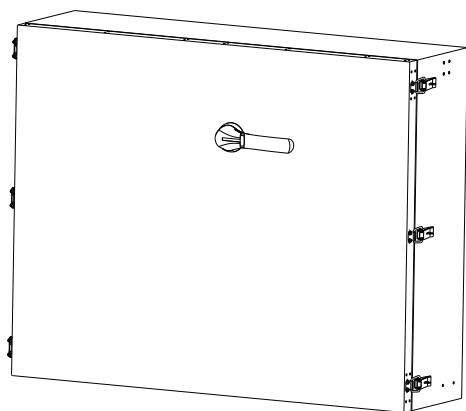




# Quick Installation Guide

## Version 1.0

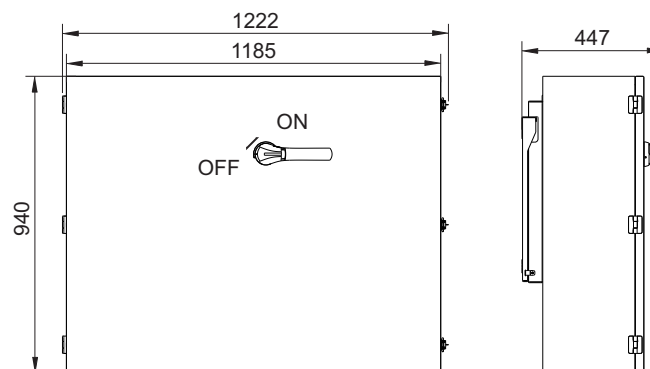
### AC Combiner Box



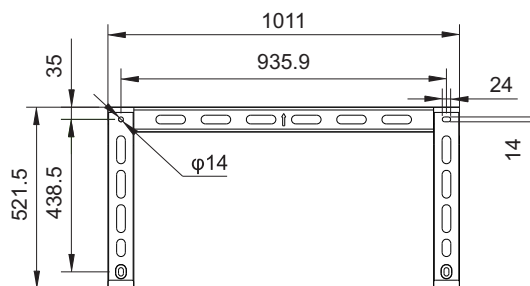
Ginlong Technologies Co., Ltd.

## 1 Bracket mounting

AC Combiner box size



Back plate size



## 2 Safety Symbols

Safety symbols used in this manual, which highlight potential safety risks and important safety information, are listed below:



### WARNING

Symbol indicates important safety instructions, which if not correctly followed, could result in serious injury or death.



### NOTE

Symbol indicates important safety instructions, which if not correctly followed, could result in damage to or the destruction of the AC Combiner.



### CAUTION, RISK OF ELECTRIC SHOCK

Symbol indicates important safety instructions, which if not correctly followed, could result in electric shock.



### CAUTION, HOT SURFACE

Symbol indicates safety instructions, which if not correctly followed, could result in burns.



### WARNING

Electrical installations must be done in accordance with local and national electrical safety standards.



### CAUTION

Do not remove cover until five (5) minutes after disconnecting all sources of supply have passed, and this can only be done by a service technician. The warranty may be voided if any unauthorized removal of cover occurs.



### CAUTION

To avoid risk of burns, do not touch the surface when the AC Combiner is operating. AC-Combiner must be installed out of the reach of children.



### NOTE:

If choosing aluminum alloy cable, you must use copper aluminum transfer terminal in order to avoid direct contact between copper bar and Aluminum alloy cable. (Please select a copper aluminum transfer terminal based on your cable specification).

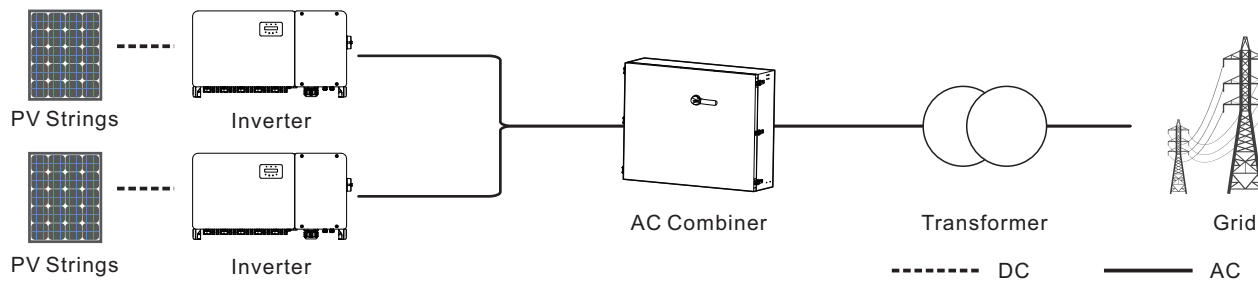


### WARNING

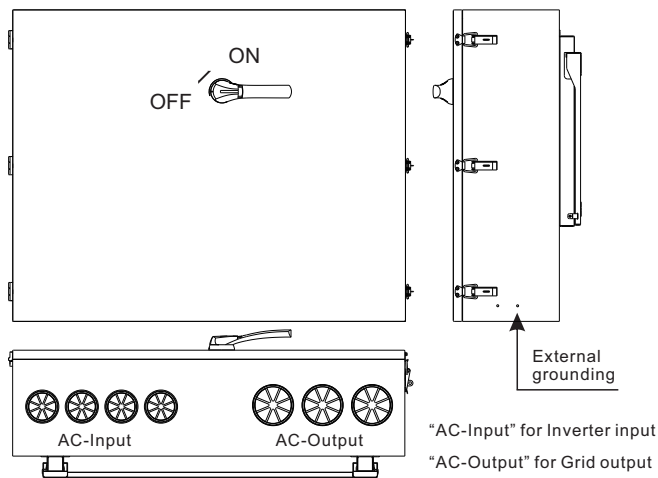
High Voltage.  
AC and DC measurements should be made only by qualified personnel.

SAVE THESE INSTRUCTIONS – This manual contains important instructions for Model that shall be followed during installation and maintenance of the AC Combiner.

### 3 Grid-tied PV System

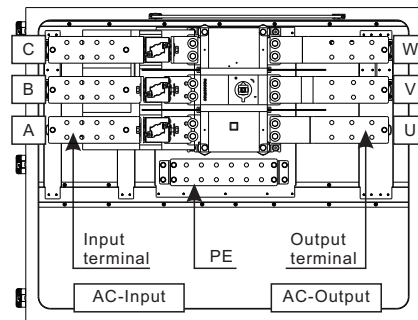


### 4 Wire connection



Wire connection steps:

1. Please turn the switch of the AC Combiner off before connecting the cable.
2. Open the cover of the AC combiner box by loosen the four screws on the cover.
3. Run the inverter AC cable into the left or right conduit.  
(Cable outer diameter range: 48mm~56mm)
4. Connect the 3 wires to the left or right terminals with the correct sequence.
5. Run the output wires from the center two pairs of terminals to the output conduit.
6. Connect the grounding wire on the side of the AC combiner box with >16mm<sup>2</sup> wire.
7. Reassemble the cover the AC combiner box. Screw torque 2N.m.



Name	Description	Remark
A	1,2,3, and 4 inverters in same phase cables connect to the same phase number inside the AC combiner.	See attached diagram
B		
C		
U	A phase of AC combiner box	
V	B phase of AC combiner box	
W	C phase of AC combiner box	
PE	Internal grounding	
Instruction	1. Inverters A, B, C, and PE are connected to the bottom hole on the left side of the AC combiner in sequence. (Example phase A is connected to the first hole on the left side; phase B into the second left hole..... And so on) 2. The same phase line of multiple inverters corresponds to the same hole position of the AC combiner.	

Cable type	Input terminal	Output terminal
Wire cross-section range	70~185mm <sup>2</sup>	185~300mm <sup>2</sup>
Wire Type	Copper	Copper or Aluminium
Terminal Fastening Torque	75N.m~80N.m	

1. Correctly insert the cables through the terminal and fasten them.
2. Cable diameter 48-56mm.

### 5 Specifications

Model Name	Solis -AC Combiner -800V/1000A	Solis -AC Combiner -800V/800A	Solis -AC Combiner -800V/630A
Input Parameters			
Number of AC Input Circuits	3,4	3	2
OCPD	Fuse		
Rated Input Voltage	800Vac		
Rated Input Current	3 x 253A, 4 x 185A	3 x 185A	2 x 253A
Input Conductor Size	3 x (300-750kcmil CU/AL)		
Input Conduit Knockout Size	Removable Bottom Plate		
Output Parameters			
Rated Output Current	753A	555A	502A
Output Conductor Size	3 x (2 x 600-1000kcmil CU/AL)		
Output Conduit Knockout Size	Removable Bottom Plate		
Short Circuit Interrupt Capacity	65kA		
Output Fuse Rating	1000A	800A	630A
Mechanical			
Dimension (HxWxD)	940 x 1225 x 380mm		
Weight	70kg		
Equipment Grounding	Yes		
Padlockable Enclosure (LOTO)	Yes		
Breather Vent	Yes		
Grounding Busbar	No		
Environment			
Enclosure Protection Degree	NEMA Type 3R		
Operating Temperature Range3	-22°F to +140°F / -30°C to +60°C (derating from +107°F / +40°C)		
Operating Humidity	0 to 100%		
Operating Altitude	9842ft / 3000m (no derating) 13120 /4000m (max)		
Safety			
Certifications and Standards	UL1741, CSA-C22.2 No.107.1-16		
Warranty			
Standard	5 Years		
Extended Terms	10, 15 and 20 years		

### 6 Completion

You have finished the initial installation.

You may use the Soliscloud APP to link the datalogger to your local router. Please refer to the datalogger installation manual for the detailed configuration.