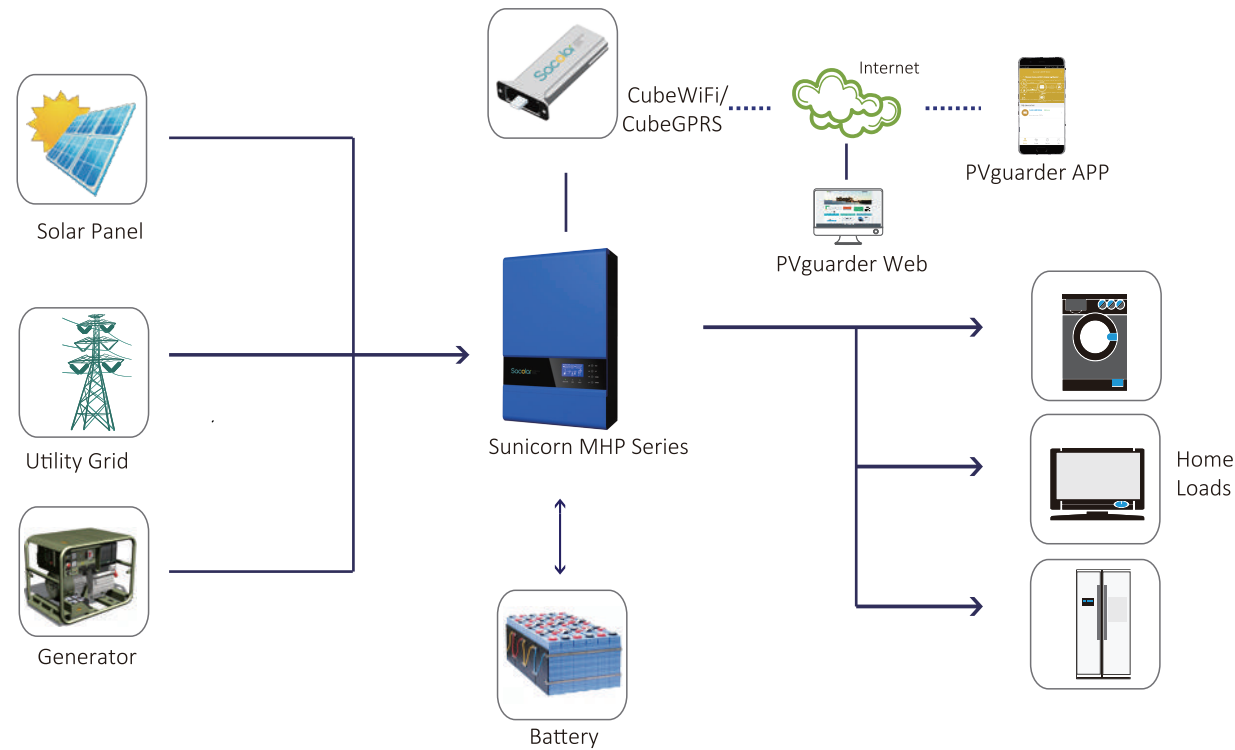


CubeWiFi/CubeGPRS

MAIN FEATURES:

- ➔ Easy to use
- ➔ Plug-and-play commissioning
- ➔ 100-meter wireless connection for CubeWiFi/2G network for CubeGPRS
- ➔ Free online monitoring via PVguarder Web



INTRODUCTION:

CubeWiFi/CubeGPRS is a plug-and-play monitoring device to help monitor the status of the PV system. This device is installed on a Sacolar inverter or controller, uploading and receiving data from the PVguarder server.

SPECIFICATION

CubeWiFi

CubeGPRS

General Data

Dimensions (Length/width/Height): 135/79/29 mm
 Weight: 63g
 Language: English, Chinese

Dimensions (Length/width/Height): 135/79/29 mm
 Weight: 70g
 Language: English, Chinese

Wireless Parameters

Certification: FCC/CE
 Wireless Type: WiFi
 Wireless Standard: 802.11 b/g/n
 Transmit Power: 802.11b: +20dBm(Max.); 802.11g: +18dBm(Max.);
 802.11n: +15dBm(Max.)
 Receiver Sensitivity: 802.11b: -89dBm(Max.); 802.11g: -81dBm(Max.);
 802.11n: -71dBm(Max.)

Certification: FCC/CE
 Wireless Type: GPRS
 GSM/GPRS/EDGE Frequency Range: 850/900/1800/1900 MHz
 Antenna Gain: 3dbi
 Max. Output Power: GSM850/GSM900: 2W; DCS1800/PCS1900: 1W
 Speed: Max. 85.6Kbps(DL); Max 42.8Kbps(UL)

Hardware/Software Parameters

Data Interface: UART: 9600bps; Ethernet: 100Mbps
 Operating Voltage: 5V (+/-15%)
 Operating Current: 100mA ~ 300mA
 Operating Temperature: -25°C ~ +55°C
 Storage Temperature: -30°C ~ +60°C
 Network Type: AP (Access Point); Station Mode (with Soft AP)
 Security Mechanisms: WEP / WPA-PSK / WPA2-PSK / WAPI
 Encryption: WEP64 / WEP128 / TKIP / AES
 WLAN Default IP: 192.168.10.100

Serial Port Speed: 9600bps
 Operating Voltage: 5V (+/-15%)
 Operating Current: 1.5A
 Operating Temperature: -40°C ~ +85°C
 Storage Temperature: -40°C ~ +85°C

Application Parameters

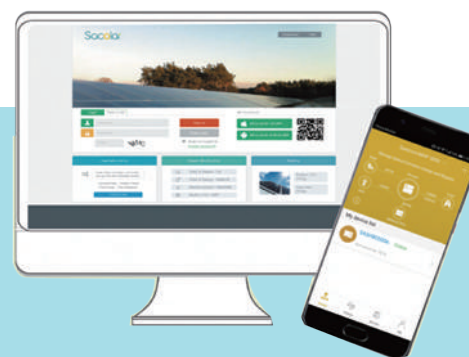
Server: Pvguarder
 Inverter Communication: RS232 (Modbus RTU protocol)
 Sever Communication: WiFi via router (Modbus TCP protocol)
 Supported Routers: Wireless router (Include 3G router)
 User Configuration Interface: Wireless web server (Internet Browser)
 Max. Communication Range: 100m
 Data Transfer Interval: 5 minutes
 Default Server URL: pvguarder.sacolar.com

Server: Pvguarder
 Inverter Communication: RS232 (Modbus RTU protocol)
 Sever Communication: TCP (Modbus TCP protocol)
 Configuration Interface: APP
 SIM Type: Regular SIM card
 Uploading Interval: 5 Mins (1~15 adjustable)
 Default Server URL: pvguarder.sacolar.com

PVguarder Web / APP

MAIN FEATURES:

- Easy to operate
- Quick overview of all PV plants status
- Monitor and record several of PV plants with centralized management
- Professional analysis function to help maximize the system performance
- Real-time access to key performance worldwide via PC or mobile phones



INTRODUCTION:

Sacolar can manage to deliver a satisfactory monitoring solution based on PVguarder server. PVguarder provides access to key system datas at anytime and any place.



Android & iOS

SPECIFICATION

Model	PVguarder Web
System Requirements	
Supported Operating Systems	All
Recommended Browsers	Internet Explorer, Google Chrome, Firefox, Opera, Safari
Supported Data Logger	CubeWifi, CubeGPRS
Access	
Website	http://pvguarder.sacolar.com
Plant Information	
Plant Overview	Quick yield overview of all your PV plants
Specified Plant	All important data at a glance including energy output, yield gains, environmental status
Plant Installation Data	Summary of all plant information which contains installation date, location date and income data
Device Overview	Display of all important data about datalogger, inverters, environment monitor, smart meter, etc
Time Periods	5 mins
Plant Management	
Account	Use can manager all PV plants with one same account
Monitoring	
Inverters Status	All inverter running status are recorded automatically, The warning of fault is immediate and highlightde
Status Reporting	
Event Reports	Timely email reports on system fault and plant error
Background Operating	
Plant Management	Add new plant, edit and delete existed plant
Device Management	Intuitive operation to manage all devices
Inverter Setting	Simple parameter setting for inverters including power management

Model	PVguarder APP
General Data	
Supported Operating Systems	Android / iOS
Source of Data	pvguarder.sacolar.com
Plant Information	
Plant Overview	Quick yield overview of all your PV plants
Specified Plant	All important data at a glance including energy output, environmental status
Plant Installation Data	Summary of all plant information which contains installation date, location data and income data
Device Overview	Display of all important data about datalogger, inverters, environment monitor, smart meter, etc
Plant Enver Log	Display of all the warning events of the plant
Device Information	
Inverter Data	All inverter running status and data could be obtained at any time
Enviroment Monitor Data	Key parameter about environment could be obtained
Dlectric Meter Data	Primary parameters at the point of connection are collected in every measured period