04 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).

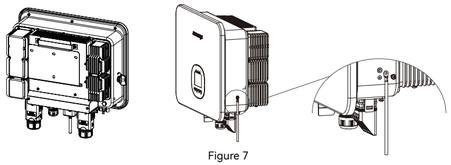


Figure 7

05 Electrical Wiring Diagram

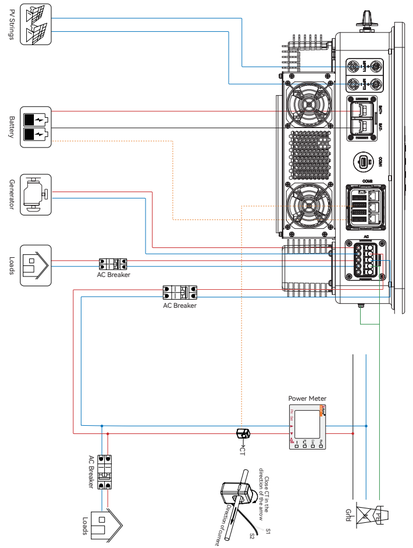
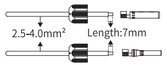


Figure 8 Electrical wiring diagram

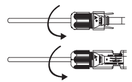
06 PV Connector Assembly Procedure and Connection

Cable type	Conductor cross-setional area (mm²)	
	Scope (mm²)	Recommended value (mm²)
General photovoltaic cable	2.5-4.0	4.0

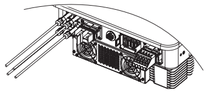


① Strip off the cable sheath

② Press the metal terminal



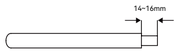
③ Tighten the DC connector



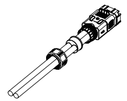
④ Insert the connectors

07 Inverter Battery Connector Assembly Procedure

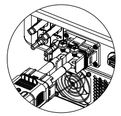
Model	Cable type	Outside diameter (mm)
STH 3-8KTL-LS	Single-core Cable: 1AWG (2pcs)	12-14



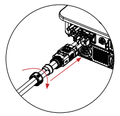
① Strip off the cable sheath



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

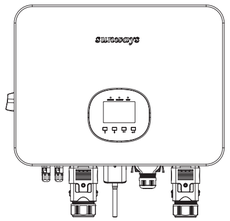


③ onnect OT terminals to battery port, then tighten screws with cross-head screwdriver (torque 5-6N·m).



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

sunways



QUICK INSTALLATION GUIDE

STH 3-8KTL-LS
Low Voltage Hybrid Inverter
Single Phase 1/2 MPPT

Sunways Technologies Co.,Ltd.
Hotline: +86 400-9922-958
Website: www.sunways-tech.com
Address: No. 1, Second Road, Green Industrial Zone, Chongshou Town, Cixi City, ZheJiang Province, PEOPLE' S REPUBLIC OF CHINA

S11-00128-00

Part 1 Inverter Installation And Wiring

01 Packing List

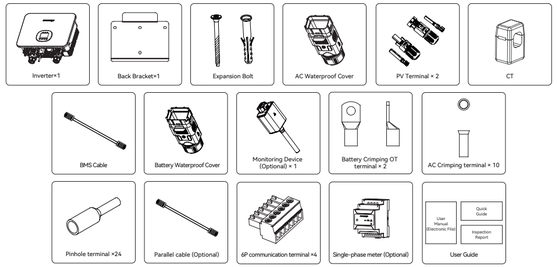


Figure 1 Packing list

02 Installation Spacing and Angle

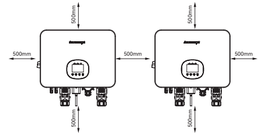


Figure 2 Recommended installation spacing

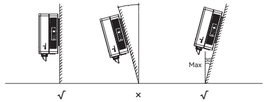


Figure 3 Recommended installation angle

03 Wall Bracket Installation

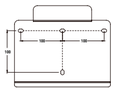


Figure 4 Dimensions of wall bracket

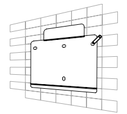


Figure 5 Mark the holes on the wall

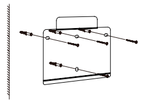
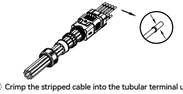


Figure 6 Fix the wall bracket

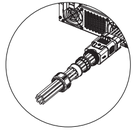
08 AC Output Connector Connection

Model	STH-3KTL -LSS	STH-3.6KTL -LSS	STH-4.2KTL -LS	STH-4.6KTL -LS	STH-5KTL -LS	STH-6KTL -LS	STH-7.5KTL -LS	STH-8KTL -LS
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)							

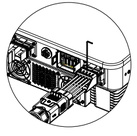
① Strip cable insulation as illustrated.



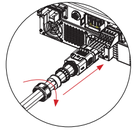
② Crimp the stripped cable into the tubular terminal until tight.



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.

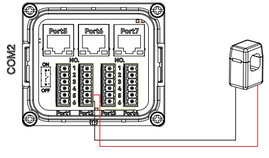


⑤ Install the waterproof cover and tighten the Gland (torque 6~7N·m).

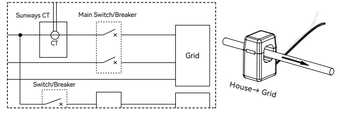
09 CT Connection

Port	Function	NO.	Definition
Port2 (CN4)	DI1/DO3/CT	1	GND-S
		2	DI1_IN
		3	DO3
		4	DO3-
		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.



10 Monitoring Device Installation

Sunways STH 3-8KTL-LS 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.

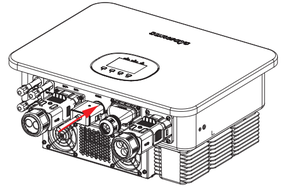


Figure 10 Monitoring Device Installation

11 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.

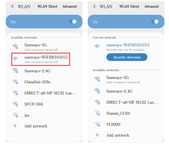
3) Turn the DC switch in the inverter bottom to the “ON” position.

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.

Part 2 Monitoring Device Configuration Guide

01 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“sunways-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 14.

Figure 14

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”.

Figure 15

Figure 16

Figure 17

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

Figure 18

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

Figure 19

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

Figure 20

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

Figure 21

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

Figure 22

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

Figure 23

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

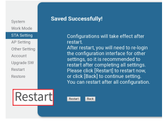


Figure 24

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

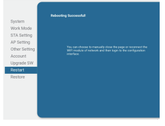


Figure 25