InstaGen
your energy

ON-GRID INVERTER

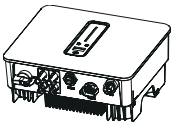
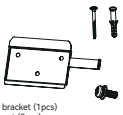
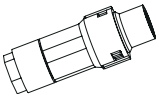
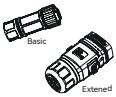
INS-SI-3.6
INS-SI-4.2
INS-SI-5
INS-SI-6

Quick Installation Guide

ENGLISH VERSION

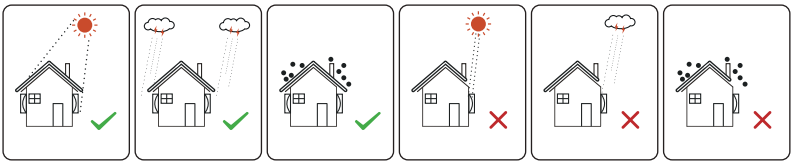
1 Installation

A Check Packing List

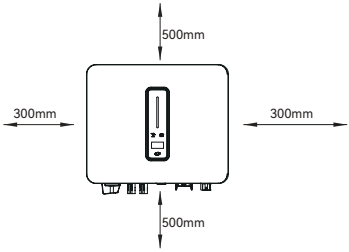
 Inverter (1pcs)*	 Wall-mounting bracket (1pcs) Expansion plug set (3pcs) M5 screws (1pcs)	 AC connector set (1pcs)
 PV terminal (2 pairs)	 COM2 connector set (1pcs) *	 Monitoring device (1pcs)
 PE terminal (1pcs)	 User guide	 SK with 1 CT (1pcs) or 1CT (1pcs)**

*There are two versions of the COM2 connector, please select the appropriate version according to the order requirements.
**Optional

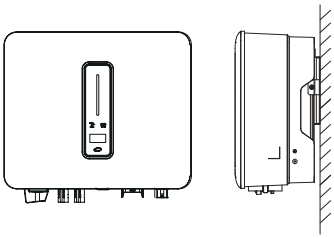
B Installation Location



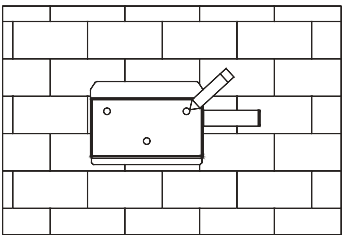
C Installation Space



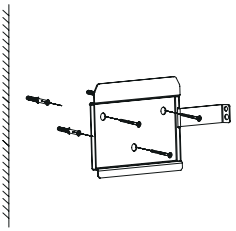
D Installation Angle



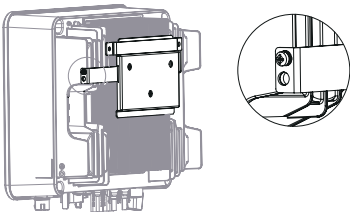
E Mark the Position and Drill Holes



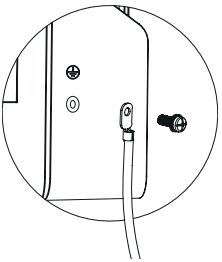
F Fix Wall Bracket



G Mounting Inverter

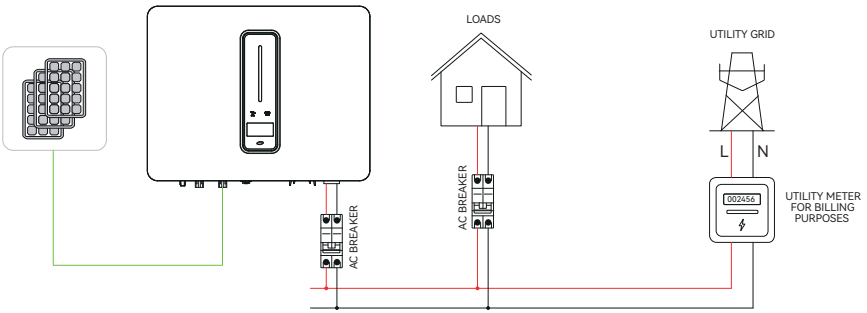


H Grounding Terminal Connection

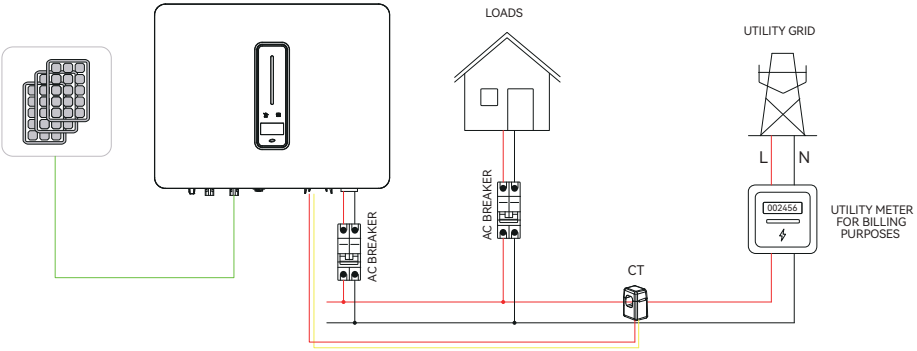


2 Electrical Connection

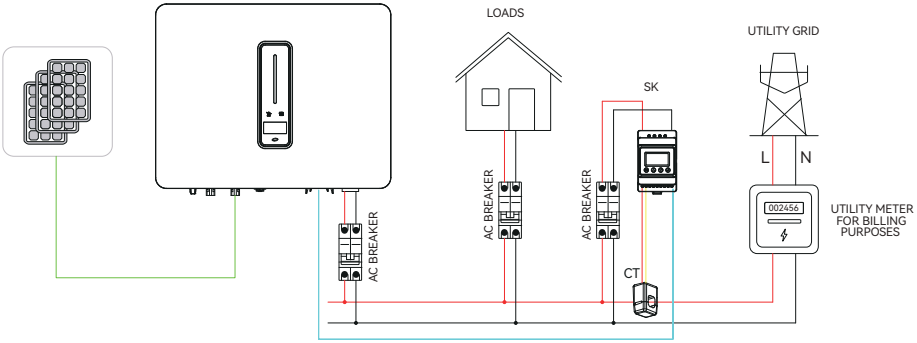
A Electrical Wiring Diagram



Electrical Wiring Diagram

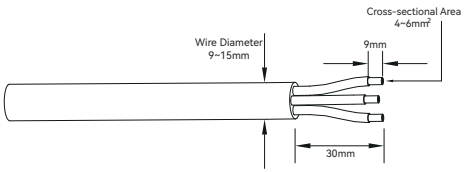


Electrical wiring diagram of export limit

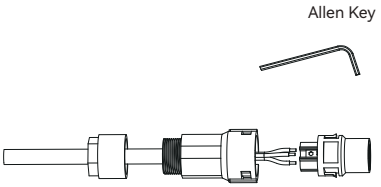


Electrical wiring diagram of export limit & 24 hours load consumption

B AC Connection



①



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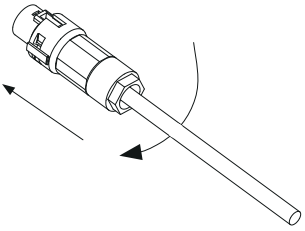

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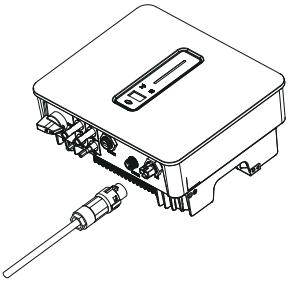
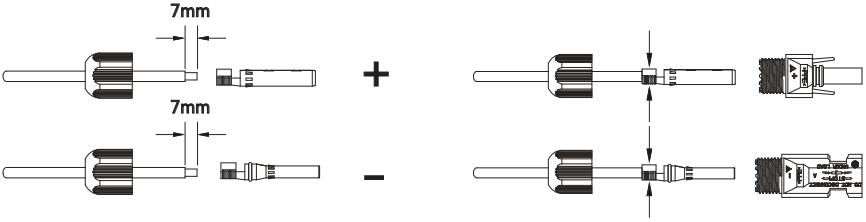


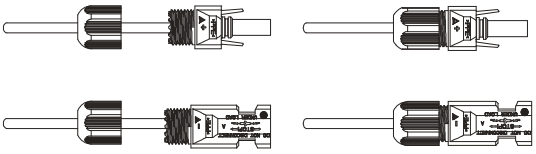
④

C PV String Connection



①

②



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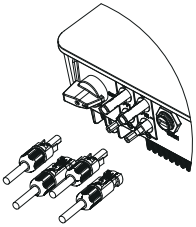
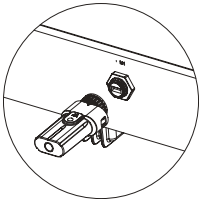


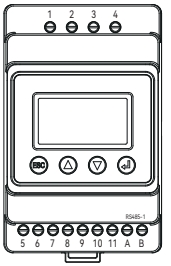
④

D Monitoring Device Installation



If the inverter is connected to the Datalogger and SK, the Monitoring Device does not need to be connected, and refer to the Datalogger or SK manual to connect it to the internet.

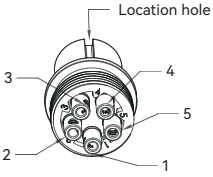
E SK installation (Optional)



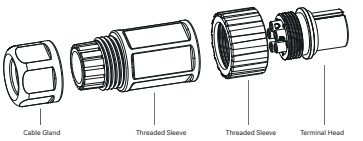
No.	Definition	Function
5	L-S1	To detect the CT current
6	L-S2	
7-10	/	
11	PE	Ground Connection
1	L	L /N connect to grid to detect power grid voltage
2-3	/	
4	N	
RS485-1	RS485	Communicate with inverter
RS485-2	/	Reserved

SK terminals definition

F Communication connection (Basic version)



Pin	Definition	Function
1	RS485-A1	Communicate with SK or Datalogger.
2	RS485-A2	
3	RS485-A1	
4	RS485-A2	
5	/	Reserved



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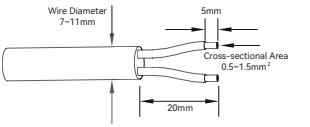

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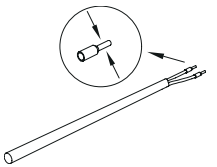

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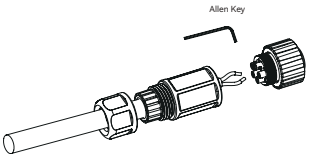

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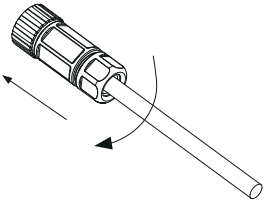

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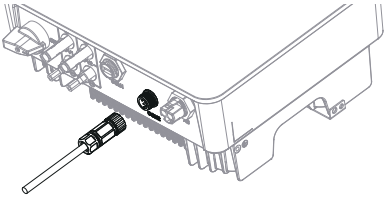
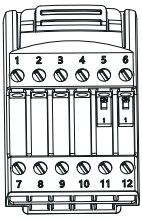
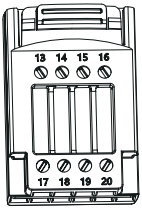


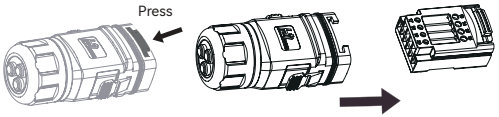
⑤

G Communication connection (Extended version)





Pin	Definition	Function
1	RS 485 A2	Reserved
2	RS 485 B2	
3	Fast stop +	Reserved
4	Fast stop -	
5	Dipswitch-1	Reserved
6	Dipswitch-2	120Ω terminating resistor dipswitch between RS 485 A1 and RS 485 B1
7	CT-S1	Detection of CT current for export limit
8	CT-S2	
9	RS 485 A1	① Communicate with SK for export limit & 24 hours load consumption. ② In case of multiple inverters, all the inverters can be daisy-chained via RS485 cables.
10	RS 485 B1	
11	RS 485 A1	
12	RS 485 B1	
13	/	Reserved
14	/	
15	COM D/0	Reserved
16	REF D/0	
17	DRM4/8	
18	DRM3/7	
19	DRM2/6	
20	DRM1/5	



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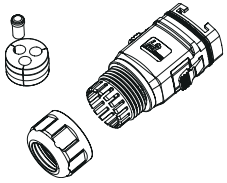

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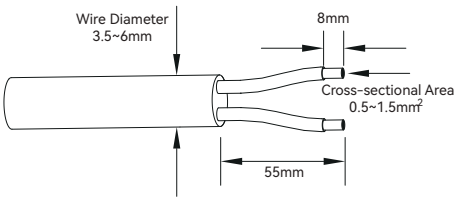

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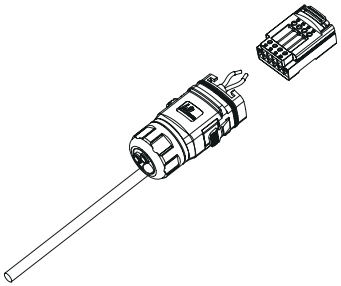

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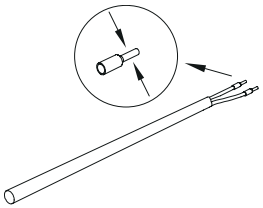

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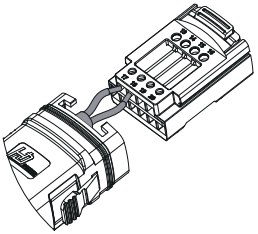

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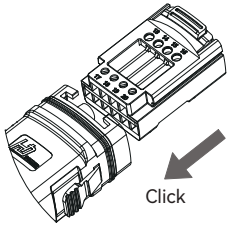

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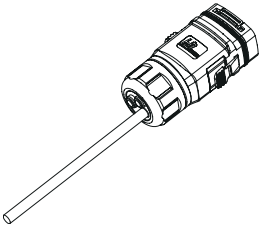

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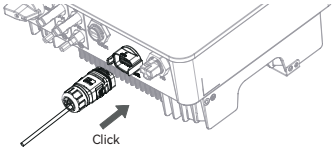
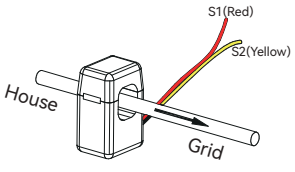


⑨

F CT installation (Optional)



The direction of the arrow is consistent with the direction of the arrow inside the CT.

2 WiFi Module Configuration Guide

1

Prepare a laptop or Smartphone and turn on the WLAN connection.

2

Searching for the corresponding WLAN in the WLAN connection list “WIFI-AP********” (*represents the last 8 numbers of the inverter SN), and tap connect.

3

Open the browser and enter 10.10.100.254.

4

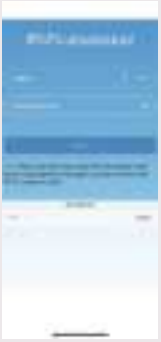
Tap“Scan”， A list of WiFi network names pop up.

5

Click and select the corresponding router network you want to configure.

6

Input the password of wireless network，(note the case difference)，Tap“Connect”



7

If connected successfully “Connection succeeded” will displayed. After successful configure, the indicator status of WIFI module will be steady on.

3 LAN Module Configuration Guide

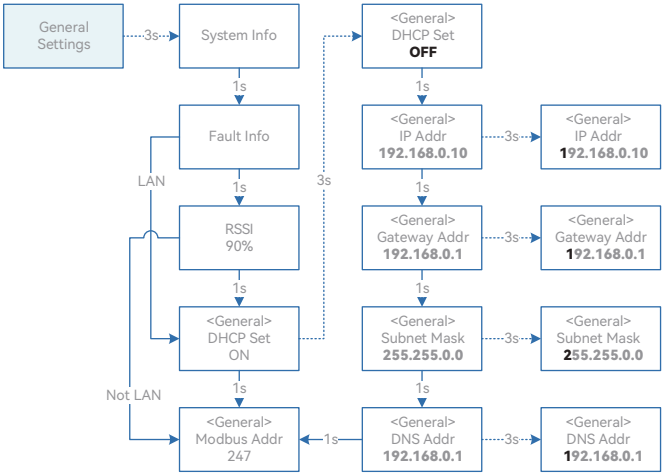
If DHCP is enabled on the router, the LAN module does not need to be configured. Otherwise, the LAN module will need to be configured on inverter screen.

① Find the “General Settings” by short pressing the button on the inverter screen.

② Enter the “General Settings” by long pressing the button on the inverter screen.

③ Find “DHCP set” by short pressing the button, then turn off DHCP function by short pressing and long pressing the button on the inverter screen.

④ Then set the “IP Address”, “Gateway Address”, “Subnet Mask” and “DNS Address”. Short press to change the number, long press to confirm the number and jump to the next number.



4 Indicator

A Inverter

Item	Indicator	Status		Description
1	Power and Alarm Indicator	Off		No power.
		Green	Quick flashing	Inverter entered self-test status.
			Slow flashing	Inverter entered waiting status.
			Breathe flashing	Inverter works normal.
		Red	Always on	An alarm or fault is detected, view the fault info on the display.
2	Grid Indicator	Off	Grid lost.	
		Slow flashing	Inverter detected grid but not running in on-grid mode.	
		Always on	Inverter works in on-grid mode.	
3	Communica-tion Indicator	Green	Always on	The inverter communication is running nor-mally.
		Green	Flashing	The inverter communicates with datalogger or SK through RS485.
4	Display	Display off to save power, press the button to wake up the display.		
5	Button	Switch display information and set parameters by short press or long press.		

B Monitoring Device

Indicator Status	Description
Off	Connection abnormal
Always On	Communicate with the server normally
Slow flashing	The monitoring device is not connected to the router or is not connected to the base station.
Quick flashing	The monitoring device is connected to the router or connected to the base station but not connected to the server.

Button	Description
Press 1 second	Reset device, the indicator goes off for 2 seconds, then flashes normally.
Press 5 second	Restore factory default settings, the indicator goes off for 2 seconds, then flashes once every 2 seconds, until the factory restore is completed.

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