Quick Installation Guide

Hybrid inverter



358-S030004-00

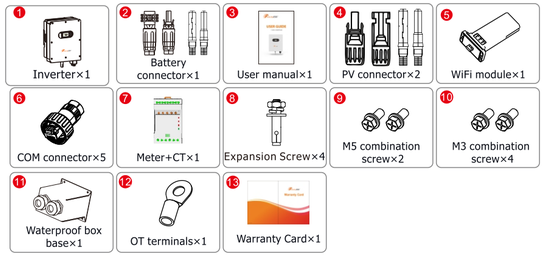
Disclaimer

- Please read the user's manual carefully before performing all operations; this installation guide does not supersede the use of the product's user's manual;
- Product information is subject to change without notice. This manual is frequently updated, please contact your salesperson for the latest version.
- After unpacking, please check the product for damages and missing parts.
- Do not open the battery to repair or disassemble. Only FelicityESS is allowed to carry out any such repairs. Only qualified personnel can install this device with battery.
- In case of fire, use only dry powder fire extinguisher. Liquid extinguishers should not be used.
- Before using the inverter, please read the instructions and warning signs of the battery and corresponding sections in the instruction manual. Improper reassembly may result in electric shock or fire.
- To reduce risk of electric shock, disconnect all wires before attempting any maintenance or cleaning. Turning off the unit will not reduce this risk.
- Never charge a frozen battery.
- Never cause AC output and DC input short circuited. Do not connect to the mains when DC input short circuits.

Installation Video

You can watch the installation video by scanning the QR code to the right

Packing List

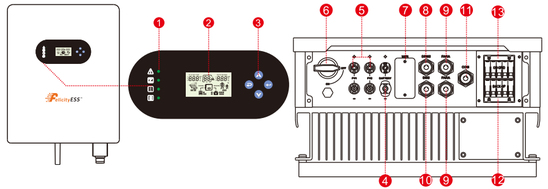


NO.	Name	Description	Quantity
1	Inverter	Inverter	1
2	Battery Connector	Connection ports for batteries and inverter Bat Port	1 pair
3	User Manual	User manual	1
4	PV Connector	PV Port Connectors	2 pairs
5	WiFi Module	For installing the WIFI module	1
6	COM Connector	Communication Port Connector	5
7	Meter+CT(Optional)	Meters and anti backflow	1
8	Expansion Screw	Used for securing the product's wall mount	4
9	M5 Combination Screw	Fixed wall mounts and inverter	2
10	M3 Combination Screw	Used to install the tamper-proof box	4
11	Waterproof Box Base	Waterproof AC terminals	1
12	OT Terminals	For external ground connection	1
13	Warranty Card	Warranty Card	1

Explanation of the Symbols

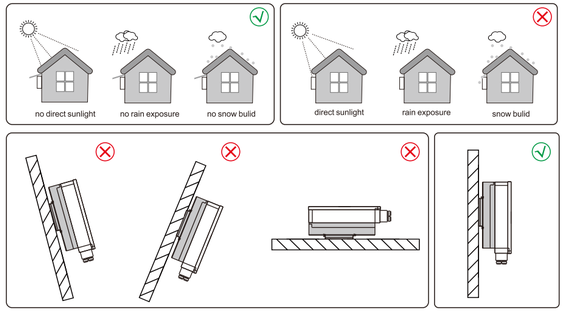
	Danger: Serious physical injury or even death may occur if not follow the relative requirements		Instruction manual:Read the instruction manual before starting installation and operation.
	Warning: Physical injury or damage to the devices may occur if not follow the relative requirements		EU WEEE mark: Product should not be disposed as household waste.
	Hot surface: Sides of the device may become hot. Do not touch!	NOTE	Note: The procedures taken for ensuring proper operation.
	Electrostatic sensitive: Damage may occur if not follow the relative requirements	CE	CE mark: The inverter complies with the CE directive.
RoHS	Directive on the restriction of the use of certain hazardous components in electrical and electronic equipment		Earth terminal: The inverter must be reliably grounded.
	Caution: Ensure that DC and AC side circuit breakers have been disconnected and wait at least 5 minutes before wiring and checking.		

Product Overview



1. Inverter Indicators
2. LCD display
3. Button
4. Battery connection port
5. PV input connection port
6. DC switch
7. WIFI Communication port
8. DRMS port
9. PARA port
10. BMS port
11. COM port
12. Back-up terminal
13. On-grid terminal

Installation Environment

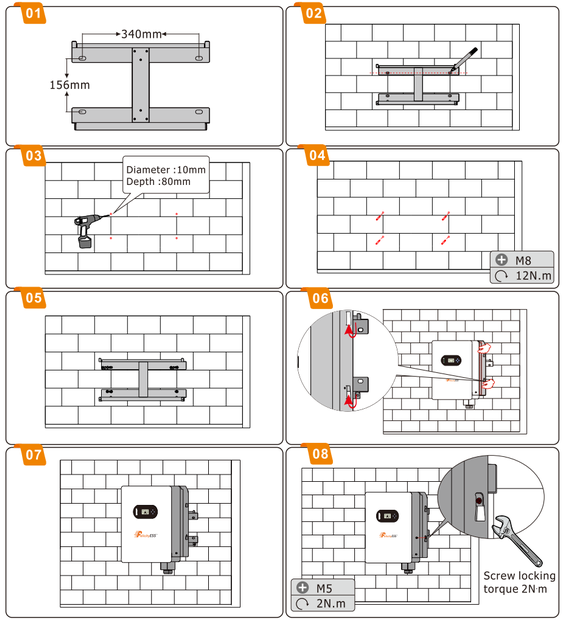


LCD Display Icons

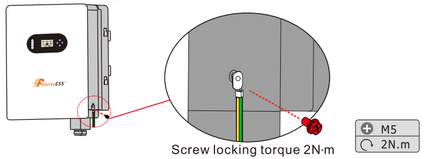
Function Key	Icon	Description
ESC		Hold on the "ESC" button last for 3S to turn off the inveter
UP		To go to previous selection
DOWN		To go to next selection
ENTER		Hold on the "ENTER" button last for 3S to turn on the inveter
LED Indicator	**Icon**	**Description**
Battery		Charging the battery, the LED light flash. If battery is full, the LED light will always-on. The battery is not charged, the LED light will go out.
Utility		Inverter running in utility mode, the LED will always-on. Inverter is not running in utility mode, the LED will go out.
Inverter		Inverter running in off-grid mode, the LED light will always-on. Inverter is not running in off-grid mode, the LED light will go out.
Fault		If inverter in fault event, the LED light will always-on. If inverter in warning event, the LED light will flash. Inverter work normally, the LED light will go out.
Buzzer Information		
Buzzer beep		Turn on/off the inverter, the buzzer will last for 2.5s. Press any button, the buzzer will last for 0.1s. Hold on the "ENTER" button, the buzzer will last for 3s. If in fault event, the buzzer will keep going. If in warning event, the buzzer will beep discontinuous (Check more information on the chapter of "Warning Code Table").

Installation Procedure

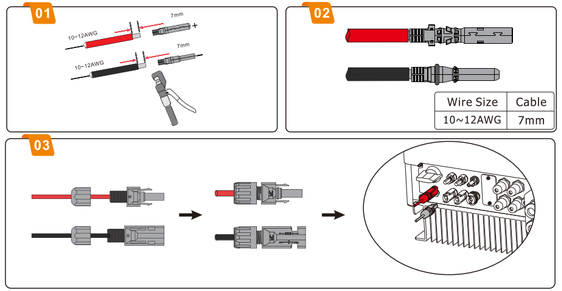
The inverter is suitable for mounting on concrete or other non-combustible surface only.



External Grounding Connection



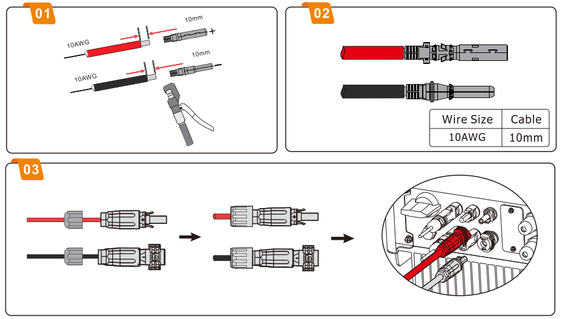
PV Connection



Battery Connection

Please be careful about any electric shock or chemical hazard.Make sure there is an external DC breaker(150A)connected to the battery without build-in DC breaker.

Inverter Model	Wire Size	Strip length
T-REX-10KHP3G01	10AWG	10mm



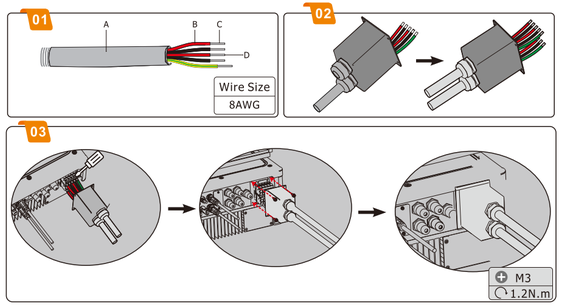
·The polarity of battery cannot be connected reversely, otherwise the inverter could be damaged.

On-Grid & Back-Up Connection

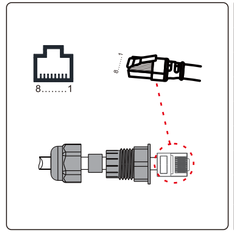
·Make sure the inverter is totally isolated from any DC or AC power before connecting AC cable.

An external AC breaker is needed for on-grid connection to isolate from grid when necessary.
Recommended AC circuit breaker parameters are 40A/230V.

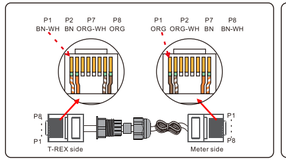
Grade	Description	Value
A	Outside diameter	13-18 mm
B	Separated wire length	20-25 mm
C	Conductor wire length	7-9 mm
D	Conductor core section	2.5-4 mm

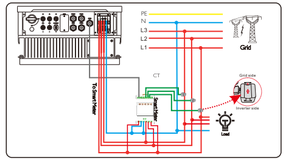


Smart Meter & CT Connection

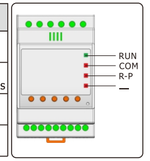


Position	Function	Note
1	485_A2	RS485-2 For Meter
2	485_B2	
3	485_A3	RS485-3 For Remote Monitor
4	485_B3	
5	485_B3	
6	485_A3	
7	RY_4	Dry Signal
8	RY_5	

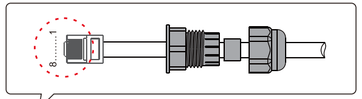




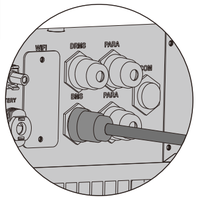
STATUS	OFF	ON	Blinking
Run (Green)	The instrument is not running	/	The instrument is running normally
Com (Red)	The instrument is not communicating	/	The instrument is incommunication status
R-P (Red)	Positive power	Negative power	/
— (Red)	/	Negative value indicator lamp	/



BMS Cable Connection



Position	Function	Note
1	/	/
2	/	
3	+VCC	Power Supply
4	COM-GND	
5	CANH1	/
6	CANL1	
7	RS485-A1	Lithium Battery Communication
8	RS485-B1	



Installation of Wifi module

For detailed instructions on how to install WIFI Module, you can scan the QR code to the right to view the WiFi Module installation instructions.

WIFI Module

User Manual

User Manual in the OR code or at https://www.felicityess.com/

User Manual