



# Quick Installation Guide

## Battery Storage System

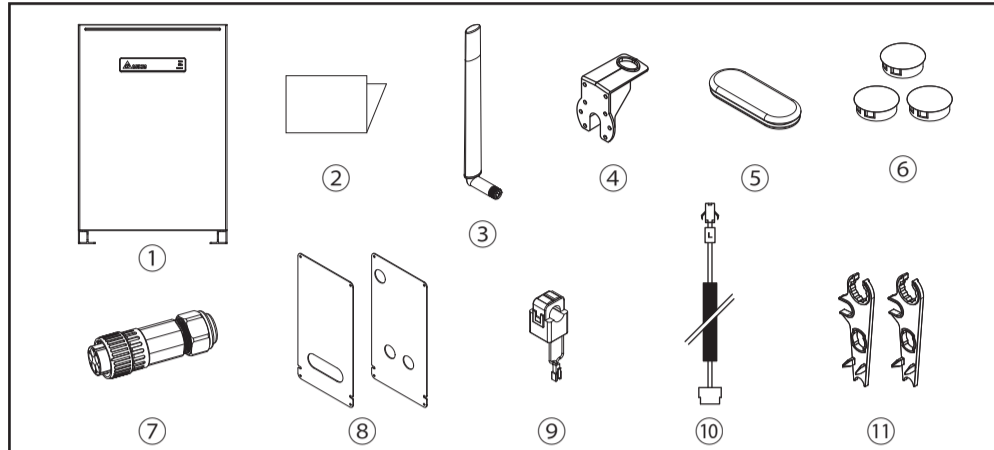
### BX6.3\_AC100



#### BX6.3\_AC100 user manual

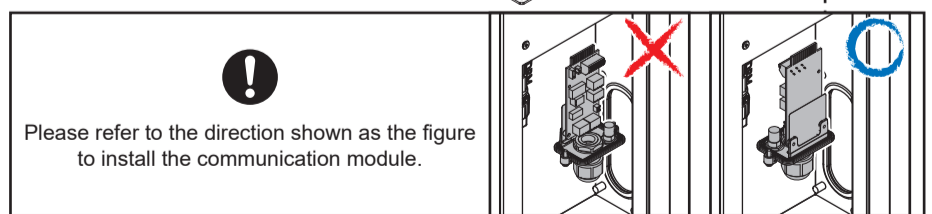
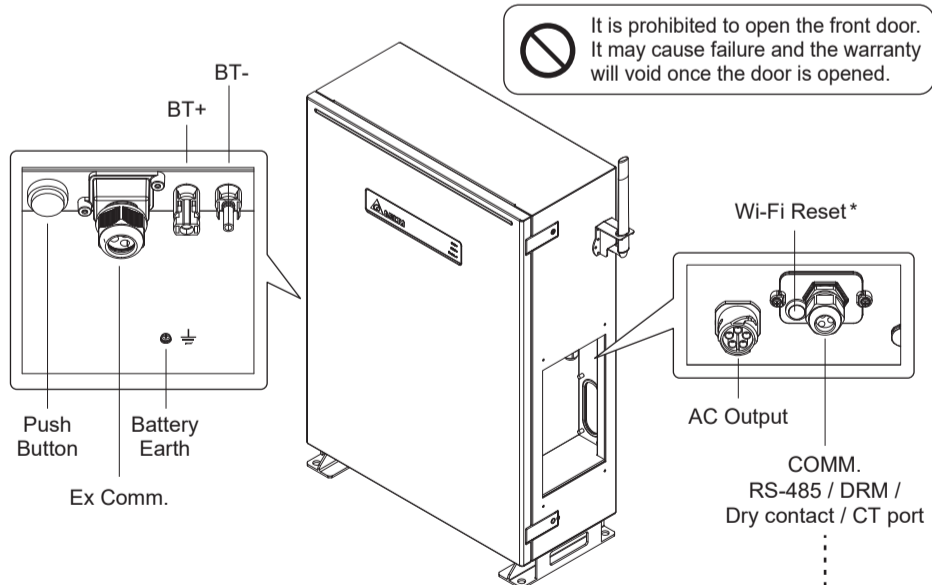
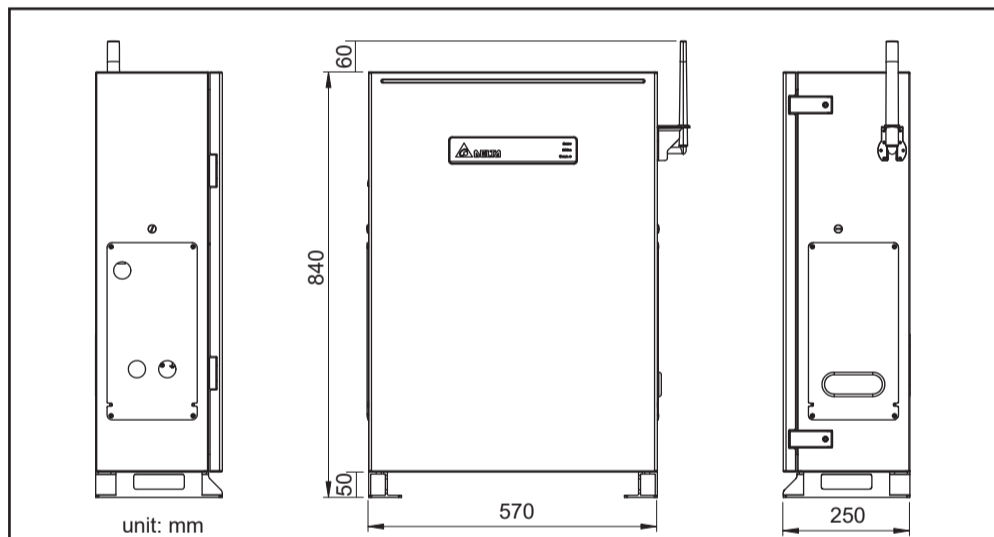
For more instruction and specification, please scan QR-code to see user manual.  
 > Battery > BX6.3\_AC100 Operation and Installation Manual  
[https://mydeltasolar.deltaww.com/?p=product\\_manual](https://mydeltasolar.deltaww.com/?p=product_manual)

## Descriptions of Components



Object	Qty	Description
1	1	Delta BX6.3_AC100 Residential AC ESS
2	1	Quick Installation Guide The Instruction to provide the information of safety, Installation and specification.
3	1	WiFi antenna 2.4 Ghz Wi-Fi Antenna (IPX7)
4	1	Antenna Bracket To support Wi-Fi antenna on BX6.3_AC100
5	1	Rubber cover Protective cover for non-critical waterproof and dust prevent
6	3	Plastic cover Protective cover for non-critical waterproof and dust prevent
7	1	AC Plug Connector for AC connection
8	2	Wiring Cover Protective cover to prevent users from touching the power cable
9	1	Current sensor 120A current transformer
10	1	CT cable Cable for CT connection
11	2	H4 Wrench To disconnect H4 connector

## Dimensions and Interface Overview



#### \* Wi-Fi reset button function

Operation	Wi-Fi LED Status	Explanation
Push 3s~10s	Wi-Fi LED flashing once every half a second	Reset Wi-Fi module
Push 10s~20s	No flash	No function
Push 20s~	Wi-Fi LED flashing once every one seconds	Reset Wi-Fi module, and Wi-Fi password returns to the default: DELTASOL

## Warning



Do not open this product or insert tools due to shock and fire hazard which may cause injury.



When installing this product you must adhere to the following instructions:

- The product is intended to be installed and operated by qualified personnel or service personnel only.
- Do not power up the device before installation is complete.
- All circuit breakers must be in the OFF position before commencing installation.



- Do not install BX6.3\_AC100 near or on flammable surfaces.
- Please mount BX6.3\_AC100 tightly on a solid / smooth surface.
- Install BX6.3\_AC100 in a location that prevents damage from flooding.
- Do not expose BX6.3\_AC100 to ambient temperatures above 60°C or below -20°C.
- Operating or storing BX6.3\_AC100 in temperatures outside its specified range might cause damage to BX6.3\_AC100.
- With BX6.3\_AC100 internal ATS mode, please make sure to add an external ATS contactor between grid and inverter when you want to bypass the battery, please refer to warranty document for related installation.



#### Danger to life through electric shock

Potentially fatal voltage is applied to the unit during operation. This voltage persists even 60 seconds after disconnection of the power supply.

Never open the unit.

The unit contains no components that must be maintained or repaired by the operator or installer. Opening the housing will void the warranty.



The product supports wireless communication.

- Install the product as far away as possible from devices that emit strong radio waves, such as civil band radio equipment.
- Do not install the product in metal box and make sure there is no metal barrier between the product and connecting devices to prevent the communication signal attenuation.
- When using Wi-Fi to connect the inverter, the connection signal strength is recommended to be at least -70 dBm to ensure good communication quality.

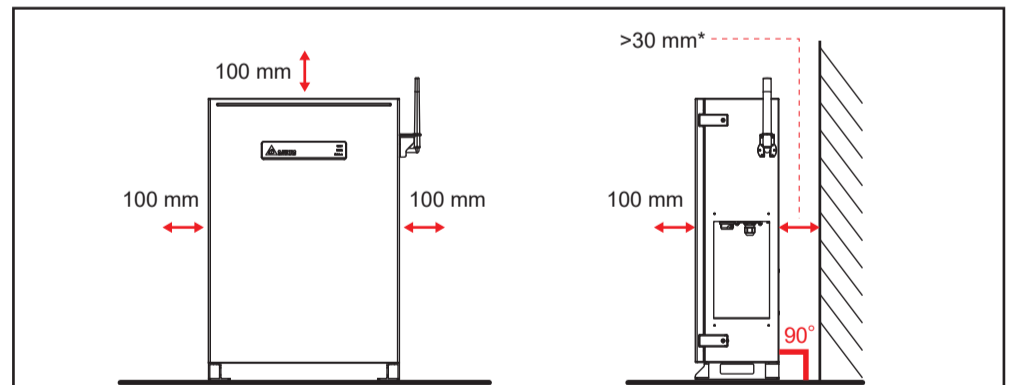
## LED Indicators and Push Button



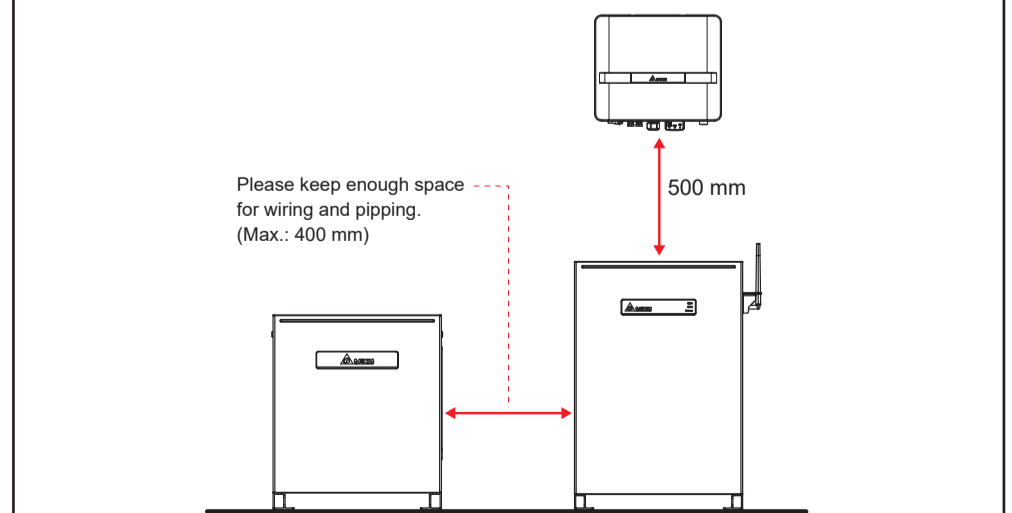
LED	LED Status	Definition
Grid	GREEN ON	On Grid mode
	GREEN FLASH 1s ON/OFF	On Grid count down
	GREEN FLASH 0.1s ON/OFF	Grid setting "default"
	RED ON	PCS Error
SPS (Stand-alone Power System)	GREEN ON	Standalone mode
	GREEN FLASH	Standalone count down
	RED ON	Battery Error
	RED FLASH	Battery Power OFF
Comm.	GREEN ON	Communicating
	OFF	No communication
Grid / SPS	GREEN FLASH	SBMS Balance mode
	Grid ON 1s ↔ SPS ON 1s	SBMS Force_CHG Maintenance Mode

Status	Operation	Action
BX6.3_AC100 power OFF	Grid supplied	Power ON the unit (AC start-up)
BX6.3_AC100 power OFF	Power button push > 20 sec (until grid green LED flash)	Power ON the unit (Cold start-up)
BX6.3_AC100 power ON already	Power button push >1 sec	Power OFF the unit

## Installation

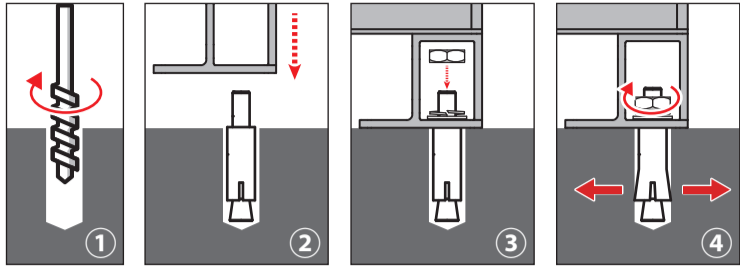


\* Please refer to regulation AS/NZS 5139:2019 for detail installation space requirement. To avoid extra fireproof cement sheeting installation requirement, it is recommended to keep at least 300mm between the wall and BX.



## Installation

### Insert Rawplug

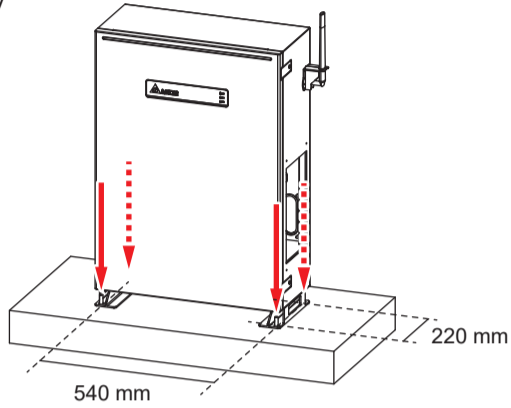


1. Drill 4 holes with  $\Phi 16$  mm diameter in dimension 540 mm x 220 mm
2. Insert Rawplug into these hole
3. Put on and fix BX6.3\_AC100 firmly

### CAUTION !

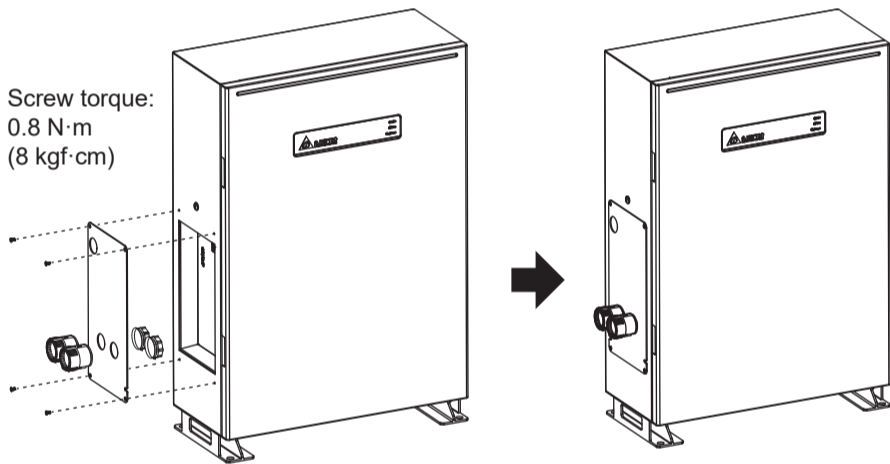


- Please do not install the battery pack on uneven floor surfaces.
- Holes size is 16 mm diameter for attaching the battery pack.



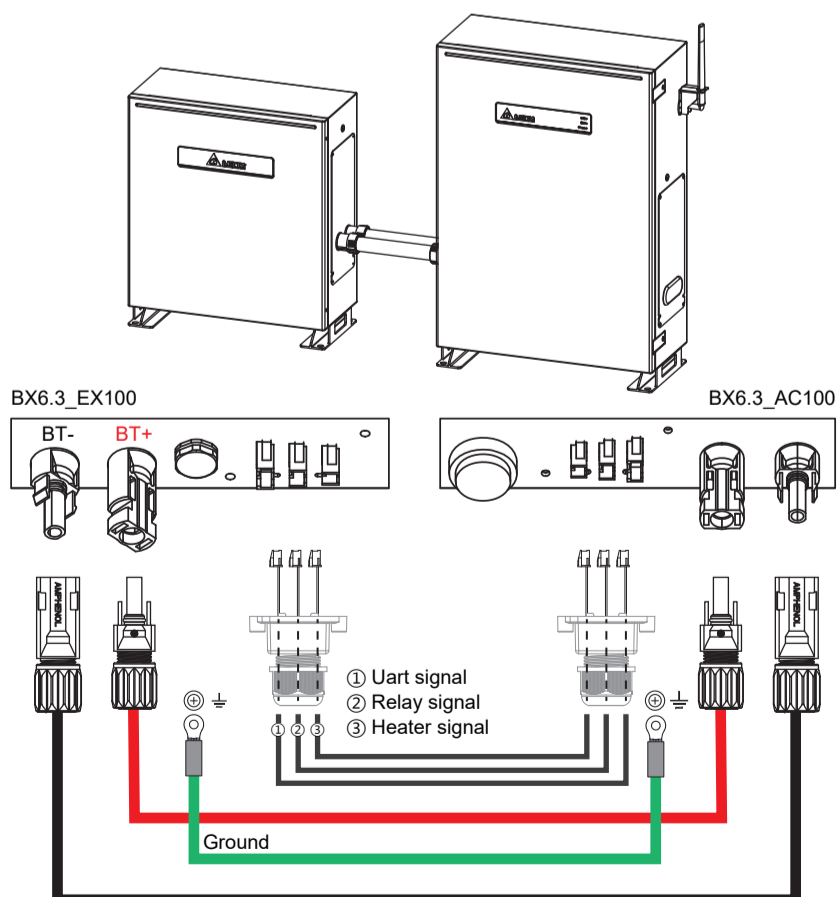
### Wiring

Conduit hole(mm)	PF pipe(mm)
$\Phi 34$	$\Phi 28$



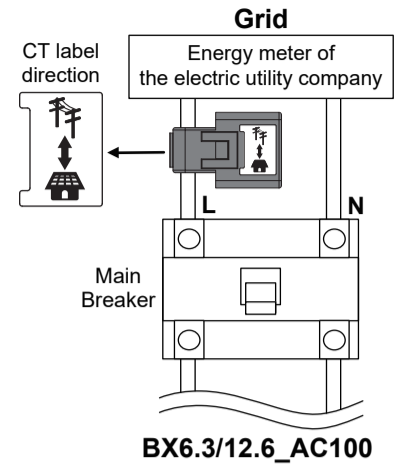
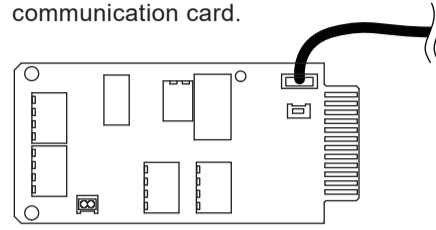
\* Please do not remove all the rubber covers on BX6.3\_AC100 if BX6.3\_EX100 is not installed.

### Installation of BX12.6\_AC100



## Current Transformer installation

1. The CT can be opened.
2. Take the CT clip on the Line conductor wire.
3. please be aware of the CT direction.  
Arrow symbol means utility grid.
4. Connect the CT wires to the device.
5. Connect CT wire to the CT port of communication card.



BX6.3/12.6\_AC100

Model	BX6.3_AC100	BX12.6_AC100
<b>GENERAL</b>		
Enclosure	Aluminum with powder coating	
Operating temperature	-10°C * ~ 45°C	
Operating Altitude	0 to 2000m (0 to 6666 ft.)	
Relative humidity	0% – 95% non-condensing.	
Environmental category	Indoor / Outdoor	
Protection degree	IP65 (Electronics)	
Pollution degree	PD 2	
Overtoltage category	AC output :III	
Galvanic isolation	NO	
Safety class	Class I metal enclosure with protective earth	
Weight	77kg	77 kg (BX6.3_AC) + 60 kg (BX6.3_EX)
Dimensions(W*H*D)	570 × 840 × 250 mm	570 × 840 × 250 mm + 520 × 600 × 230 mm
Connectors	Weather resistant connectors	
Audible noise	< 40dB	
<b>BT INPUT</b>		
Type	Li-ion	
Battery Module	Samsung SDI 41J (21700)	
Nominal Battery Capacity	6.3 kWh	12.6 kWh
Usable Battery Capacity	6.17 kWh	12.34 kWh
Typical Voltage	DC 202.7 V	DC 405.4 V
Voltage Range	DC 175 - 228 V	DC 350 - 456 V
Depth of Discharge (DoD)	98 %	
<b>AC INPUT / OUTPUT</b>		
Nominal power	3000 VA	4500 VA
Maximum power	3000 VA	4500 VA
Voltage	According to country setting (Programmable 230Vac ± 20%)	
On Grid Nominal current	13 A	19.6 A
Stand-Alone Nominal current	13 A	19.6 A
Inrush current	16 A / 100 us	
Maximum output fault current (rms)	25 A	25 A
Maximum overcurrent protection	25 A	25 A
Frequency	Rated 50/60 Hz (Programmable 45-65 Hz)	
Active anti-islanding method	Reactive power injection	
Total harmonic distortion	< 3 %	
Power factor	> 0.99 @ full power	
Output current DC component	< 0.5% rated current	
Tare loss	< 10 W	
Maximum efficiency	96.5%	
<b>SYSTEM INFORMATION / COMMUNICATION</b>		
User interface	Wi-Fi connection 365 days data logger and real time clock 30 events record	
External communication	2 RS-485 connections	
<b>REGULATIONS &amp; DIRECTIVES</b>		
CE conformity	Yes	
Grid interface	AS/NZS 4777.2 :2015	
Emission	EN 61000-6-3	
Harmonics	EN 61000-3-2	
Variations and flicker	EN 61000-3-3	
Immunity	EN 61000-6-2	
Immunity	ESD	IEC 61000-4-2
	RS	IEC 61000-4-3
	EFT	IEC 61000-4-4
	Surge	IEC 61000-4-5
	CS	IEC 61000-4-6
	PFMF	IEC 61000-4-8
Electrical safety	IEC 62619:2017, IEC 62040-1:2017	

\* 0 degree for the first time installation.