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	F Power input			
G	RS485 for inverter			
Н	RS485 for Smart meter			

Table 1: Interface description

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.



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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 18.4KW.

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.



Fig 3: Ethernet cable splitter

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.
- After the RS485 address setting completed, disconnect the communication module.

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3.Connect the RS485 cables, 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:



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Export Limit Setting

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.

Commur	nication Module Network S	tatus 📊	Module SN M5450Y2333011156	
Device	M5450Y2333011156 Model eSolar SEC-C (2)	>	Model Product Code Firmware Version Hardware Version Working Modes	eSolar SEC-C 123456789 v1.045 v1.001 auto
_	R6F2173J2232E11262		WIFI	
	Device Model R6-17K-T2-32		Connect	up
()	RS485 Address 1		MAC Address	4C:75:25:7C:A2:6C
			IP	10.10.121.147
9	R6I4503G2101E01234 Device Model R6-50K-T4-32		Mask	255.255.252.0
			Gateway	10.10.120.1
	H5485 Address Z		Router SSID	SAJ_SYS_2.40
			Router BSSID	CC:D7:3C:5A:85:E
Aeter (1)		Router Signal	-48dBm
<u>_</u>	export meter		Ethernet	
(. > .)	Model DTSU-1.5		Connect	up
			MAC Address	4C:75:25:7C:A2:6
			IP	10.10.43.144
			Mask	255.255.255.0
			Gateway	10.10.43.1

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

<	Communication module		< Export li	nitation setti	ng
(22)	Module mode setting		Export limitation	Turn ON	
(î;	Wi-Fi configuration		Setup type	Total Power	
6	Communication		50		%
ф	network diagnosis		[0~110]		
0	Export limitation setting	>			
G	Factory setting				
Ø	Restart module			0	
				Save	
			_		

1



• Procedure: Communication > RS485 setting > Address.

	Local connect	Ċ	<	Communicat	ion
сю Ш	Bluetooth connection:BlueLink:00456 R5T2033J2032E20354		🗂 RS485 se	etting	>
œ	device info				
28	Maintenance				
<u>&</u>	Initial Setting		1	PS/185 cotti	na Sava
躗	InvWaveCheck Set		Protocol two	K3485 Setti	MODBUS RTU
0	Protection data		Roud coto		9600
÷	Feature data		Address		
	2 Power adjustment				[1-32]
Ø	Communication	>			
Û	Export limitation setting	>			

Fig 5: APP display for choosing RS485 address

Fig 9: A Export limitation setting