

HYBRID INVERTER

QUICK INSTALLATION GUIDE

PrimePower Hybrid Inverter

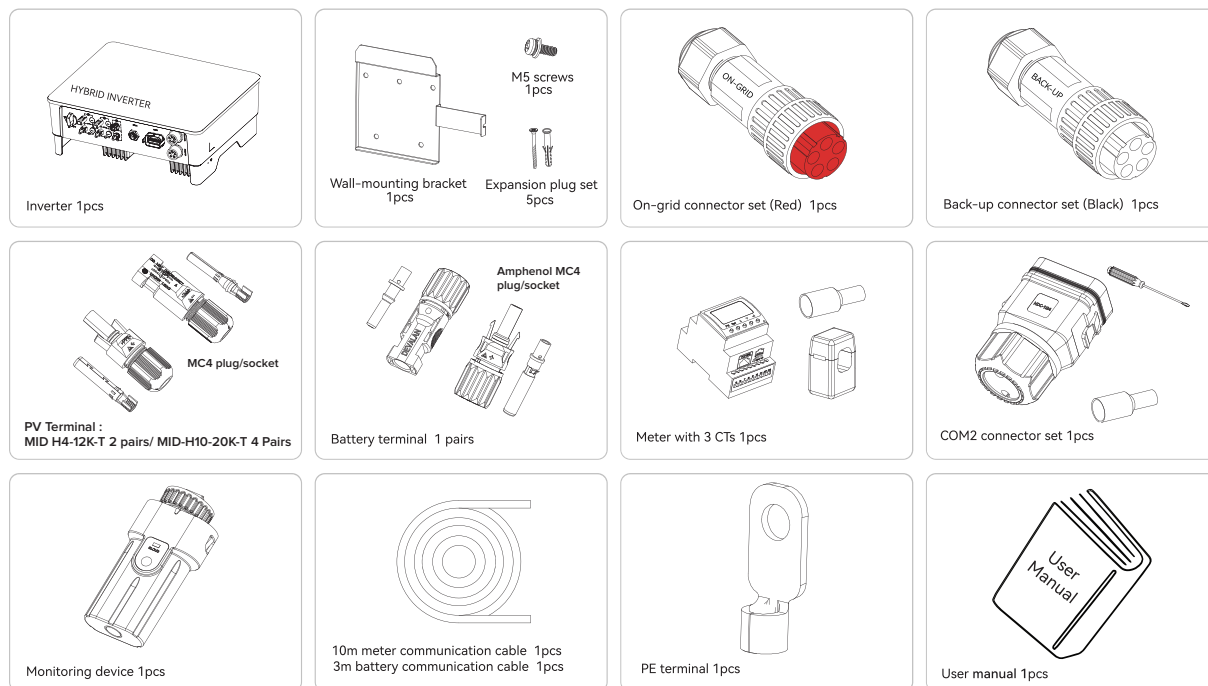
MID-H4/5/6/8/10/12kW – 25A

MID-H 10/12/15/20kW – 40A

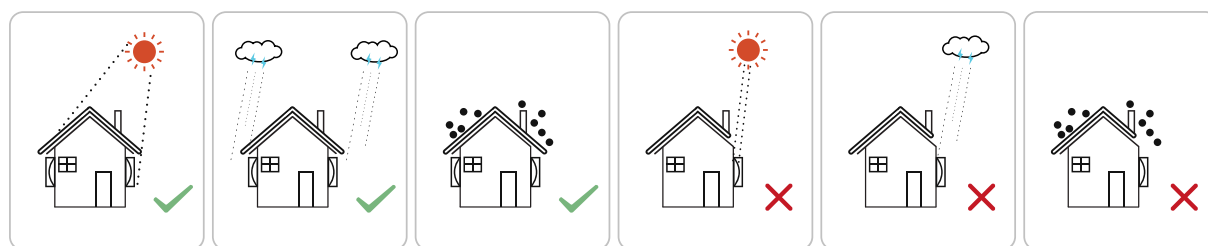


1. Installation

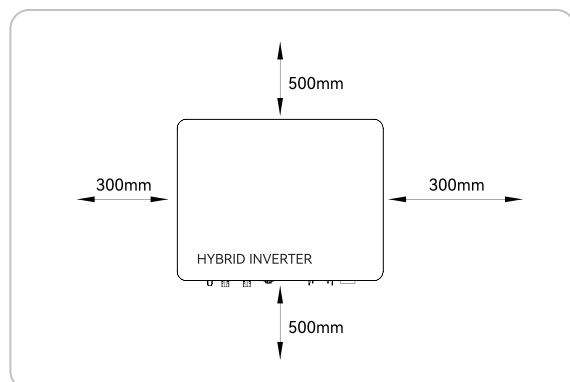
A. Check Packing List



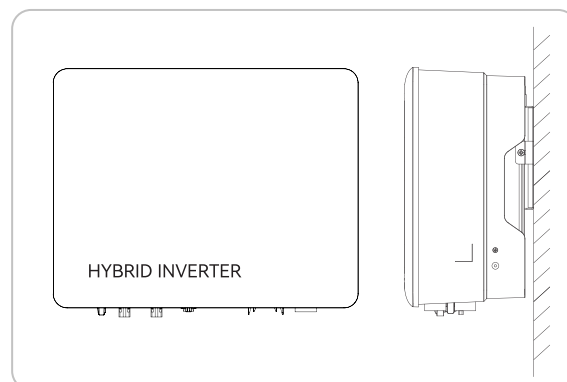
B. Installation Location



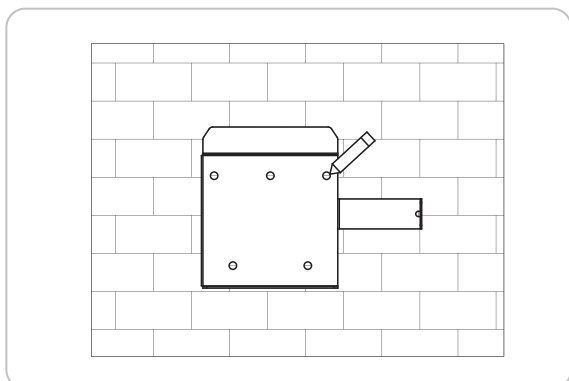
C. Installation Space



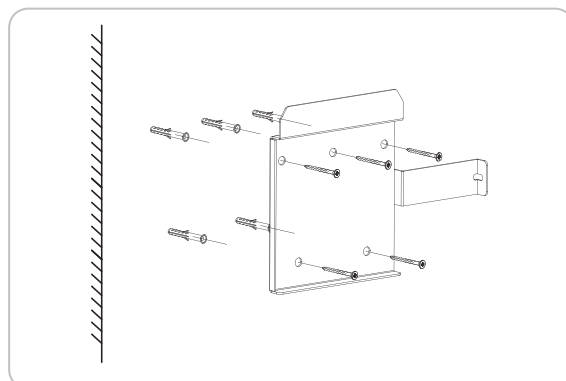
D. Installation Angle



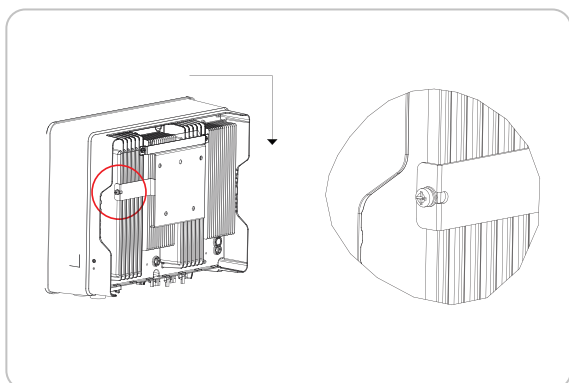
E. Mark the Position and Drill Holes



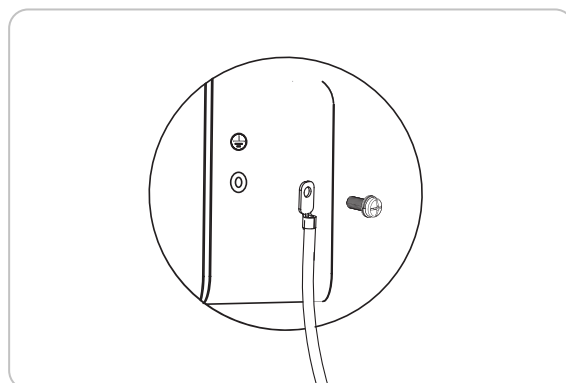
F. Fix Wall Bracket



G. Mounting Inverter



H. Grounding Terminal Connection



2. Electrical connection

A. Cable Requirements

Cable Types	Cable Requirements	
	Outside Diameter	Conductor Core Section
AC cable	13.0-18.0 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 Cable: On the grid side, a five-core cable (L1, L2, L3, N, and PE) is used. On the backup side, a four-core cable (L1, L2, L3, N) is used.

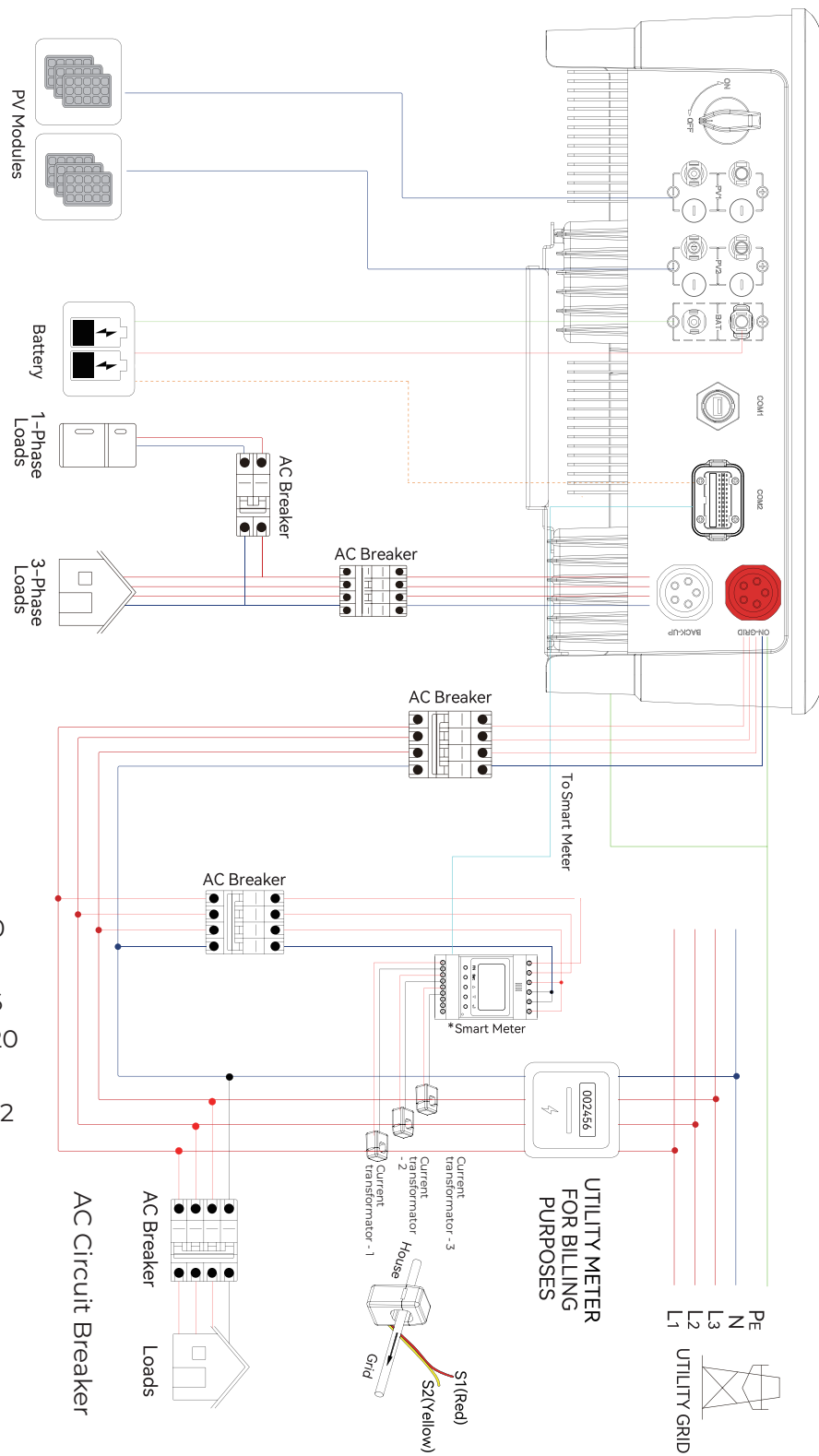
AC Connector: Please distinguish the on-grid and back-up connector, On-grid connector is red and Back-up connector is black.

Battery Power Cable: If the wire cross-section of the battery cable is too small, which can lead to poor contact between the terminal and the cable, use single-core H07-VK or PV cable H1Z2Z2-K up to a maximum of 6 mm .

B. Electrical Wiring Diagram

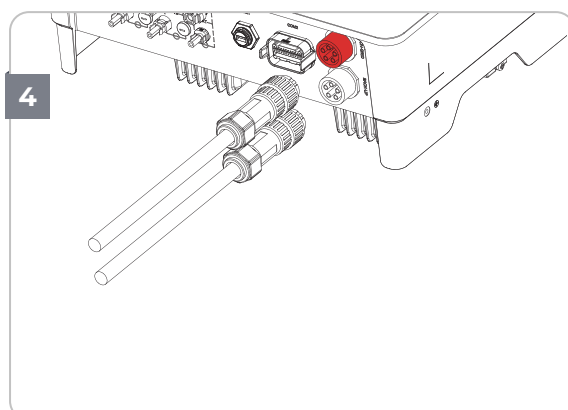
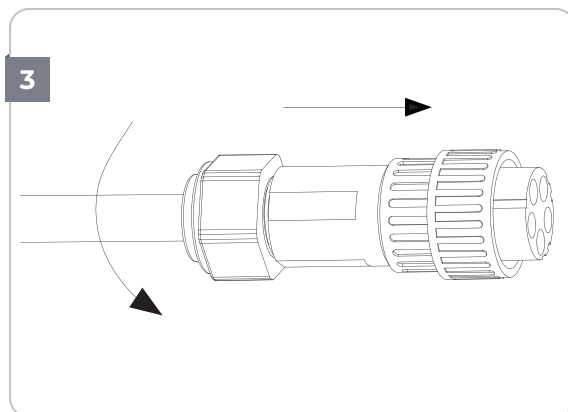
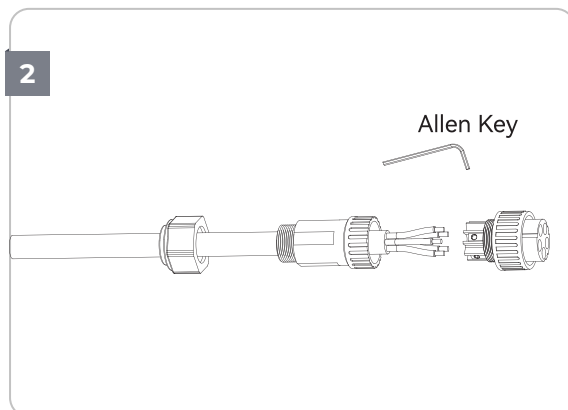
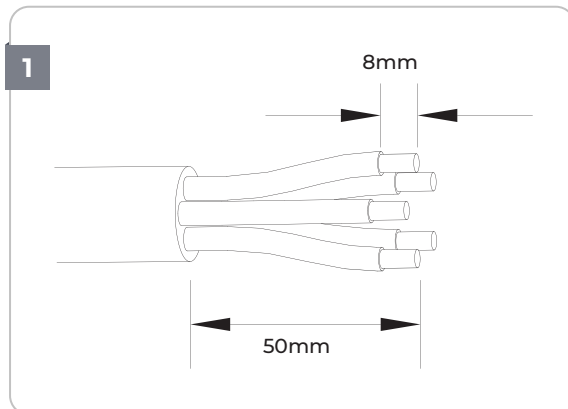
Choose the appropriate upstream protection based on the inverter's power class.

MID H4K-T = C10
MID H5K-T = C13
MID H6K-T = C16
MID H8K-T = C120
MID H10-T = C25
MID H12K-T = C32

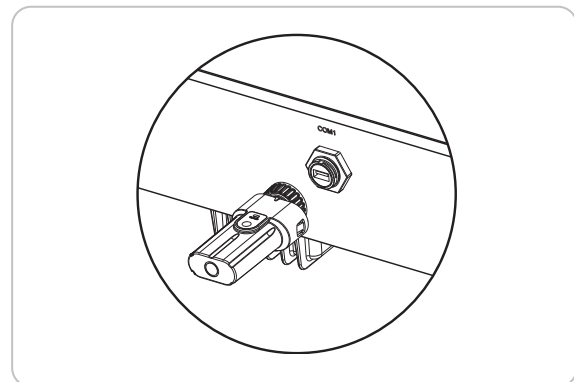


*Smart Meter consists of ACR10R and SM. Define the cable connections for the meter based on the actual meter model and refer to Meter Terminals Definition. This cable diagram is for reference only.

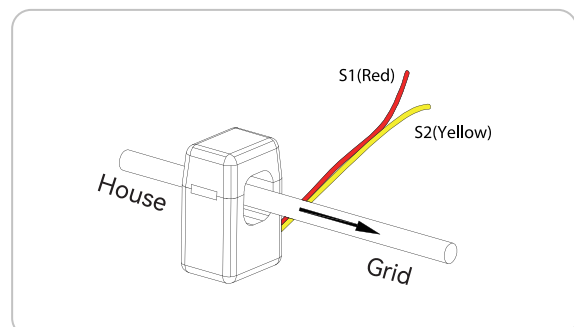
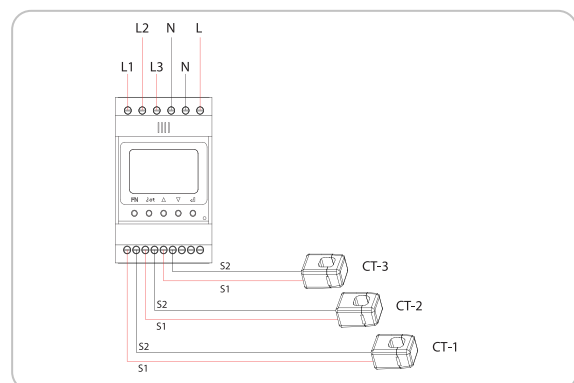
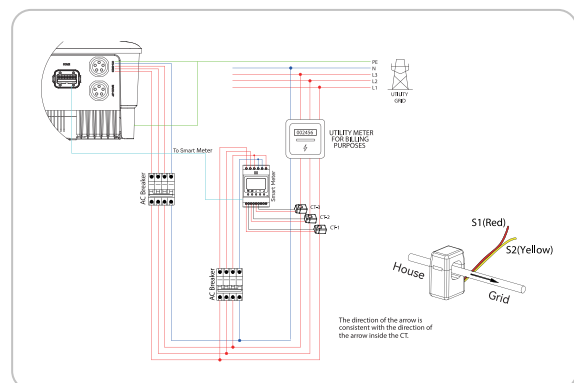
C. AC Connection



D. Monitoring Device Installation



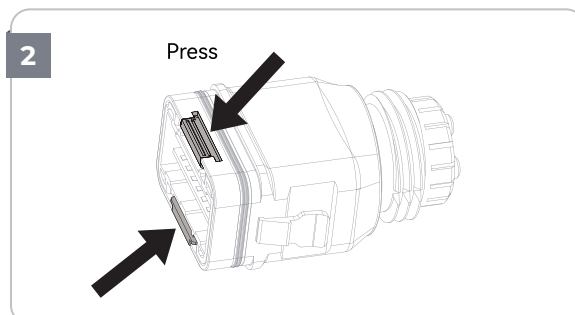
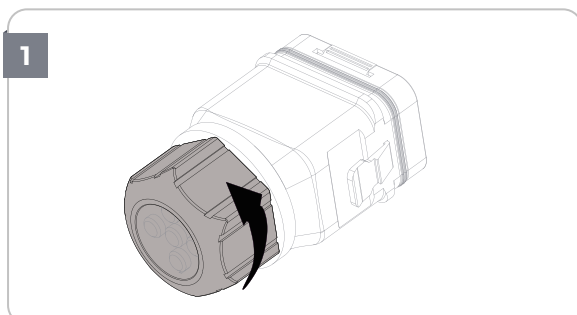
E. Meter and CT Connection

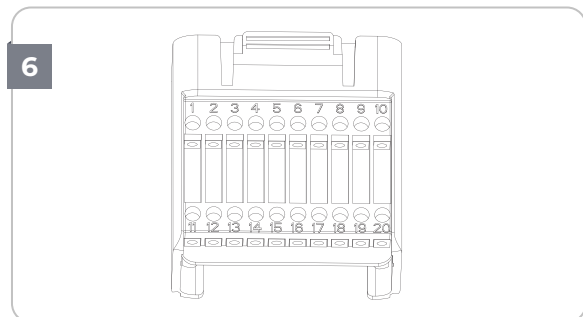
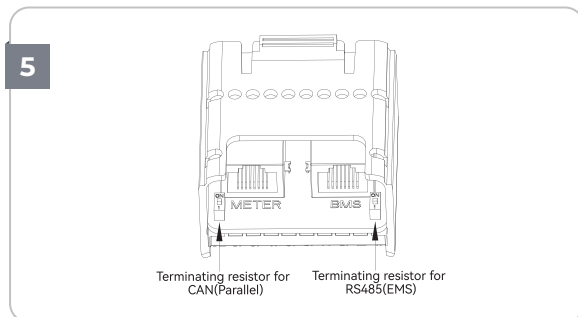
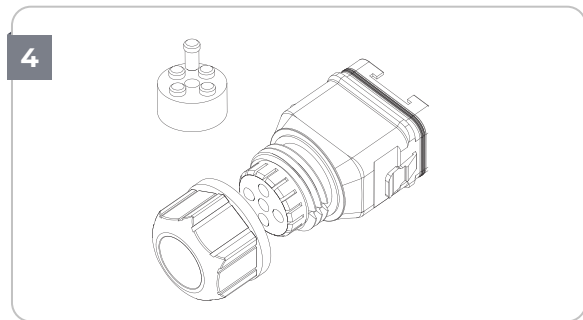
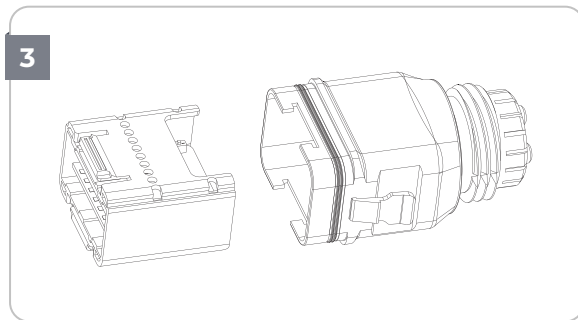


Meter Terminals Definition

No.	Definition		Function
	ACR10R	SM	
1	L1-S1		To detect the CT current and direction
2	L2-S2		
3	L2-S1		
4	L2-S2		
5	L3-S1		
6	L3-S2		
7	/	PE	Ground connection
8	L	/	Power supplied from grid
9	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

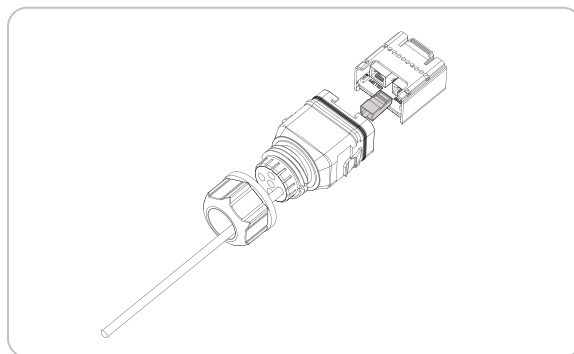
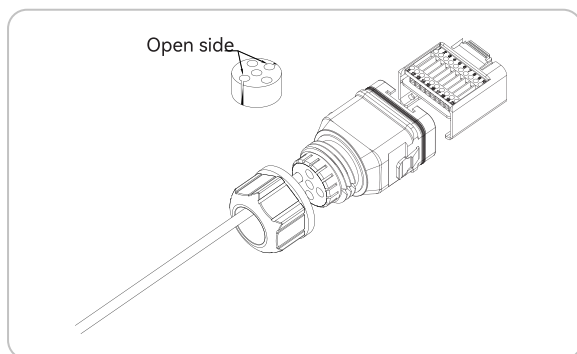




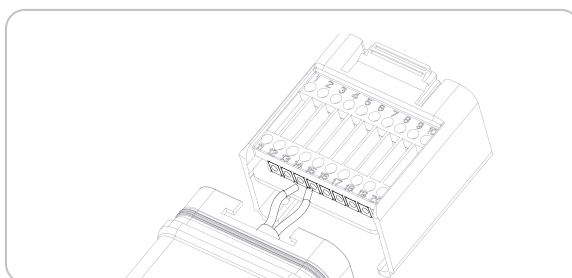
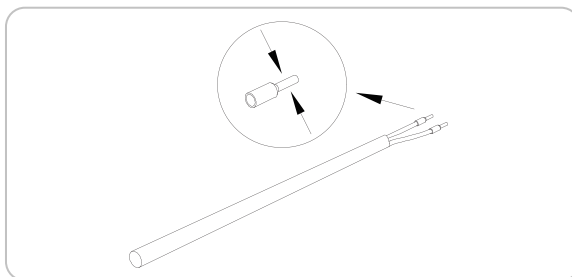
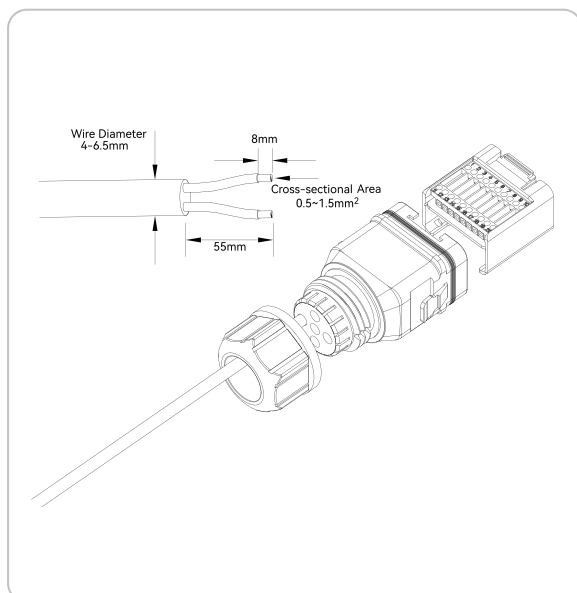
Pin	Definition	Function
Meter (RJ45-1)	RS 485	Communication with Meter
BMS (RJ45-1)	CAN	Communication with BMS
1	COM	Multifunction Relay
2	NO (Normally Open)	
3-4	/	Reserved
5	DRM4/8	DRED For Australia and New Zealand RCR For Germany and some other European countries
6	DRM3/7	
7	DRM2/6	
8	DRM1/5	
15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

Note: Abbreviations used in the communication table refer to functions for controlling and monitoring the system. A brief explanation: DRED (Demand Response Enabling Device) enables remote control by the grid operator. DRM4/8 stand for control modes in load management. COM D/0 and REF D/0 are digital output signals for controlling external systems. EMS (Energy Management System) controls energy flows.

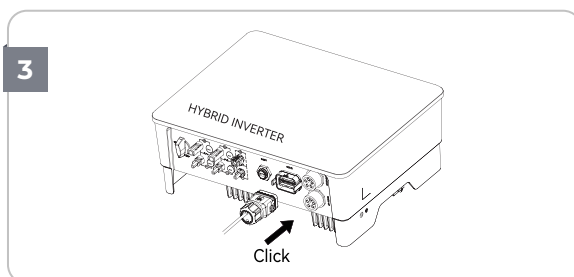
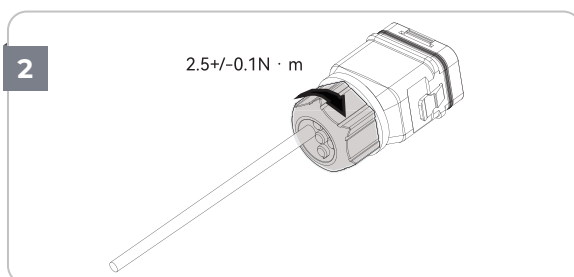
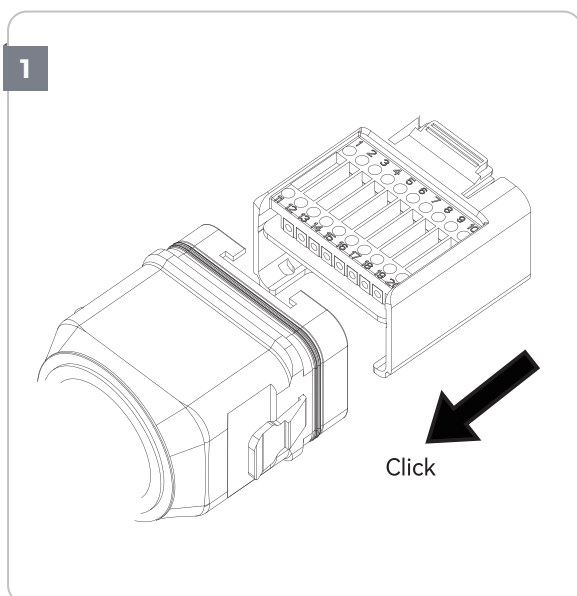
Connect the Meter and BMS Communication Cables



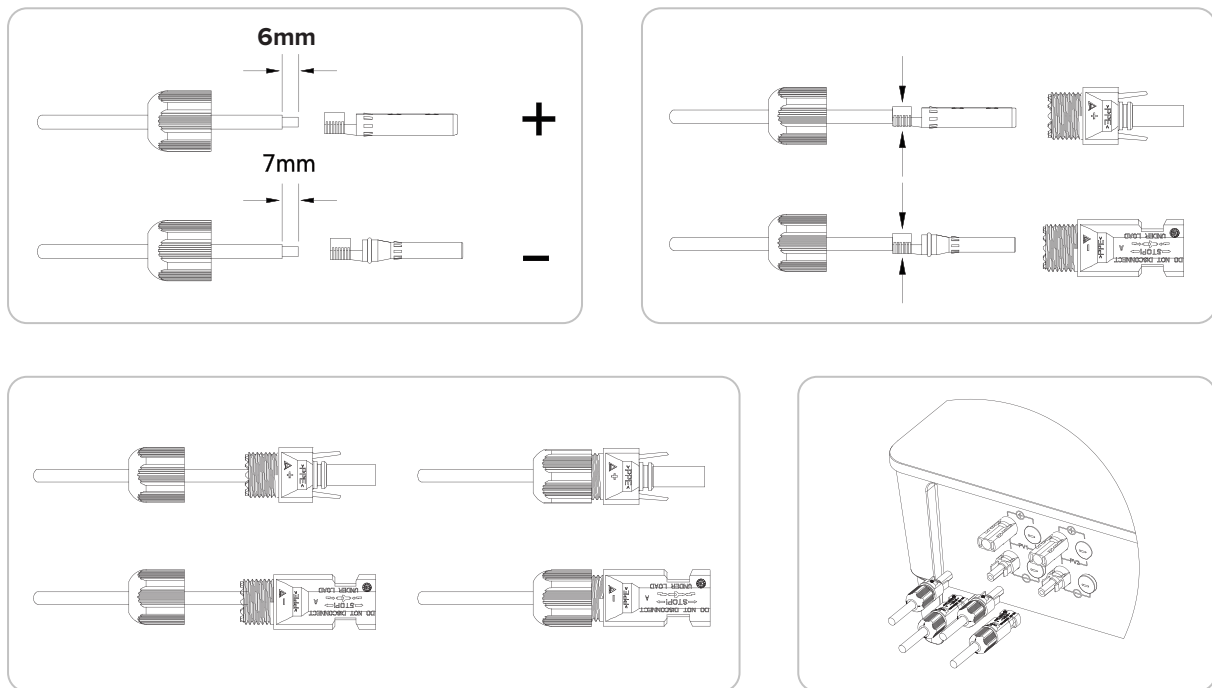
Connect Other Cables



Installing the COM Connector

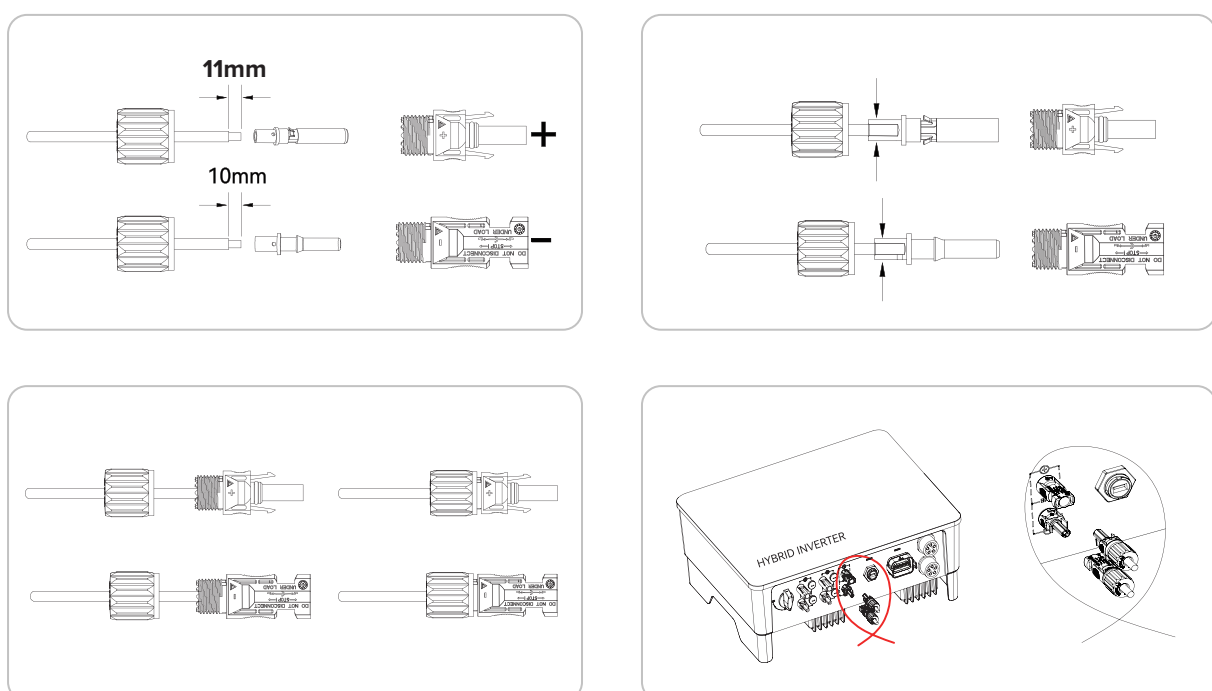


G. PV String Connection



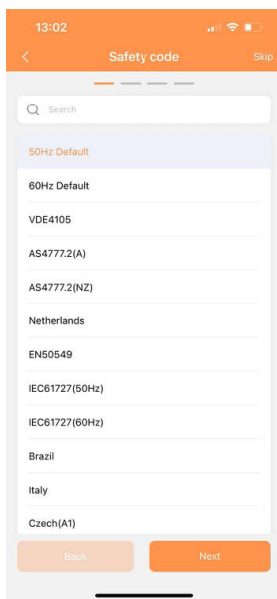
PV Max. Input voltage is 950V without battery, or 850V with battery, otherwise inverter will be waiting.

G. PV String Connection

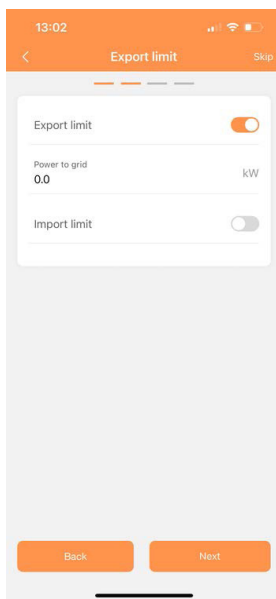


Inverter Quick Installation via **MidTeQ Solar Link App**

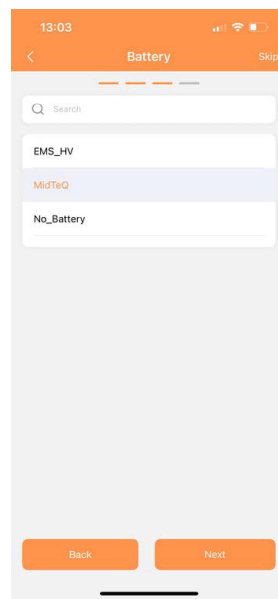
- 1** Selection of grid code by country



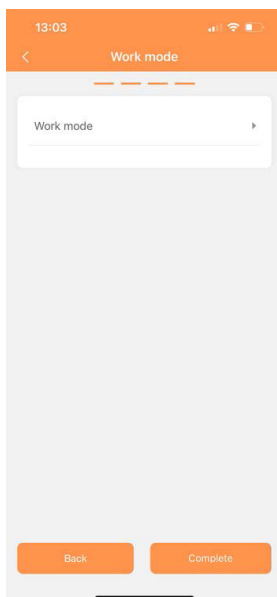
- 2** Setting the energy export to the grid



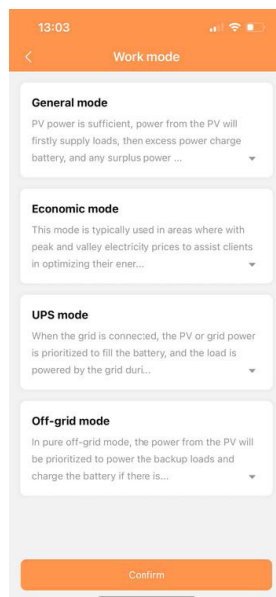
- 3** Battery selection (MidTeQ)



- 4** Inverter operation mode selection step a)



- 5** Inverter operation mode selection step b)



Scan the QR code to go directly to the MidTeQ Solar Link app.



3. Indicator

A. Inverter

Indicator	Status		Description
Power and Alarm Indicator	Off		No power.
	Green	Quick flashing	Inverter entered self-test status.
		Slow flashing	Inverter entered waiting status.
		Breathe flashing	Inverter works normal.
	Orange	Breathe flashing	Low battery warning, the battery power is about to reach the SOC protection value.
	Red	Always on	An alarm or fault is detected, view the fault info on the display.
Grid Indicator	Off		Grid lost.
	Slow flashing		Inverter detected grid but running in on-grid mode.
	Always on		Inverter works in on-grid mode.
Communication Indicator	Green	Always on	The inverter communication is running normally.
	Green	Flashing	The inverter communication with EMS or Master inverter through RS485 or CAN.
	Orange	Always on	The inverter isn't communicating with smart meter.
	Red	Always on	The inverter isn't communicating with the BMS.

B. Monitoring Device

Indicator Status	Description
Off	Connection abnormal
Always On	Communicate with the server normally
Slow flashing	The monitoring device is not connected to the router or is not connected to the base station.
Quick flashing	The monitoring device is connected to the router or connected to the base station but not connected to the server.

Button	Description
Press 1 second	Reset device, the indicator goes off for 2 seconds, then flashes normally.
Press 5 second	Restore factory default settings, the indicator goes off for 2 seconds, then flashes once every 2 seconds, until the factory restore is completed.

NOTE: For the WiFi Module and App Configuration Guide scan the QR code:



Disclaimer:

The product warranty does not cover product damage caused by failure to follow the storage, transportation, installation, and usage guidelines specified in this document and the user manual.

You can also download this quick use guide in your language by scanning below QR code:

**SCAN ME**

The information in this document is subject to change without prior notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Midcosta s.r.o. (Manufacturer)

Priemyselná 8E, 91701 Trnava Slovakia

Tel: +421333211102

Midcosta GmbH (Distributor)

Einsteinstraße 174, 81677 München, Germany

Tel: +491713538700

E-mail:**Country: SK**

service.sk@midteq.com, support.sk@midteq.com

Country: CZ

service.sz@midteq.com, support.cz@midteq.com

Country: Dach region

service.de@midteq.com, support.de@midteq.com

Country UA

service.ua@midteq.com, support.ua@midteq.com

www.midteq.com

www.midcosta.com

