DARFON

EIA02-002 User Manual

General Information

Battery Module Configuration	14S18P
Type of Battery	Lithium Ion BPI Swing 5300
Nominal Voltage	51.1V
Nominal Capacity	95.4 Ah
Design Energy	4,875Wh
Operation Energy	3,850Wh
Continue Charge Power	2000W Max.
Continue Discharge Power	2000W Max.
Operating Temperature	Charge -10 to 45℃
	Discharge -10 to 45℃
Communication Interface	RS485
Protection function	OVP/OCP/SCP/OTP
Water-Dust IP	IP20

EIA02 is only compatible with Growatt SP2000 system; Do not install EIA02 with other equipment
EIA02 is wall-mount design, please follow SOP to install it indoor.

General Information- Parts List
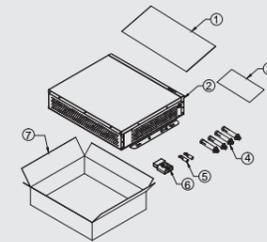
Part List		
Item	Item name	qty.
1	Wall Mount Installation	1
2	EIA02-002 Battery Pack	1
3	User Manual	1
4	Explosion Screw	4
5	KST Terminal (BMC14AG)	2
6	KST Housing (BMC2S-RED)	1
7	Carton	1

Dimension & Weight

Dimension (L x W x H)	800 x 610 X 167 mm
Net Weight	46.5kg

Key Features

LED	Mode
Dark	Shut Down/ Sleep Mode
Green Light	Battery Status Normal
Red Light	Battery Status Error

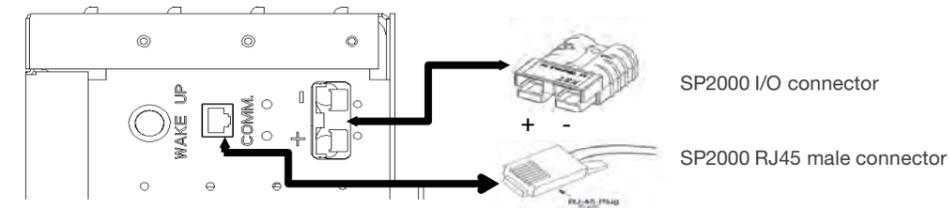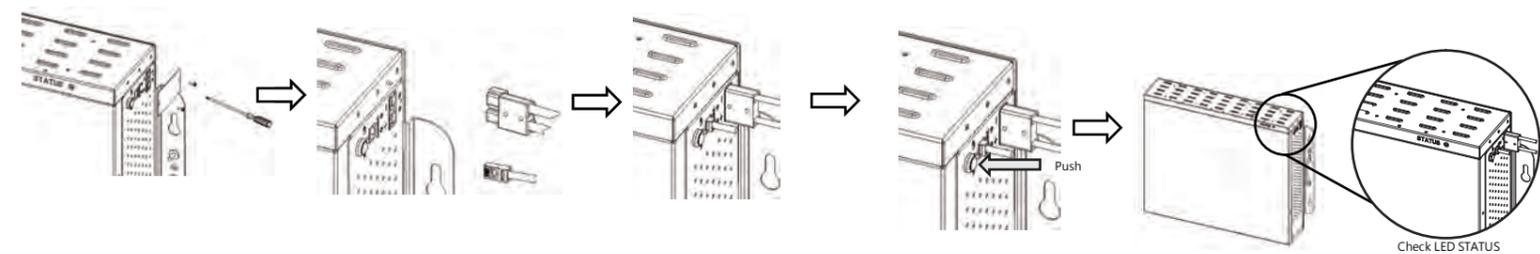Wake Up Button   COMM. Port (RJ45)   I/O Connector (KST BMC2S-RED)
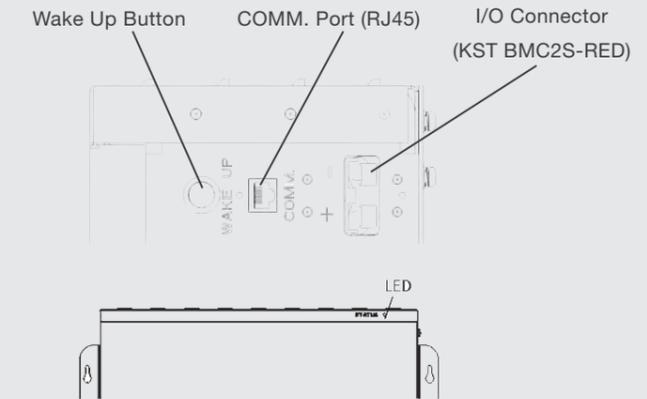
SOP of Wall mount installation and system connection

Wall Mount Installation:
1. The thickness of wall for EIA02-002 must be not less than 80mm.
2. Put the paper board to the wall, make sure the top edge of paper board is level.
3. Mark four points at the wall via the hole of the paper board, then remove the paper board.
4. Drill four ⌀12 holes at the marks point, the depth is not less than 75mm.
5. Knock four explosion screws into the ⌀12 holes, screw the nuts, to fix the belt .
6. Hang EIA02-002 onto the explosion screws ,then screw the four nuts tightly with spanner.

75mm (2.95")
⌀12mm (0.47")
325
764
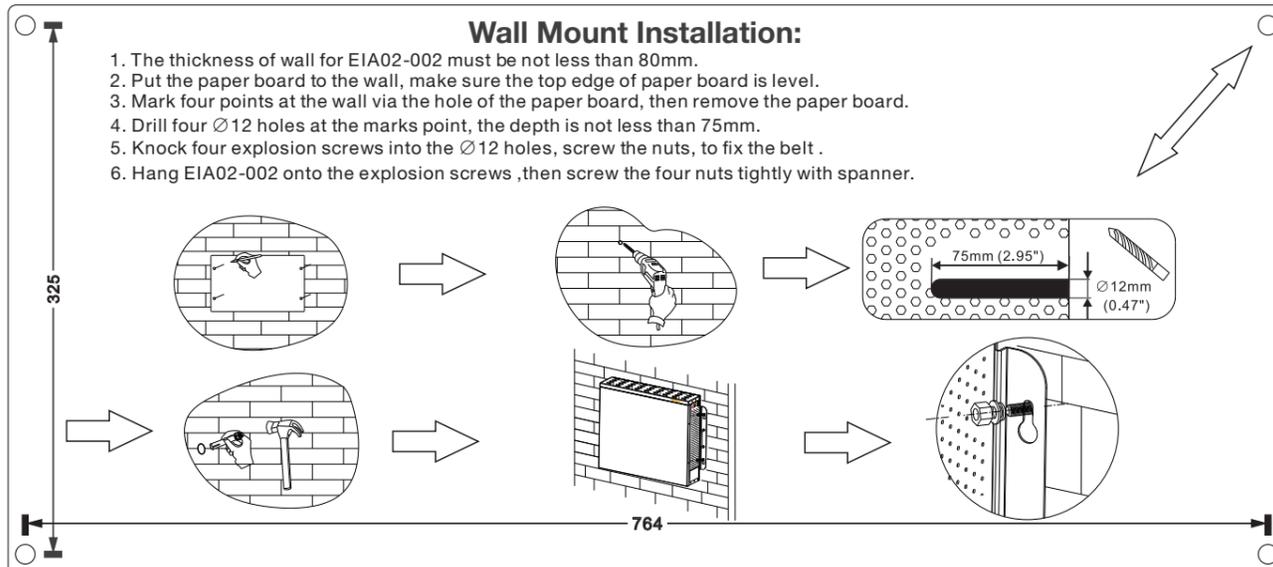
Battery System Installation

Push
Check LED STATUS

SP2000 I/O connector
SP2000 RJ45 male connector

1.Use screwdriver to take the connector cover off.
2.Connect with SP2000 RJ45 male connector
3.Connect with SP2000 I/O connector
4.Push Wake Up button one time to turn on battery system
5.Check if Battery Status LED is Green Light

KST Connector Installation

1.Adopt 6AWG wire, and strip the wire to reveal the metal core as more than 11mm.

2.Insert the metal core into the tale of the KST terminal and use crimping tool , as 5N18,to bond terminal and wire together. After crimping, the height of crimping area should be less than 5.5mm.

3.Face the KST terminal down and insert it into KST housing till the terminal locking up with housing

5.5mm
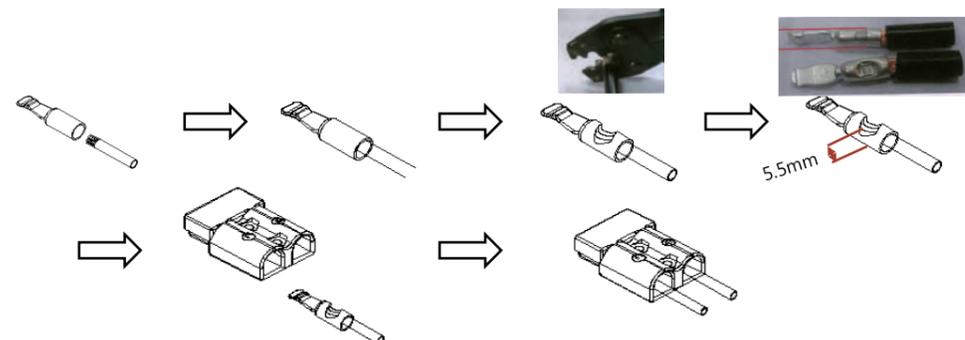
Storage Condition

Storage Temperature
• from -40°C to 60°C
• Extended storage at high temperature will have a detrimental effect to battery calendar life. The recommended storage temperature range for long periods (≥3 months) is -20°C to 35°C for optimal capacity retention.
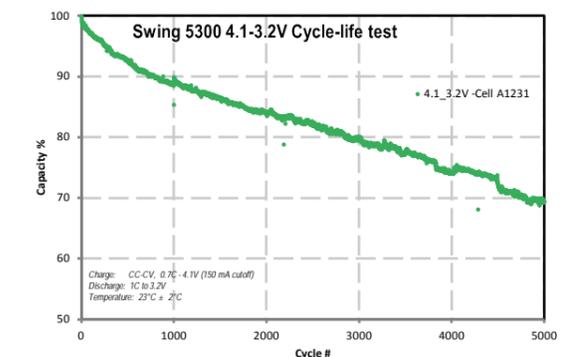
Relative Humidity
• From 5% to 95%RH

Trouble Shooting

1. LED turning red means the battery is in Error status.
2. Check all flag status from SP2000 to find error symptom.
3. If necessary, push Wake Up button for 5 seconds to enter Shut Down mode before disconnecting SP2000 and Battery System.
4. Parts swapping or repairing. The repairs are to be performed only by qualified technical personnel authorized by Darfon.
5. After trouble shooting, push button for 1 time againto return the battery into operation mode with green LED.

Battery Cell-BPI Swing 5300 Life Cycle Performance

Swing 5300 4.1-3.2V Cycle-life test
• 4.1_3.2V -Cell A1231
Charge: CC-CV, 0.7E - 4.1V (150 mA cutoff)
Discharge: 1C to 3.2V
Temperature: 23°C ± 2°C

Capacity %
Cycle #