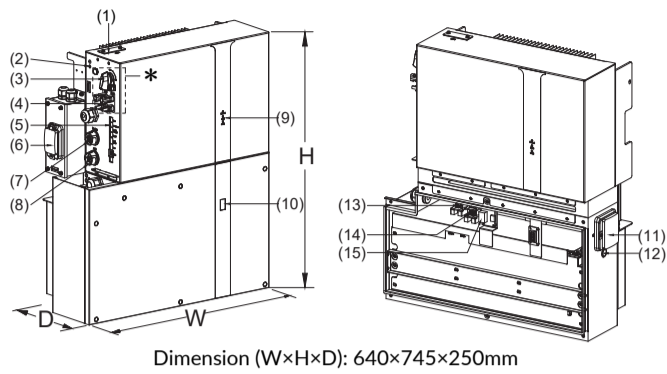


## 01 Product Overview

- (1). Wi-Fi Port
- (2). Grounding
- (3). INV PV Switch
- (4). INV PV Connectors
- (5). Communication Ports
- (6). Battery Breaker of Inverter
- (7). Backup Connector
- (8). Grid Connector
- (9). Inverter LED Display
- (10). Battery LED Display
- (11). Battery Breaker
- (12). Battery Power Switch
- (13). Battery+ Power Connector
- (14). Battery- Power Connector
- (15). BMS COM Ports



## 02 Packing List

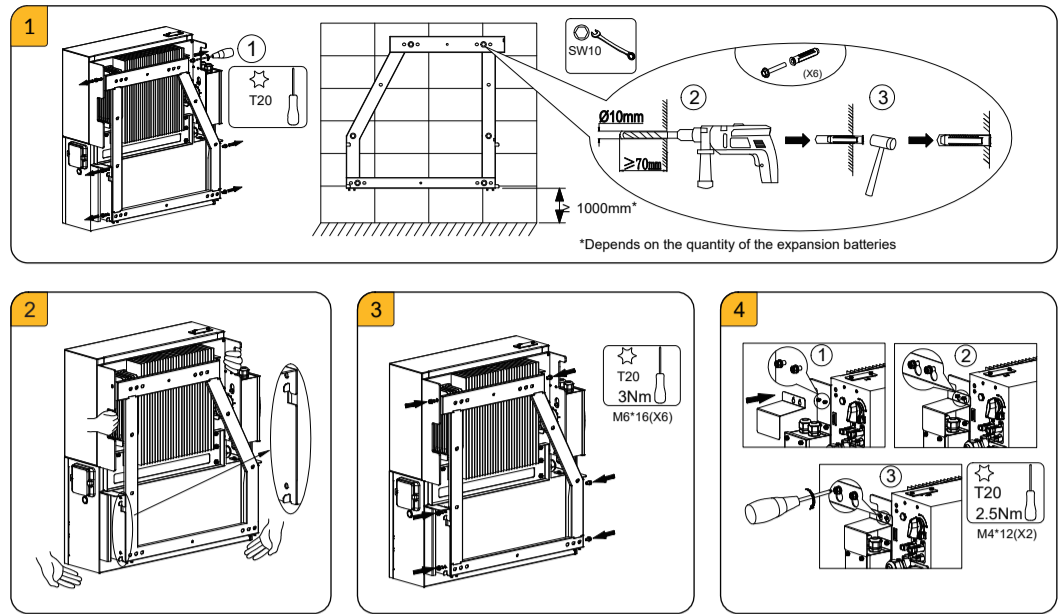
(X1)	(X1)	(X1)	(X1)	(X2)	(X2)
(X1)	(X1)	(X1)	(X1)	(X1)	(X2)
(X1)	M4*12 (X5) M6*16 (X6)	(X1) (X8)	(X6)	(X1)	

## 03 Installation Tools

T20×150mm	PH2×150mm	1.2×75mm	
T20 Screwdriver	Phillips Screwdriver	Flat-Head Screwdriver	Wire Stripper
Network Wire Clamp	Crimping Plier	Tape Measure	

01

## 04 Mount the Product



## 05 Electrical Connections

### ⚠ RISK OF ELECTRIC SHOCK

Before doing electrical connection, please ensure the PV switch & all AC and BAT circuit breakers are switched OFF and cannot be reactivated.

### ⚠ DANGER

You must protect each inverter with an individual grid/backup circuit breaker in order to ensure that the inverter can be disconnected safely.

Description	Max. Breaker Specification
Type	S5
Grid Side	32A
Backup Side	32A

### ⚠ WARNING

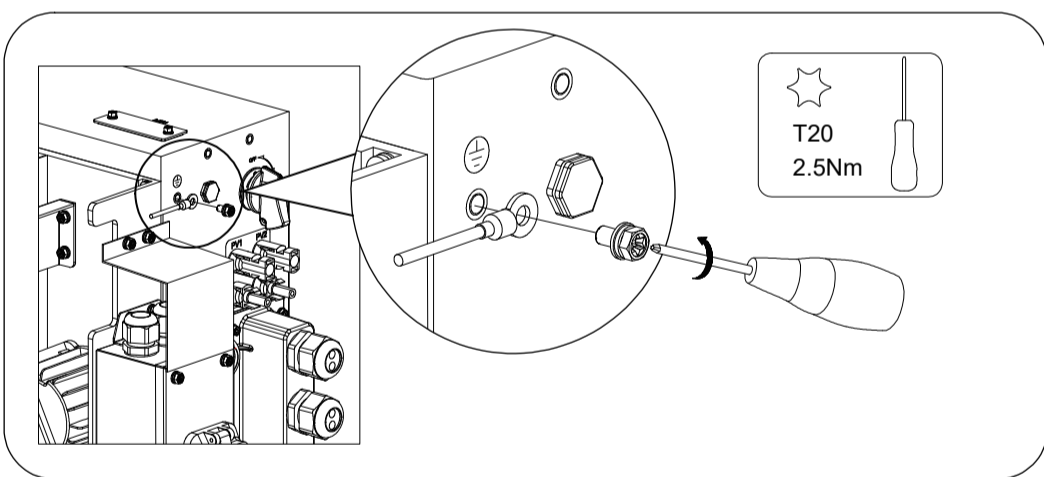
The maximum allowable AC circuit breaker specification for grid side and backup side is 32A; meanwhile, the cross section of the copper conductor must be 6mm<sup>2</sup>, otherwise it would increase the danger of the circuit breaker tripping under normal operating conditions.

### ⚠ NOTE:

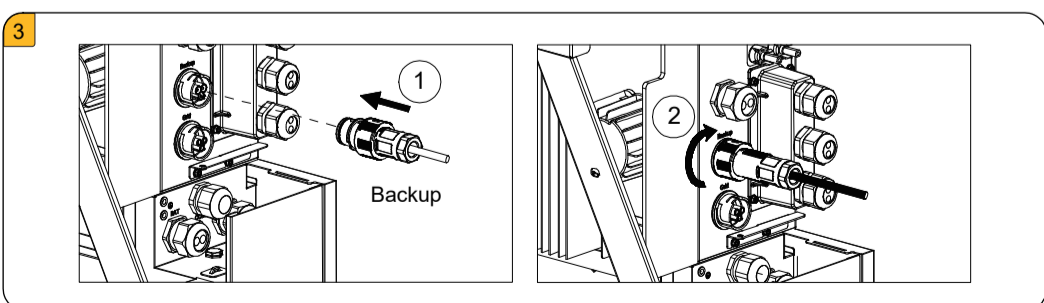
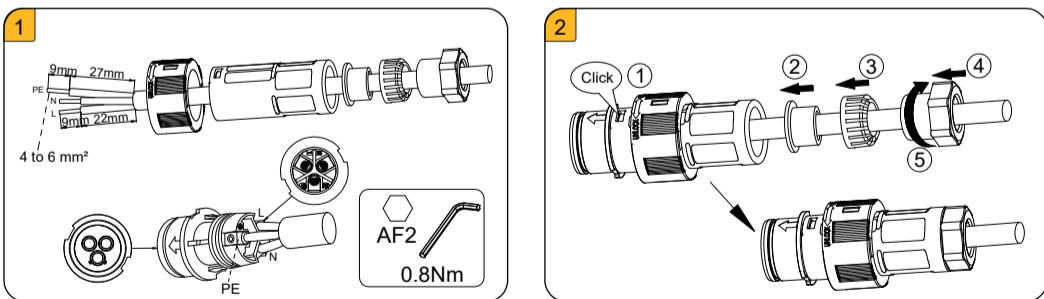
Please see System Wiring Diagram for the detailed wiring method.

02

### 5.1 Mount the PE cable

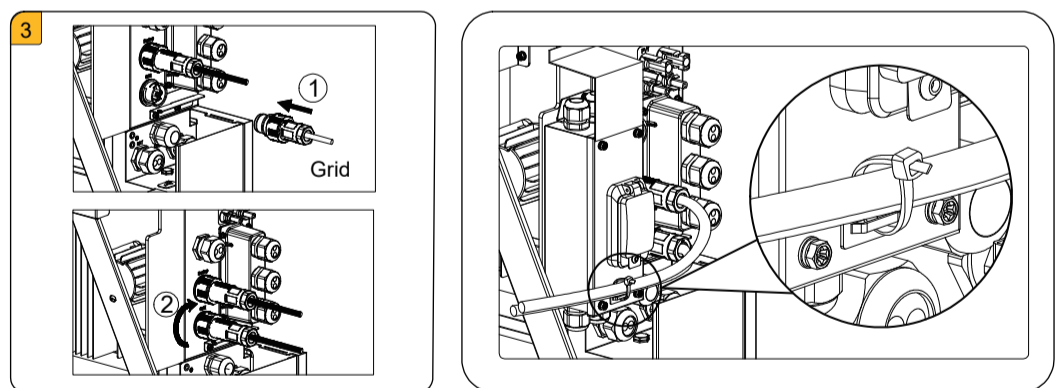
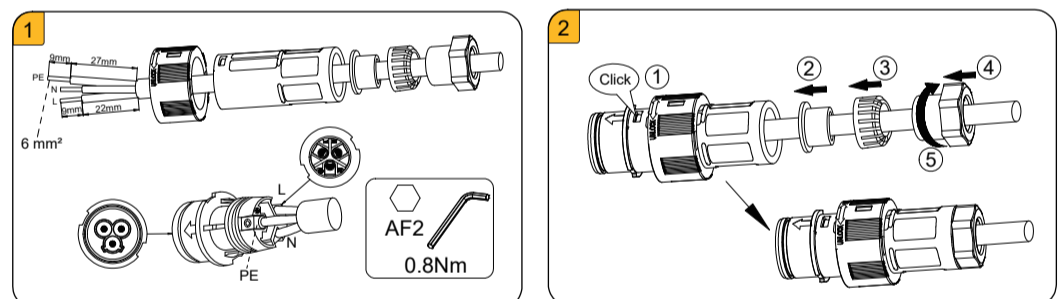


### 5.2 Connecting the Backup Power Cable



03

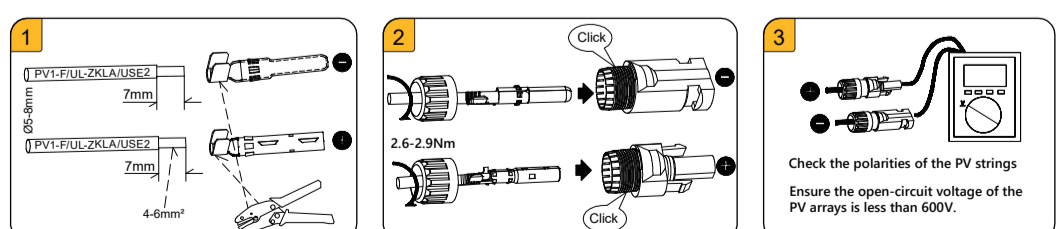
### 5.3 Connecting the Grid Power Cable



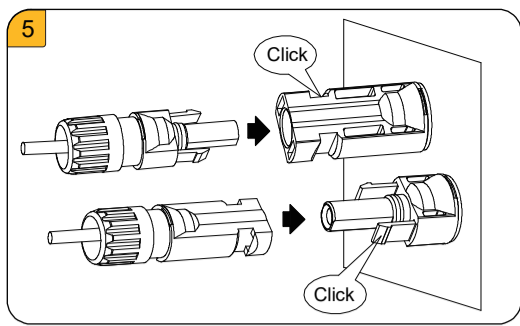
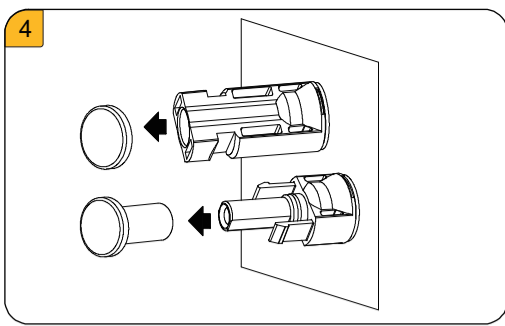
### ⚠ NOTE:

For the installation sites in Australia and New Zealand, the neutral cable of the grid side should be connected in parallel to the backup side, or otherwise the backup output will fail to operate.

### 5.4 Connecting the PV Power Cable

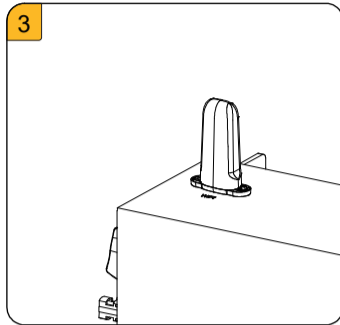
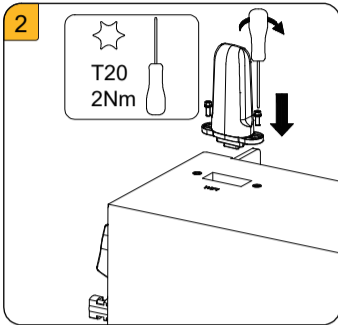
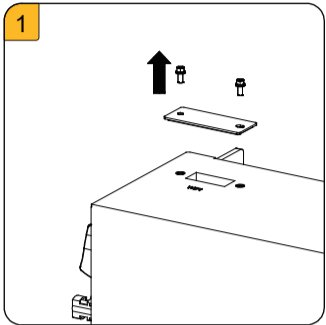


04

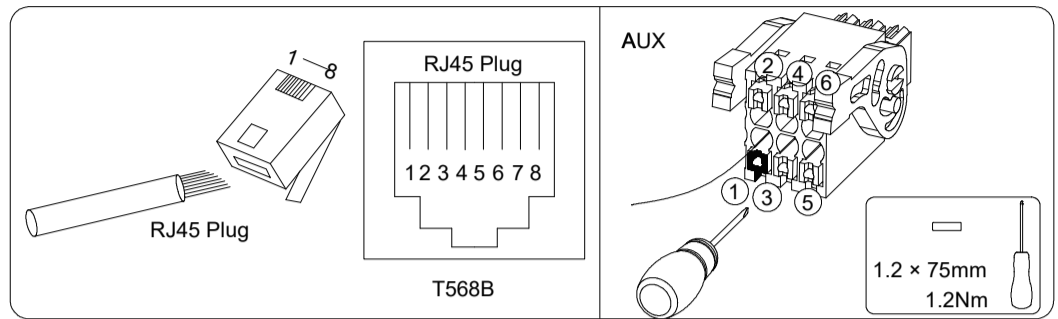
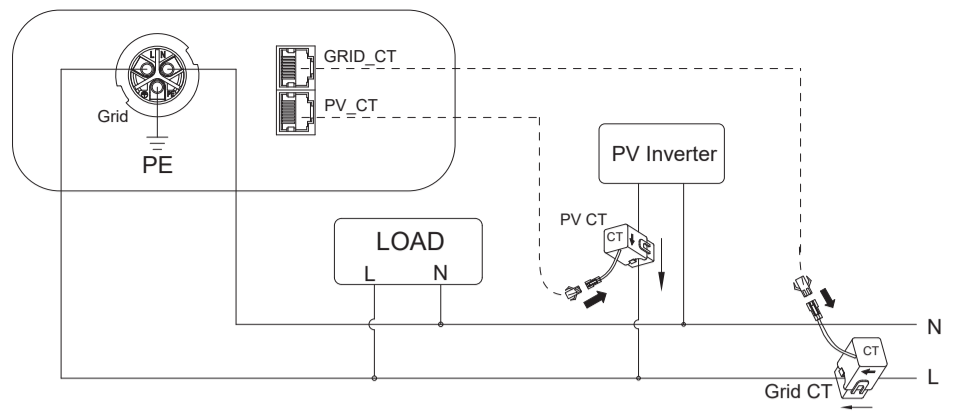
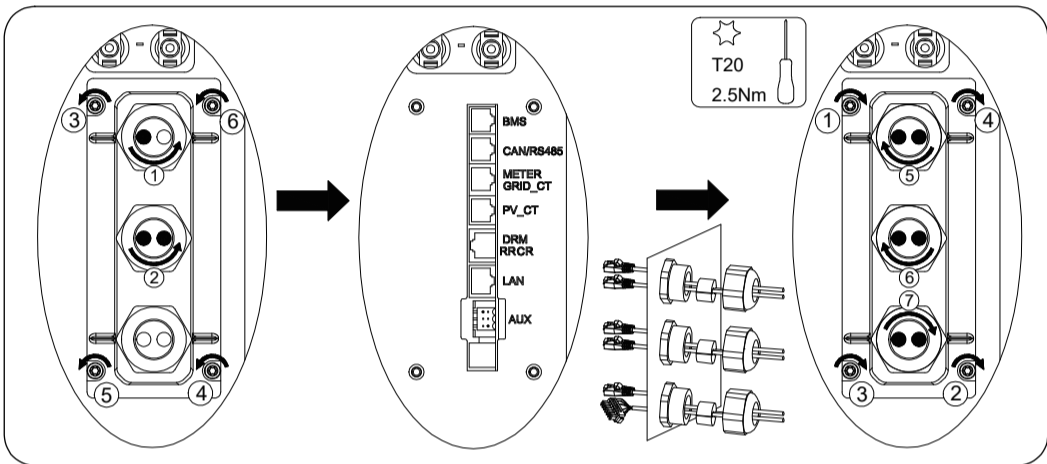


## 06 Communication Connection

### 6.1 Wi-Fi Connection



### 6.2 AUX / LAN / PV\_CT / DRM, RRCR / GRID\_CT and Meter / RS485 / BMS Connection Communication Connection Ports are as follows:



AUX	1	2	3	4	5	6		
	DO1_NO	DO1_COM	DO1_NC	DO2_NO	DO2_COM	DO2_NC		
DRM	1	2	3	4	5	6	7	8
	DRED 1/5	DRED 2/6	DRED 3/7	DRED 4/8	REF GEN/0	COM LOAD/0	/	/
PV_CT	1	2	3	4	5	6	7	8
	/	/	RS485_A7	/	/	RS485_B7	/	/
GRID_CT METER	1	2	3	4	5	6	7	8
	/	/	RS485_A7	/	/	RS485_B7	/	/
RS485	1	2	3	4	5	6	7	8
	/	/	/	RS485_B5	RS485_A5	/	/	/
BMS	1	2	3	4	5	6	7	8
	/	RS485_A4	/	CAN1_H	CAN1_L	/	RS485_B4	

## 07 Commissioning

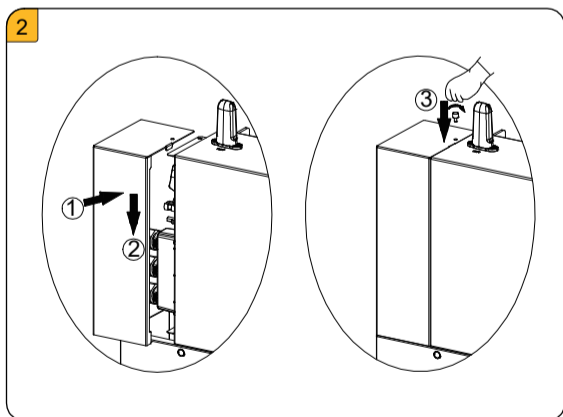
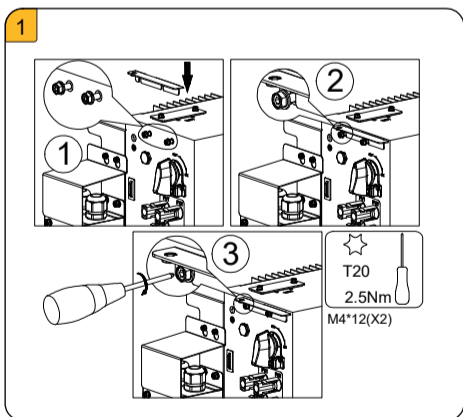
**WARNING**  
Before powering on the system, please check that the installation and electrical connection are correct and reliable.

Please follow the steps in the **COMMISSIONING GUIDE AND REPORT** to download AlphaESS APP, register your account, power on the product, configure WiFi module, set system parameters and operate the system.

## 08 Procedure for Switching OFF the Product

- 1) Switch off the AC breaker between the inverter and the load.
- 2) Switch off the AC breaker between the inverter and the grid.
- 3) Switch off the PV switch on the upper left of the inverter.
- 4) Switch off the PV switch between the PV string and the inverter if there is any.
- 5) Switch off the battery breaker which is on the left side of the inverter.
- 6) Turn off the battery by pressing the power button on the right side for more than 5s.
- 7) Switch off the battery breaker on the right side of the battery.

## 09 Installing the Cable Cover



SYSTEM USER MANUAL



SYSTEM INSTALLATION MANUAL



APP MANUAL (INSTALLER)



ALPHA CLOUD MANUAL (INSTALLER)



APP MANUAL (END USER)



ALPHA CLOUD MANUAL (END USER)



SYSTEM DATASHEET



[@AlphaEnergyStorageSystem](#) [@AlphaESS](#)

[@alpha\\_ess](#) [@AlphaESS](#) [www.alphaess.com](http://www.alphaess.com)