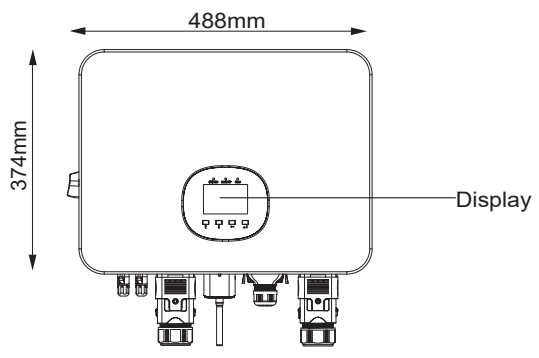
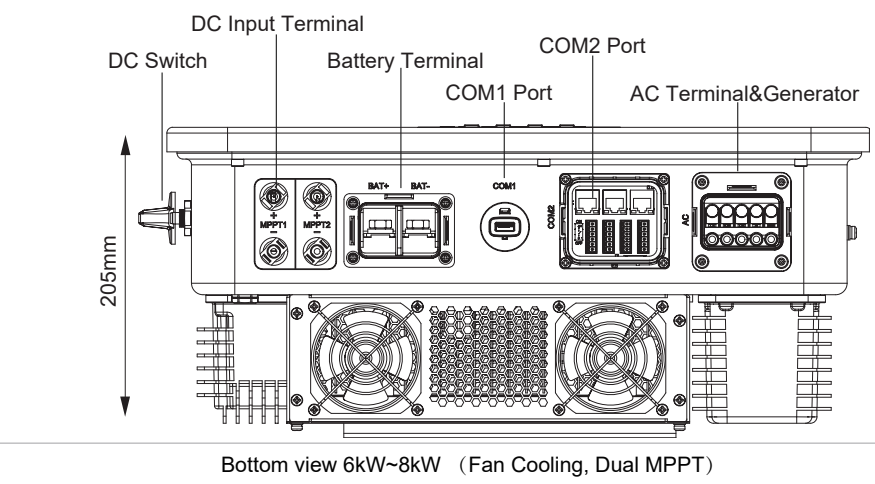
QUICK INSTALLATION GUIDE

Single Phase Hybrid Inverter Saturn 3K / 3.6K / 4K / 4.6K / 5K / 6K / 7.5K / 8K LVS Pro

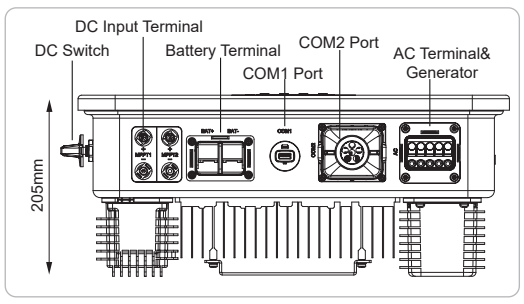
Scanning for user manual

01 Product Overview

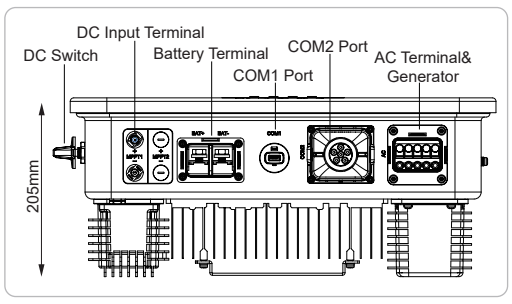




Bottom view 6kW~8kW （Fan Cooling, Dual MPPT）

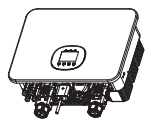
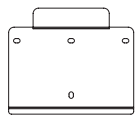
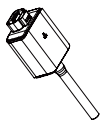
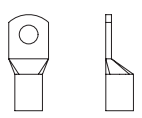
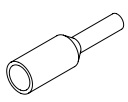
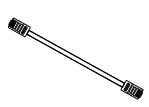
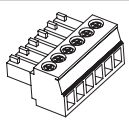
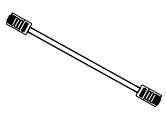
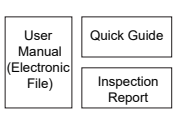


Bottom view 4~5kW
(Natural Convection, Dual MPPT)

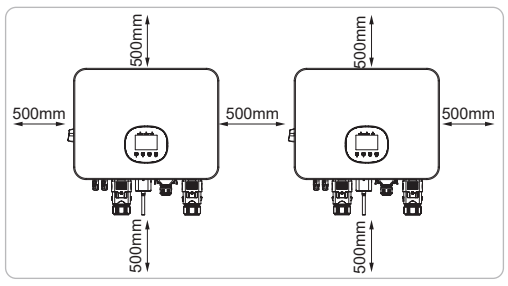


Bottom view 3~3.6kW
(Natural Convection, Single MPPT)

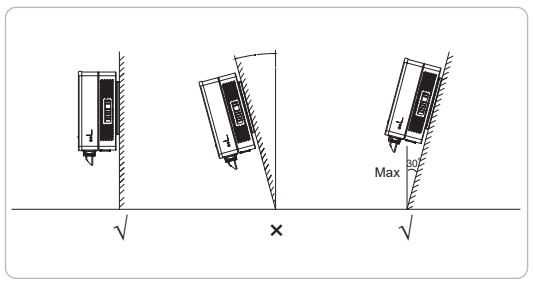
02 Packing list

 Inverter ×1	 Back Bracket ×1	 Expansion Bolt ×4	 AC Waterproof Cover	 PV Terminal 2
 CT 16D90A/ϕ16 90A:45mA Line10M	 Battery Waterproof Cover	 Monitoring Device (Optional) × 1	 Battery Crimping OT terminal × 2	 AC Crimping terminal ×10
 Pinhole terminal ×24 For communication wiring	 Parallel connection cable (Optional)	 6P communication terminal ×4	 BMS Cable	 User Guide

03 Installation Spacing and Angle

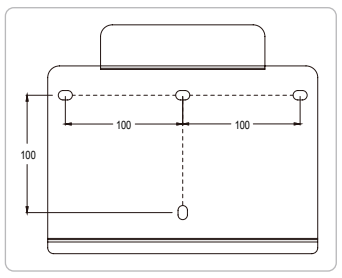


Recommended installation spacing

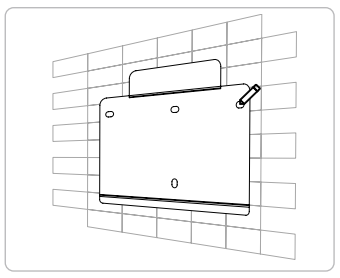


Recommended installation angle

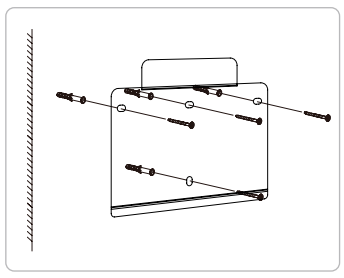
04 Wall Bracket Installation



Dimensions of wall bracket



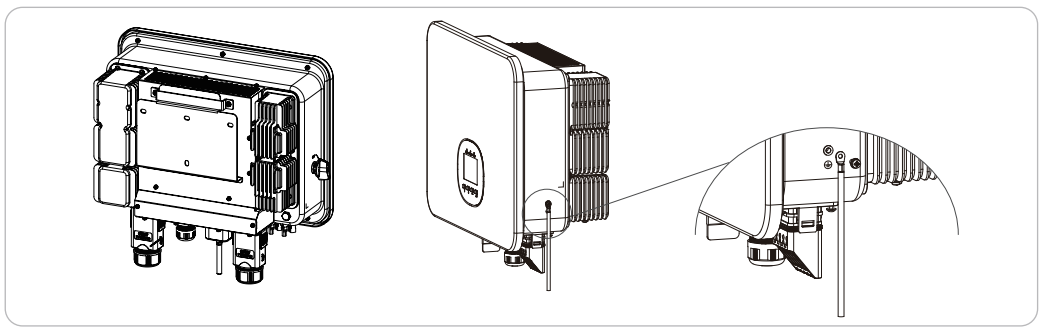
Mark the holes on the wall



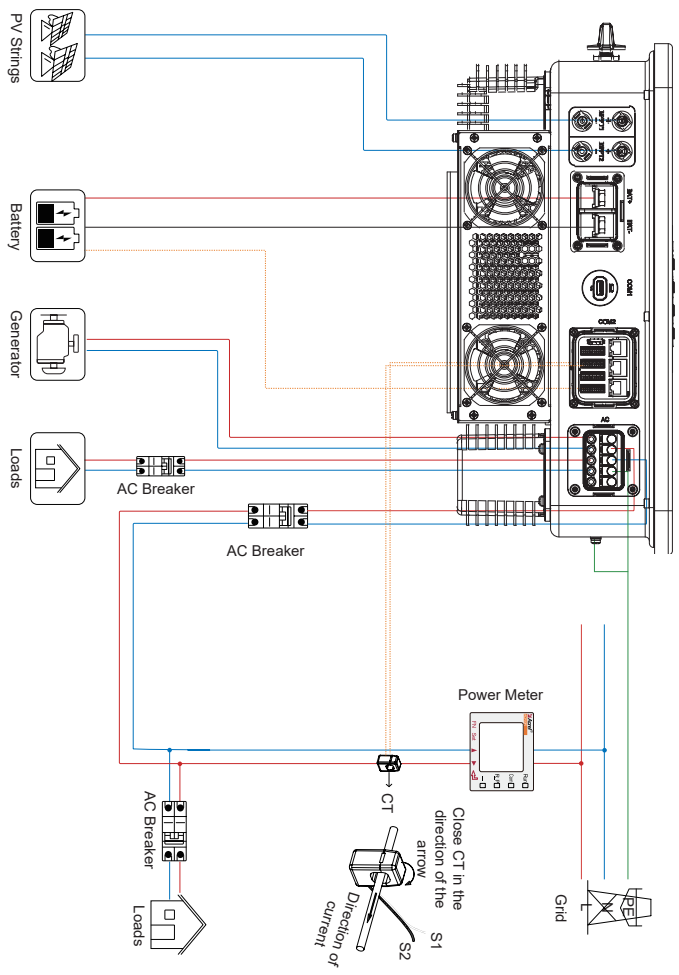
Fix the wall bracket

05 Mounting the Inverter

Lift the inverter, hang the back rail on the fixed wall bracket carefully.
Fix the grounding terminal to the PE wire with a proper tool and lock the grounding terminal to the grounding hole in the lower right side of the inverter(torque 1.5~2N·m).

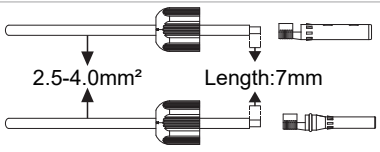


06 Electrical Wiring Diagram

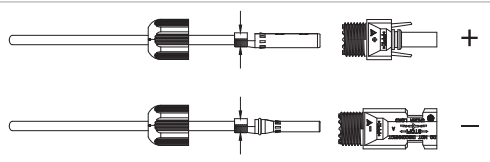


07 PV Connector Assembly Procedure and Connection

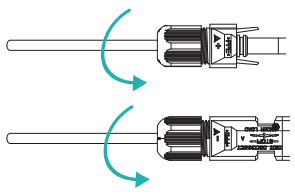
Cable type	Conductor cross-setional area (mm^2)	
	Scope (mm^2)	Recommended value (mm^2)
General photovoltaic cable	2.5-4.0	4.0



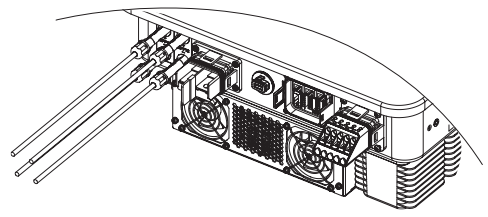
① Strip off the cable sheath



② Press the metal terminal



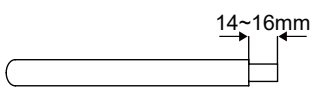
③ Tighten the DC connector



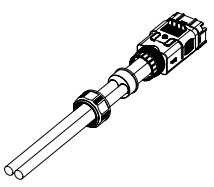
④ Insert the connectors

08 Inverter Battery Connector Assembly Procedure

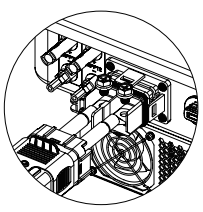
Model	Cable type	Outside diameter (mm)
Saturn 3-8K LVS Pro	Single-core Cable: 1AWG	12-14

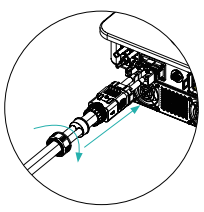


① Strip off the cable sheath



② **Install OT terminals on the cable ends and assemble the terminal housing.**



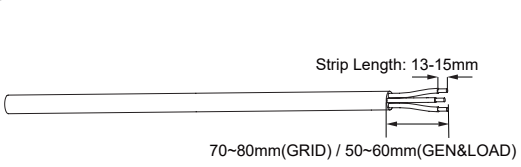


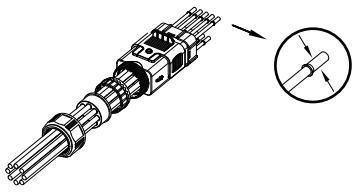
③ onnect OT terminals to battery port, then tighten screws with cross-head screwdriver (torque 5-6N·m).

④ Install the waterproof cover and tighten the Gland (torque 6~7N·m).

09 AC Output Connector Connection

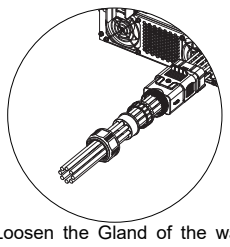
Model	Saturn 3K LVS Pro	Saturn 3.6K LVS Pro	Saturn 4.2K LVS Pro	Saturn 4.6K LVS Pro	Saturn 5K LVS Pro	Saturn 6K LVS Pro	Saturn 7.5K LVS Pro	Saturn 8K LVS Pro
Cable specification (Single-core Cable)	GRID: 8AWG (3pcs) LOAD: 8AWG (3pcs) GEN: 8AWG (2pcs)							
Cable specification (Multi-cores Cable)	GRID: 8AWG×3 (1pcs) LOAD: 8AWG×3 (1pcs) GEN: 8AWG×2 (1pcs)							
Outside diameter (mm)	Single-core Cable(GRID&LOAD&GEN:4-6.6) Multi-cores Cable(GRID&LOAD:10-15 GEN:10-13.5)							



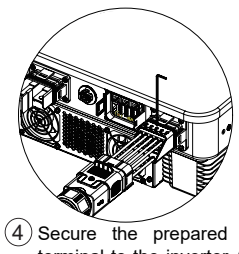


① Strip off the cable sheath

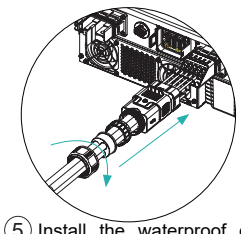
② Press the metal terminal



③ Loosen the Gland of the waterproof cover, pass the AC cables through the Gland, the waterproof ring and the waterproof cover in sequence.



④ Secure the prepared tubular terminal to the inverter AC port with a hex wrench.

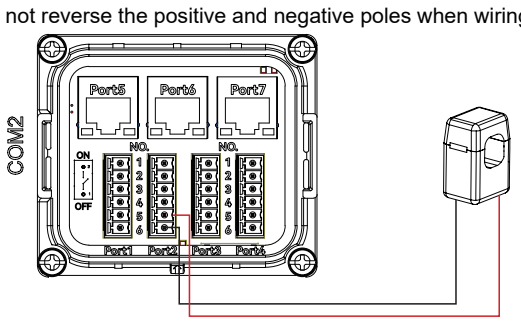


⑤ Install the waterproof cover and tighten the Gland (torque 6~7N·m).

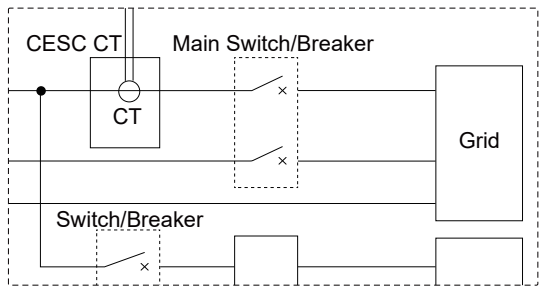
10 CT Connection

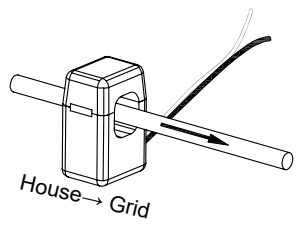
Part	Function	NO.	Definition
Part2 (CN4)	Single-core Cable: 1AWG	1	GND-S
		2	DI1_IN
		3	D03
		4	D03-
		5	CT+
		6	CT-

On the Inverter communication side, CT needs to be connected with the Port 2 NO.5 and NO.6 Terminal in the communication port. Do not reverse the positive and negative poles when wiring.



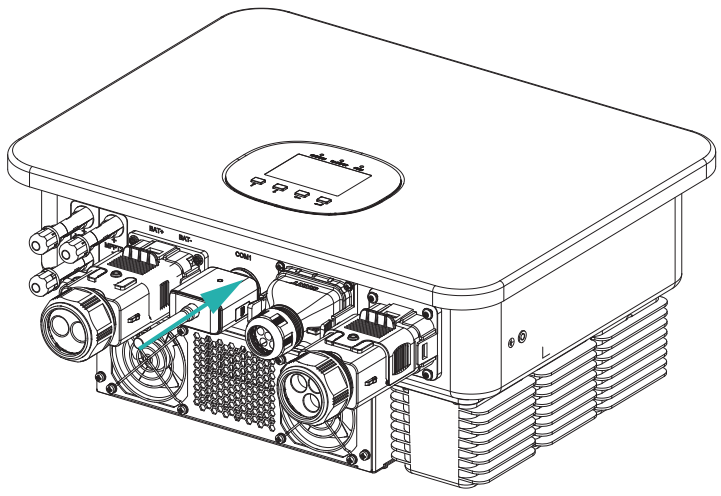
For the Fire wire side, please install the CT on the Fire wire between the house loads and the power grid.





11 Monitoring Device Installation

Saturn 3-8K LVS Pro series hybrid inverter can be monitored through WiFi, GPRS or LAN(Optional), and you can alternatively select according to your preference. Plug the Monitoring module into the Com1 port in the bottom of inverter. A slight “click” sound during the installation represents that the assembly is in place.



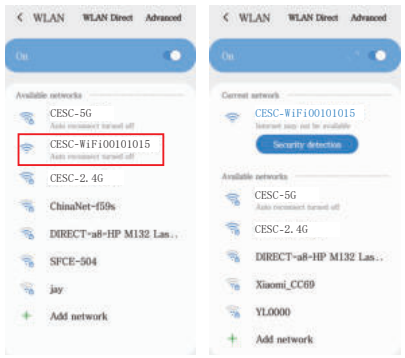
Monitoring Device Installation

12 Start the Inverter

When starting the inverter, follow these steps:
1) Turn on the AC breaker (close the AC circuit breaker).
2) Turn on the lithium battery switch.
3) Turn the DC switch in the inverter bottom to the “ON” position.
4) The inverter will start to check the DC and AC input parameters and self-check, and if everything is normal, the inverter will start to work according to the work mode which you set on the App. The inverter display and indicators will show relative parameters and status.

13 WiFi Module Confguration Guide

1. WiFi Module Confguration.



A. Insert the WiFi module into the COM port at the bottom of the inverter and power on the inverter, and the indicator on the module is off now.
B. Prepare a laptop or smartphone and turn on the WLAN connection.
C. Search for the WiFi name“CESC-WiFi********”which released by the module (*represents the last 8 numbers of the inverter SN) and click the WiFi name.
D. WiFi connection succeeded as shown in Figure.

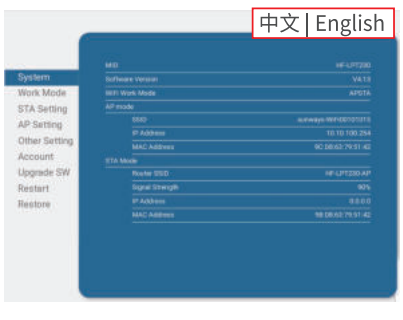
2. Open the browser and browse 10.10.100.254, you will see the following picture, input the username and password “admin” and click “Sign in”.



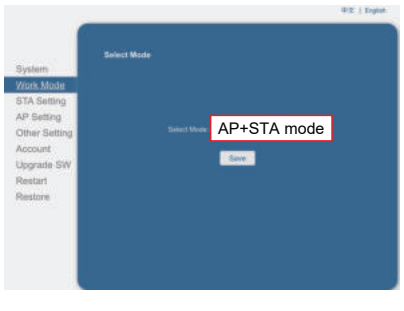




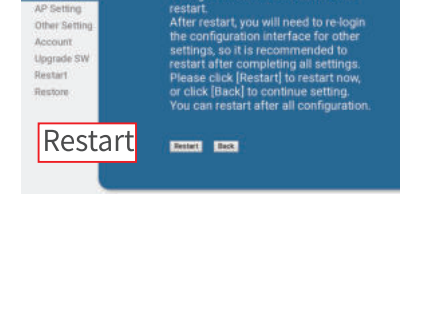
3. You will enter the interface “System”.
Note:Click the“chinese/English” in the upper right corner to switch the interface language.



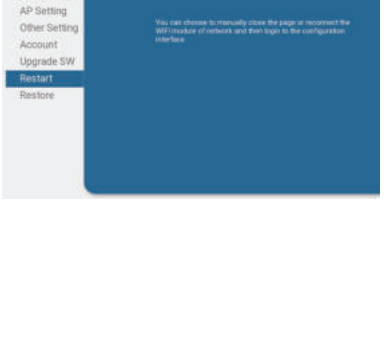
4. Please ensure the Work mode is selected to AP+STA mode.



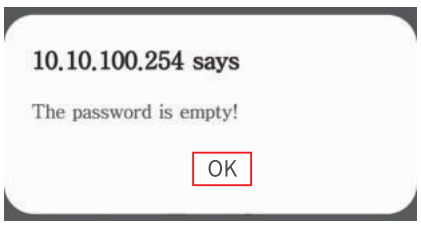
5. Click “STA Setting” to enter the WiFi configuration interface, and click“Scan".
A list of WiFi networks will be displayed.



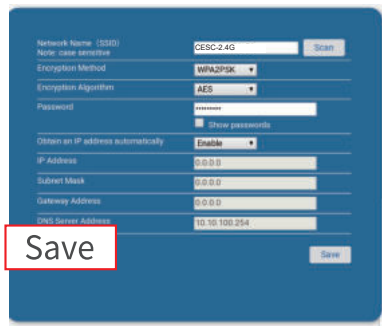
6. Select the WiFi that you are going to connect and click“OK".
Note: Only support 2.412GHz-2.484GHz router at present.



7. Now, a notice will pop-up and reminds you to input the WiFi password, click“OK”.



8.Input the password in the blank and click “Save".
Note: Password is case sensitive.



9. The system will show“ Saved Successfully !” click “Restart” to complete the WiFi configuration.

10. After the configuration succeeded, the indicator on the WiFi module will be always on.