HYBRID INVERTER

SOLARMG OST-3~8K

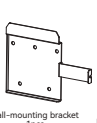
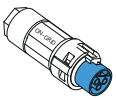
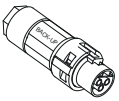
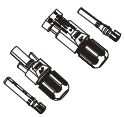
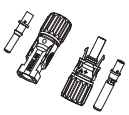
Hybrid Inverter

Quick Installation Guide

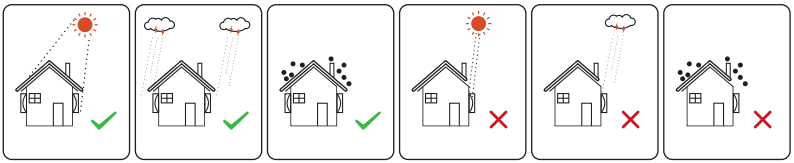
ENGLISH VERSION

1 Installation

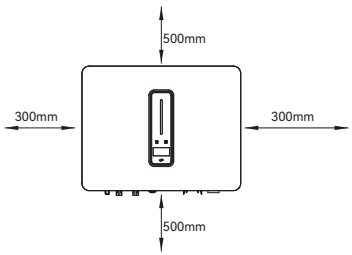
A Check Packing List

Inverter 1pcs	 Wall-mounting bracket 1pcs M5 screws 1pcs Expansion plug set 5pcs	 On-grid connector set (Blue) 1pcs	 Back-up connector set (Black) 1pcs
 PV terminal SG3-3.6K-30 1 pair / SG4.2-8K-30 2 pairs	 Battery terminal 1 pairs	Meter with 3 CTs 1pcs	COM2 connector set 1pcs
Monitoring device 1pcs	10m meter communication cable 1pcs 3m battery communication cable 1pcs	PE terminal 1pcs	User Manual User guide 3pcs

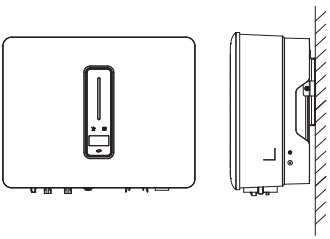
B Installation Location



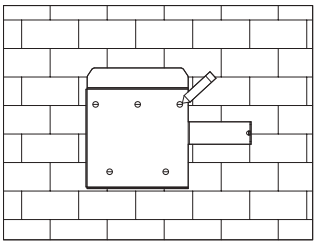
C Installation Space



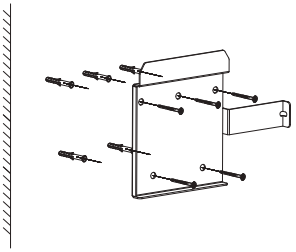
D Installation Angle



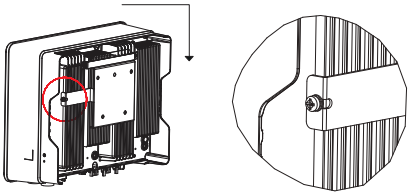
E Mark the Position and Drill Holes



F Fix Wall Bracket



G Mounting Inverter



H Grounding Terminal Connection

2 Electrical Connection

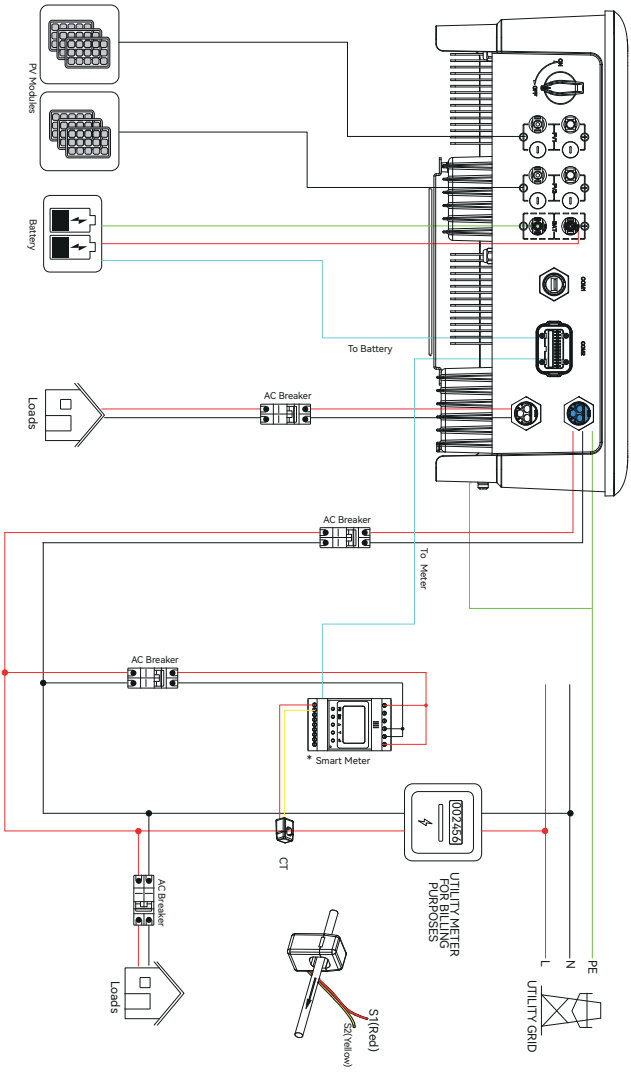
A Cable Requirements

Cable types	Cable requirements	
	Outside diameter	Conductor core section
AC cable	10.0-18.0 mm	2.5-10.0 mm^2
PV cable	5.9-8.8 mm	2.5-4.0 mm^2
Battery power cable	5.0-8.0 mm	10 mm^2

AC Connector: Please distinguish the on-grid and back-up connector, On-grid connector is blue and Back-up connector is Black.

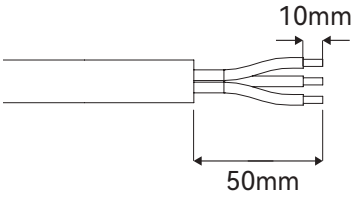
Battery power cable: If the conductor core of the battery cable is too small, which may cause poor contact between the terminal and the cable, please use the cable specified in the above table, or contact SOLARMG to purchase terminals of other specifications.

B Electrical Wiring Diagram



*Smart Meter consists of ACR10R and RMM. Define the cable connections for the meter based on the actual meter model and refer to Meter Terminals Definition. This cable diagram is for reference only.

C AC Connection



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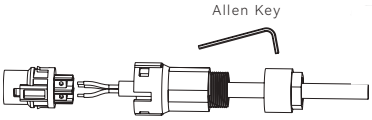

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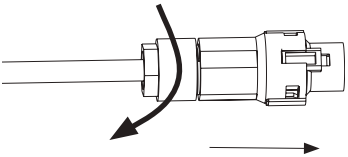

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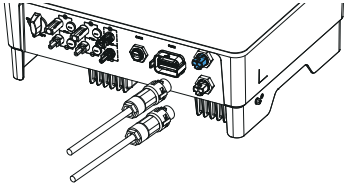

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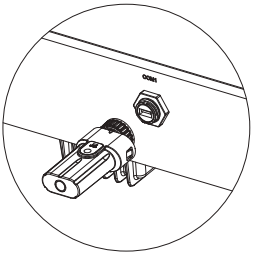
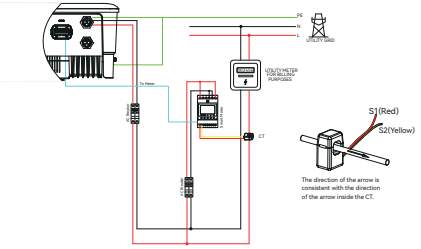
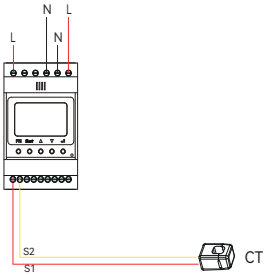
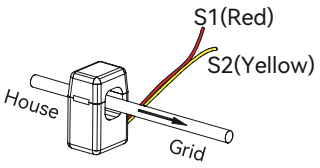
D Monitoring Device Installation



E Meter and CT Connection



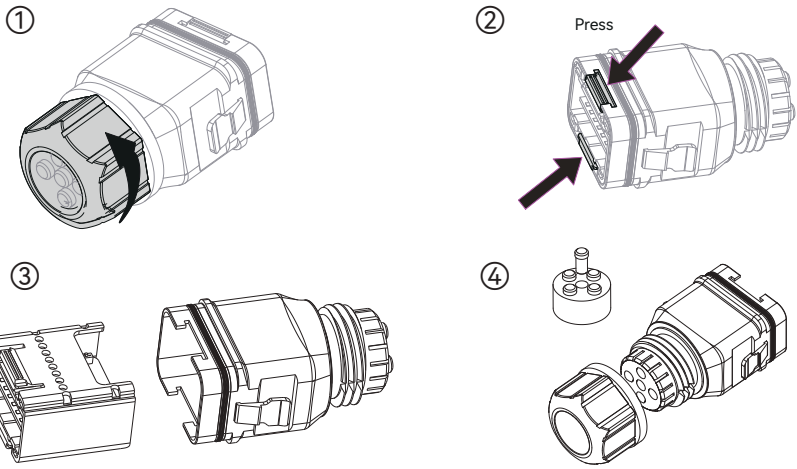




Meter Terminals Definition

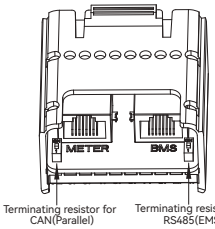
No.	Definition		Function
	ACR10R	RMM	
1	L		L/N connect to grid to detect power grid voltage
2	/		
3	/		
4	N		
5	L-S1		To detect the CT current and direction
6	L-S2		
7	/		
8	/		
9	/		
10	/		
11	/	PE	Ground connection
12	L	/	Power supplied from grid
13	N	/	
RS485	/	Reserve	/
	RS485	RS485-2	Communicate with hybrid inverter
ANT	/	Reserve	/
LAN	/	Reserve	
Type-C	/	Type-C	Specified Debug Interface. Do not use it by non-professionals

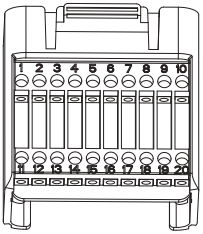
F Communication Connection



Part 1
Installation

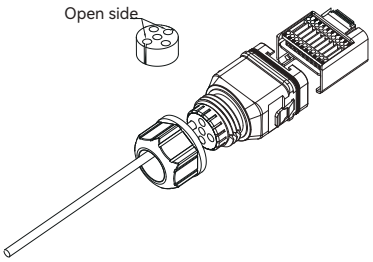
Part 2
Electrical Connection

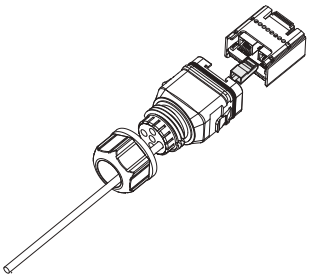




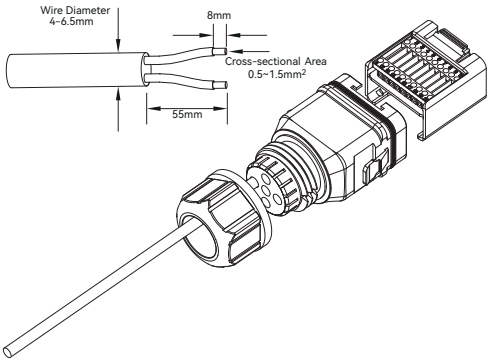
Pin	Definition	Function
RJ45-1	RS 485	Communicate with Meter
RJ45-2	CAN	Communicate with BMS
1	COM	Multifunction Relay
2	NO (Normally Open)	
3-4	/	Reserved
5	DRM4/8	DRED For Australia and New Zealand
6	DRM3/7	
7	DRM2/6	
8	DRM1/5	
15	COM D/0	
16	REF D/0	
9-10	/	Reserved
11	Fast stop +	Fast stop
12	Fast stop -	
13	485 B1	EMS
14	485 A1	
17	CANL_P	CAN for parallel connection of inverters
18	CANH_P	
19-20	/	Reserved

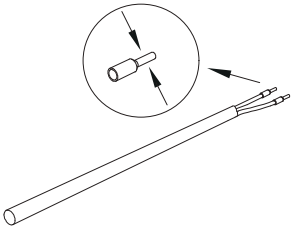
Connect the Meter and BMS Communication Cables

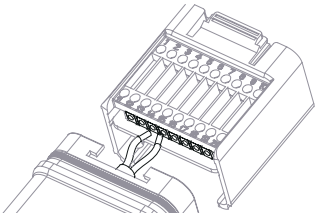




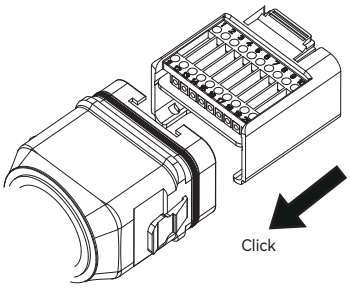
Connect Other Cables







Installing the COM Connector



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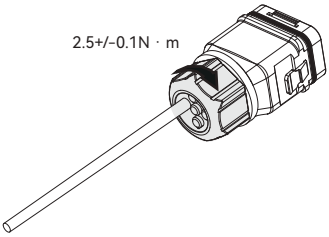

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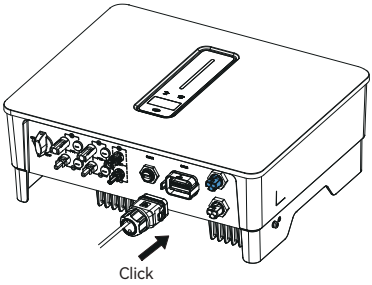
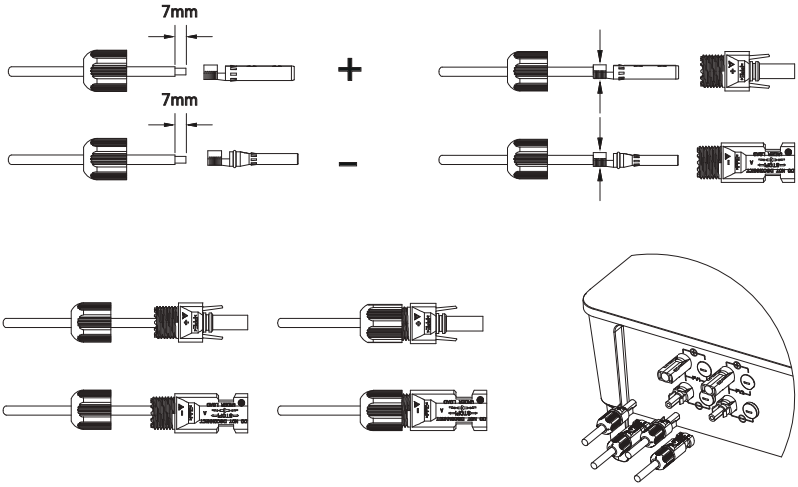
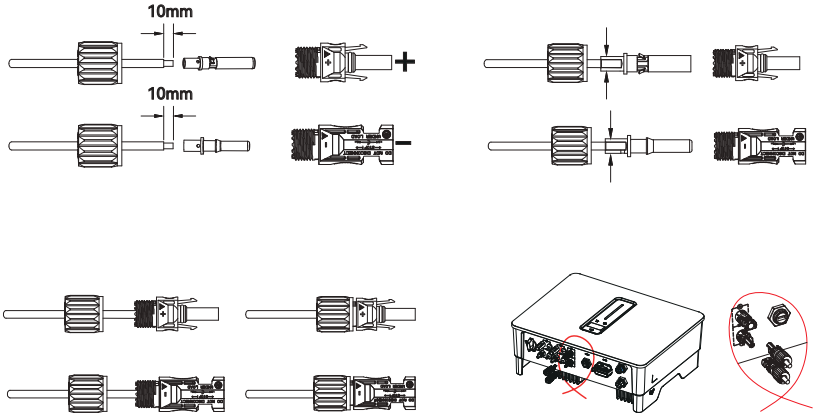


G PV String Connection



PV Max. Input voltage is 550V without battery, or 500V with battery, otherwise inverter will be waiting.

H Power Cable of the Battery Connection



SOLARMG
designed in Italy