SEC-C Module Overview

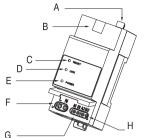


Fig 1: eSolar SEC-C definition

Code	Name
Α	External Wi-Fi antenna
В	LAN
С	RESET
D	LINK ^{*1} (LED INDICATOR)
E	POWER*2 (LED INDICATOR)
F	Power input
G	RS485 for inverter
Н	RS485 for Smart meter

Table 1: Interface description

1

Note: *1 Green light slow blinking indicates Ethernet is connected to server, fast blinking indicates firmware is upgrading. Blue light slow blinking indicates WiFi is connected to server, fast blinking indicates Bluetooth is connected.

*2 LED indicator keeps ON indicating power is working properly, while LED indicator turning OFF indicates power supply is abnormal.

Monitoring APP Connection

1) Download eSAJ Home APP

For iOS system, search "eSAJ Home" in App Store to download.

For Android system, search "eSAJ Home" in Google Play to download.

2) Bluetooth connection

① Turn on mobile phone Bluetooth connection. ② Open eSAJ Home APP→ Select "Tool" → "Remote Configuration" → Select "Bluetooth" → "Next STEP" → Search devices \rightarrow Click on the Bluetooth name of the eSolar SEC-C.



Fig 2 Bluetooth connection

Please use the eSAJ Home APP to scan the SN bar code on the front of the SEC-C module to link SEC-C module to inverter during power plant creation.



2

Parallel System Solution

Introduction:

Inverter parallel allows you to expand your power plant capacity and combine all the inverters to act as a single system to power the loads together. It is allowed to connect up to 10 inverters parallelly in the same system.

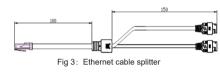
Total plant capacity:

The total power plant capacity can be reached up to 172.5KW, the size of CTs used should be determined by the maximum power plant capacity.

RS485 cable splitter:

NOTE: The RS485 connection between inverters is daisy-chain connection.

The RS485 cable splitter enables you to increase the RS485 network connection on an RS485 port. The RS485 cables wiring is as figure 4 below, connect two RS485 cables from two different inverter to a single RS485 port.



RS485

Fig 4: Ethernet cable splitter and cable connection

RS485 Connection:

NOTE: In the networking state, the RS485 and 4G/WIFI interfaces of the inverter cannot be used at the same time 1.Power on the inverters.

2.Set the inverter RS485 addresses to be different from each other. (Set the RS485 address to any number between 1 and 10, nonrepeat.),through the 4G/WIFI interface of the inverter connected to a WiFi-2 or AIO3 module or 4G module to modify.

• For R5/ R6/C6 series inverter: Set the address on the eSAJ Home APP.

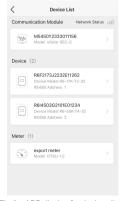
 Install a communication module(WiFi-2 or AIO3 module or 4G module) onto the inverter, and connect to eSAJ Home APP.

• Procedure: Communication > RS485 setting > Address. • After the RS485 address setting completed, disconnect the communication module.

3

3.Connect the RS485 cables, inverters, meter and SEC-C module (as the parallel system wiring diagram), then power on the SEC-C module.

4.After connecting to the eSAJ Home App, check if the displayed inverter and meter info are corrected. Normal display: Then you should see all the devices list connected parallelly.



Parallel System Wiring: AA Grid Up to 10 inverters PV Array PV Array PV Array On-grid Load 8 Main Meter •••• DC / DC AC L1| | 250A CT CT installation: The arrow direction points to the inverter կապե The address is 1: The default RS485 address of the meter is 1. You do not need to change it eSolar SE Meter 0000 IB* (White) IC* (White)

Fig 7: Parallel System Wiring

5

RS485

Export Limit Setting

Communication Module

Device (2)

Meter (1)

export meter Model DTSU-1.

Device Lis

M5450Y2333011156

R6F2173J2232E11262

R6I4503G2101E01234

Open eSAJ Home App, and connect all the devices to App. 1.Enter eSolar SEC-C interface. 2.Select the gear icon at the top-right corner.

Communication Module

volar SEC-. 123456789 v1.045 v1.001 auto

4C:75:25:7C:A2:6C 10.10.121.147

255.255.252.0

SAJ_SYS_2.4G

CC:D7:3C:5A:85/E1

4C:75:25:7C:A2:6F

10.10.43.144 255.255.255.0

10.10.43.1

10.10.120.1

-48dBm

Module SN

WIFI

MAC Addres

Gateway

Router SSID

Router BSSID

Router Signe

Ethernet Connect

MAC Addres

3.Select Export limitation setting.
4.Enter the export limit value.
5.click on "Save".

<	Communication module		< Export limitation setting			
22	Module mode setting		Export limitation	Turn ON		
(¢	Wi-Fi configuration		Setup type	Total Power		
6	Communication		50		%	
ф	network diagnosis	>	[0~110]			
0	Export limitation setting	>				
G	Factory setting					
0	Restart module			Save		
				Save		

Fig 8: eSolar SEC-C interface Connection

Fig 9: A Export limitation setting

4



Local connect 🔱		<	Communica	tion		
CID Bluetooth connection:BlueLink:00456		🗂 RS485 s	etting		>	
	device info					
23	Maintenance					
<u>.</u>	initial Setting invWaveCheck Set Protection data Feature data Power adjustment		1	RS485 setting Save		
党			Protocol typ		MODBUS RT	
0			Baud rate		9600	
÷			Address		3	
M			PMAR 699		[1-32]	
Ø	Communication	>				
Û	Export limitation setting	>				

