

HYBRID INVERTER
SOLARMG SG-25~50K
Hybrid Inverter



Quick Installation Guide

ENGLISH VERSION

Part 1

Installation

Part 2

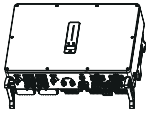
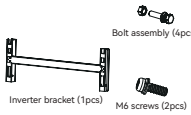
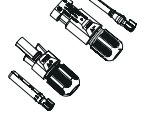
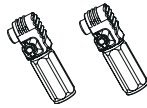
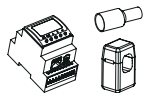
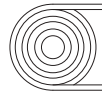
Electrical Connection

1

Installation

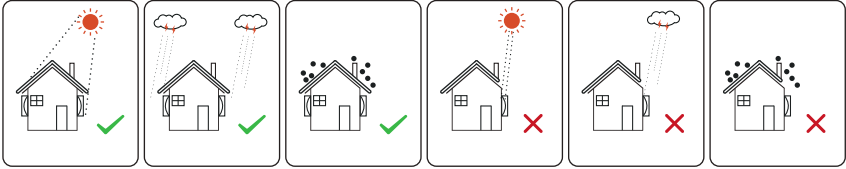
A

Check Packing List

 Inverter 1pcs	 Bolt assembly (4pcs) Inverter bracket (1pcs) M6 screws (2pcs)	 AC connector set (3 pcs)	 PV terminal 5G-25-50K 8 pairs / 5G-40-50K-P 6 pairs
 Battery terminal (1 pairs)	 Meter with 3 CTs 1pcs	 COM2 connector set (1pcs)	 COM3 connector set (1pcs)
 Monitoring device 1pcs	 10m meter communication cable 1pcs 3m battery communication cable 1pcs	 PE terminal 1pcs	 User guide

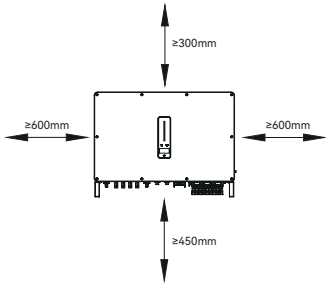
B

Installation Location



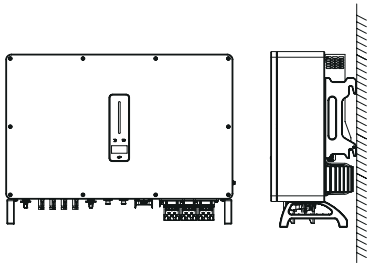
C

Installation Space



D

Installation Angle



Part 1

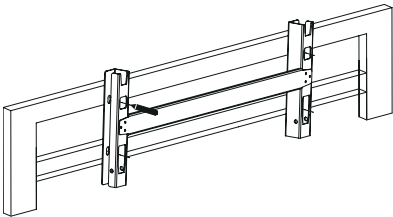
Installation

Part 2

Electrical Connection

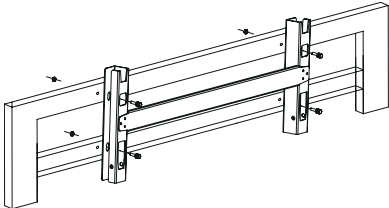
E

Mark the Position and Drill Holes



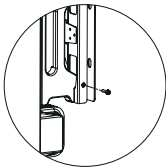
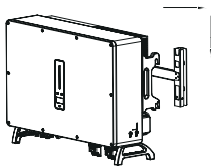
F

Fix Wall Bracket



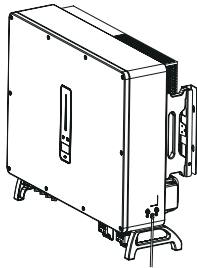
G

Mounting Inverter



H

Grounding Terminal Connection



2 Electrical Connection

A

Cable Requirements

Cable types	Cable requirements	
	Outside diameter	Conductor core section
AC cable	20.0-30.0 mm	10.0-25.0mm ² (Flexible cable)
		10.0-35.0mm ² (Hard cable)
PV cable	5.9-8.8 mm	4.0 mm ²
Battery power cable	9.8±0.2 mm	25.0 mm ²

Please use the cable specified in the above table. If the conductor core of the cable is too small,which may cause poor contact between the terminal and cable.

Part 1

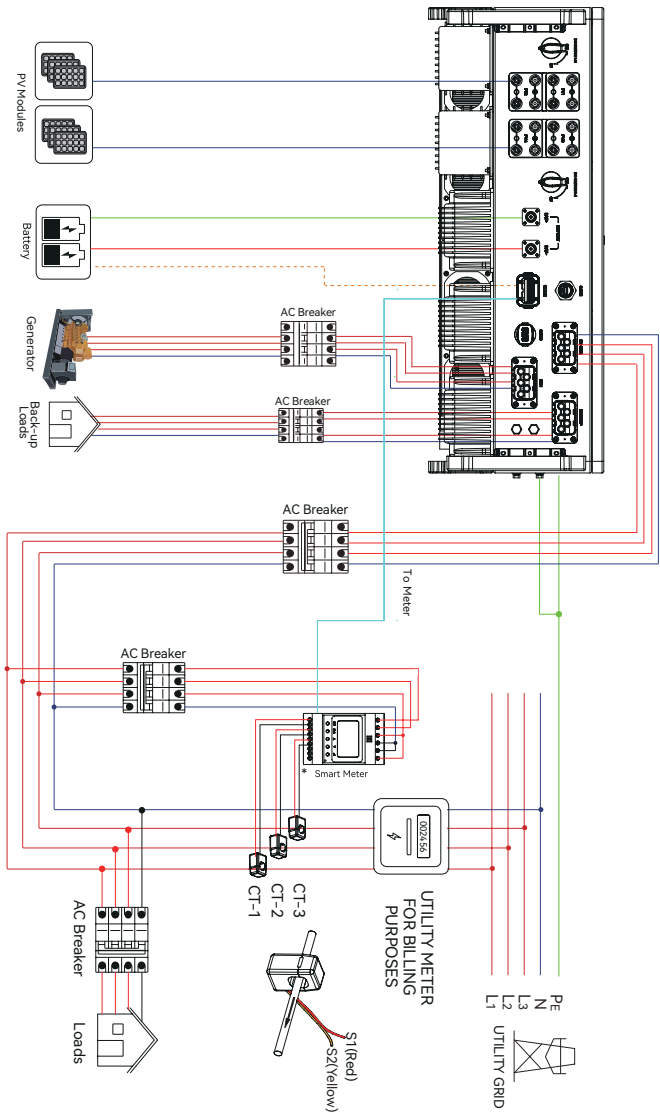
Installation

Part 2

Electrical Connection

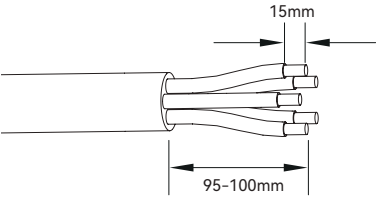
B

Electrical Wiring Diagram

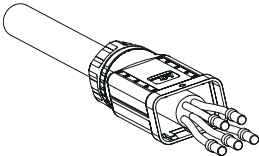


*Smart Meter consists of ACR10R and RMM. Define the cable connections for the meter based on the actual meter model and refer to Meter Terminals Definition. This cable diagram is for reference only.

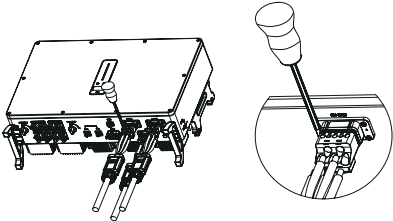
C AC Connection



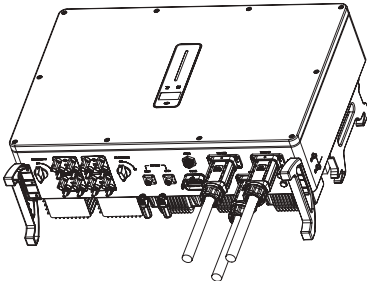
①



②

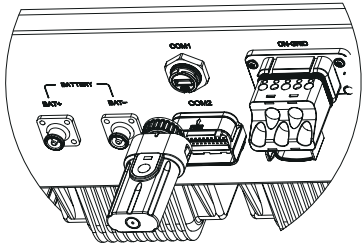


③

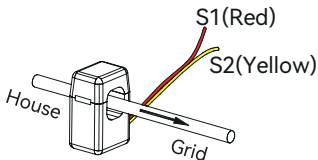
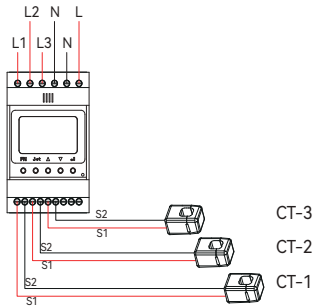
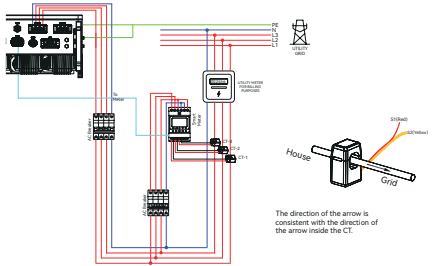


④

D Monitoring Device Installation



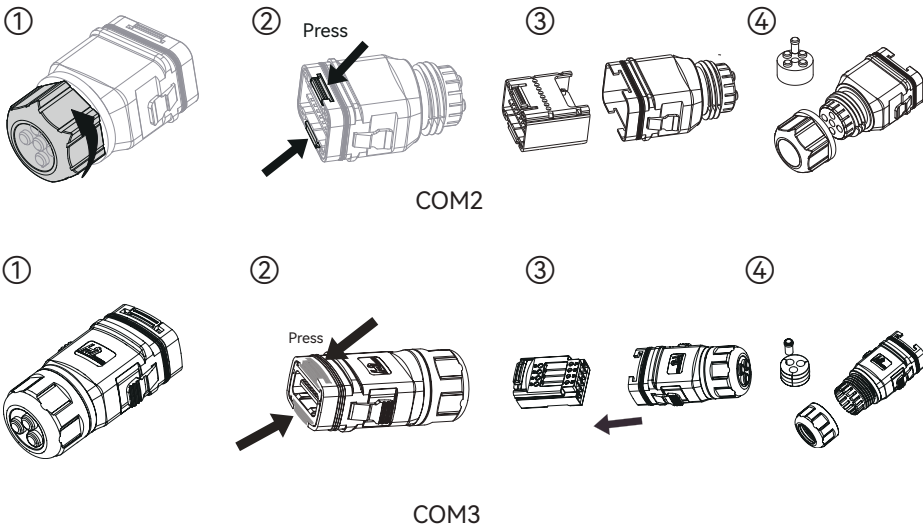
E Meter and CT Connection

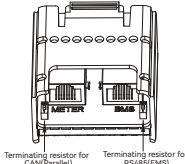
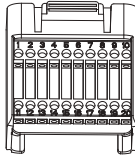


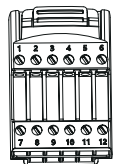
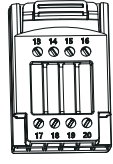
Meter Terminals Definition

No.	Definition		Function
	ACR10R	RMM	
1		L1	L1/L2/L3/N connect to grid to detect power grid voltage
2		L2	
3		L3	
4		N	
5		L1-S1	To detect the CT current and direction
6		L1-S2	
7		L2-S1	
8		L2-S2	
9		L3-S1	
10		L3-S2	
11	/	PE	Ground connection
12	L	/	Power supplied from grid
13	N	/	
RS485	/	Reserve	Communicate with hybrid inverter
	RS485	RS485-2	
ANT	/	Reserve	
LAN	/	Reserve	
Type-C	/	Type-C	Specified Debug Interface. Do not use it by non-professionals

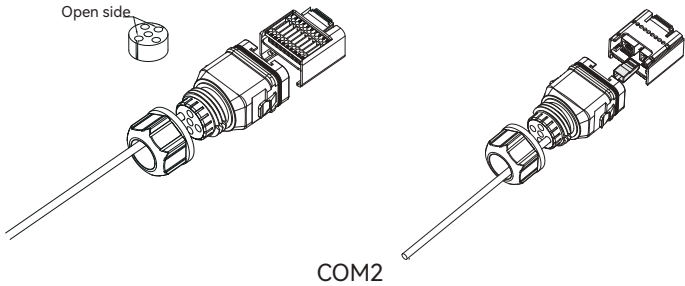
F Communication Connection



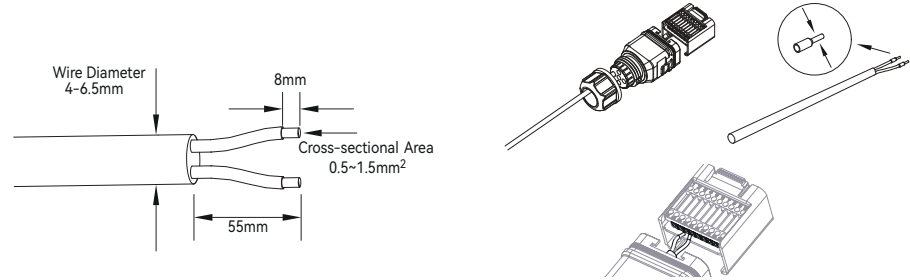
  COM2	Pin	Definition	Function
	METER (RJ45-1)	RS 485	Communicate with Meter
	BMS (RJ45-1)	CAN	Communicate with BMS
	1	COM	DO-1 (Multifunction Relay)
	2	NO (Normally Open)	
	3-4	/	Reserved
	5	DRM4/8	DRED For Australia and New Zealand
	6	DRM3/7	
	7	DRM2/6	
	8	DRM1/5	
	15	COM D/0	
	16	REF D/0	
	9-10	/	Reserved
	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

  COM3	Pin	Definition	Function
	1-6	/	Reserved
	7	COM	DO-2 (Multifunction Relay)
	8	NO	
	9-10	/	Reserved
	11	COM	DO-3 (Multifunction Relay)
	12	NC	
	13-16	/	Reserved
	17	4-20mA_OUT	4-20mA analog output
	18	GND	
	19	GND	0-10V analog output
	20	0-10V_OUT	

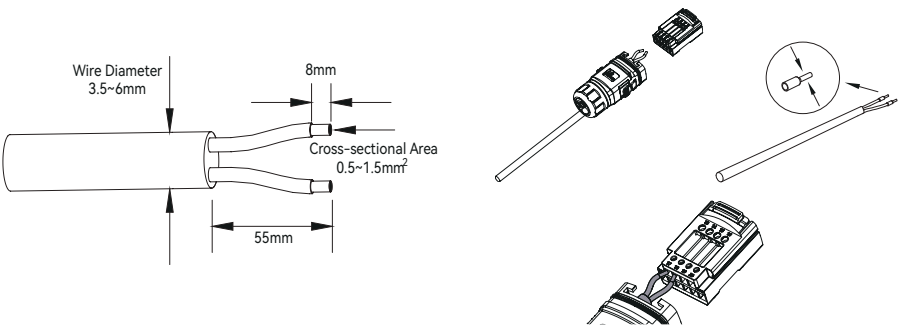
Connect the Meter and BMS Communication Cables



Connect Other Cables

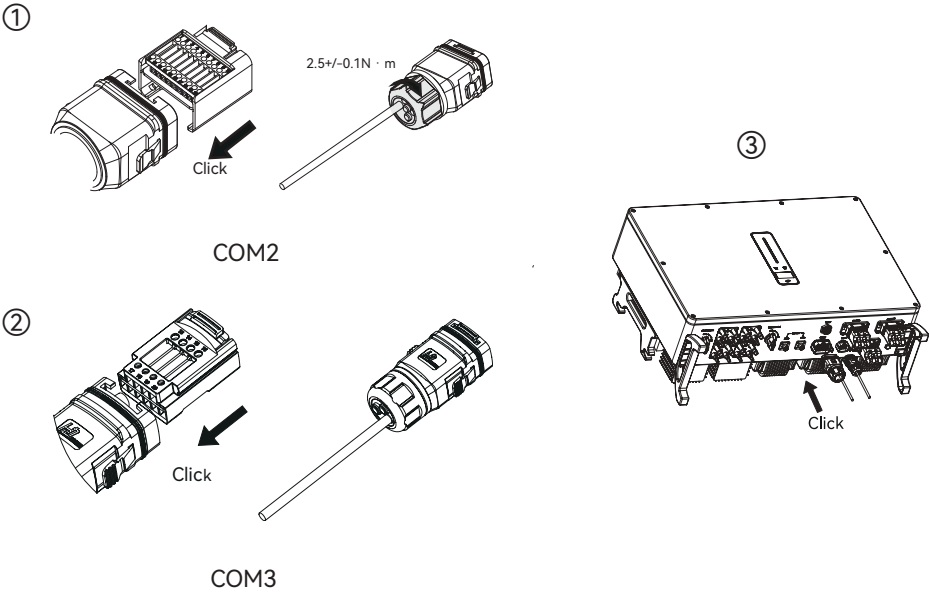


COM2



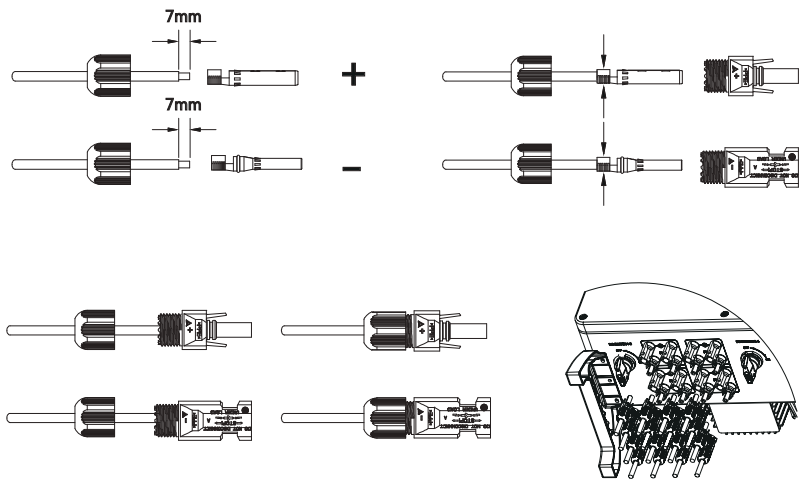
COM3

Installing the COM Connector



G

PV String Connection



PV Max. Input voltage is 850V , otherwise inverter will be waiting.

H

Power Cable of the Battery Connection

