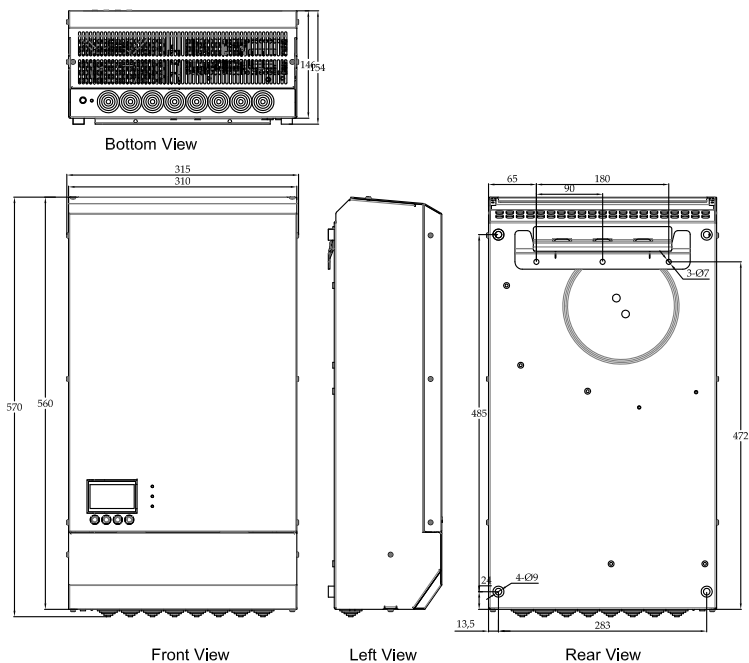


VERSION	DATE	AUTHOR	VERSION RECORD
1.0	JAN.29th 2021	MIKA	First release

① Product Dimension and Different Views



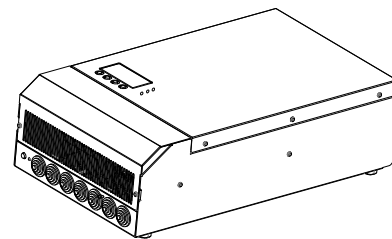
Dimensions in mm

④ Basic Electrical Parameters

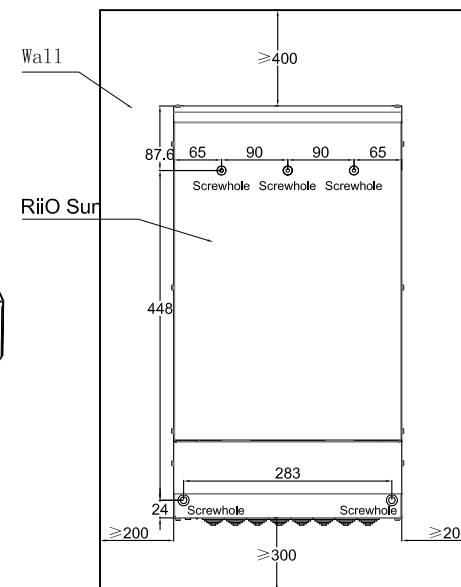
ACinput: 175~265VAC 45~65Hz, Max.50A
AC output: 220/230/240VAC,50/60Hz
battry input: 48VDC(42~68VDC)
PV input: 65~145VDC
Operating temperature: -20~65℃
Storage temperature: -40~70℃
Relative humidity: 95% without condensation
Altitude: ≤2000m
Protection index: IP21
Cooling: Force fan
Standards: EN-IEC 62477-1, EN-IEC 62109-1,
EN-IEC 62109-2;EN61000-6-1, EN61000-6-2,
EN61000-6-3, EN61000-3-11,EN61000-3-12

Model	RiiO Sun 5KVA-S	RiiO Sun 6KVA-S
Nominal battery voltage (V)	48	
Cont. output power at 25°C (VA)	5000	6000
Max. Output power at 25°C (W)	5000	6000
Peak power (3 sec) (W)	10000	12000
Surge	300%	
Maximum efficiency	94%	94%
Zero load power (W)	22	25
Max AC charge current (A)	60	70
Max Solar output current(A)	90	90
Maximum PV power(W)	6000	6000
Net Weight (kg)	29	31

② Product 3D View



③ Product Installation and Fixation Instructions

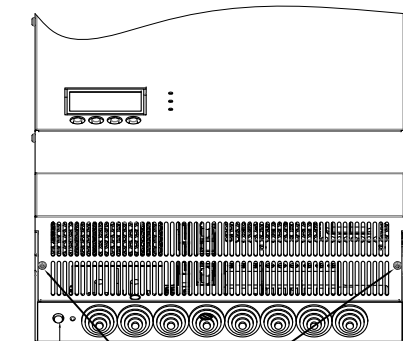


⑤ Installation Caution

- ⚠ The protection grade of the equipment is IP21, only allowed for indoor installation.
- ⚠ Do not install the device in a small, enclosed space without ventilation.
- ⚠ Do not install directly on the flammable building materials.
- ⚠ Keep away from the fire, avoid direct sunlight and rain.
- ⚠ Don't store flammable, explosive or corrosive gases or liquids in the working environment.
- ⚠ Don't install in a working environment with the metal conductive dust.

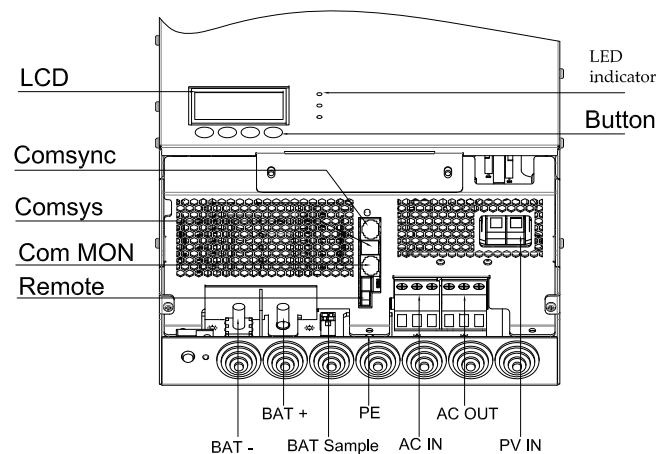
REVISION	V1.0	 PURSUIT OF PERFECTION TBB POWER Co., LTD.	SHEET 1 OF 2
DATE	JAN.29th 2021		DRAWN BY
SCALE	N.T.S		Mika.Yuan
DRAWING NUMBER	NO.TBB-AN/E-C007-V1.0	Enclosure Dimenstons for RiiO Sun 5KVA,6KVA	APPROVED BY
			Sky. Yi

⑥ Schematic Diagram of Device Ports Distribution



Remove these 2 screws before wiring, then take out the cover

On/off button



⑩ Human Machine Interface

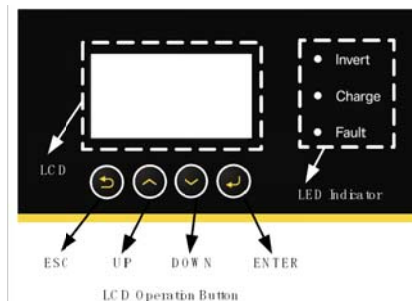
On/off button

POWER ON

Step 1	Press 2 seconds	Turn on the inverter into the Standby mode
Step 2	Wait 30 seconds, Press 1 seconds	Turn on the inverter into the Inverting mode

POWER OFF

Step 1	Press 2 seconds	Turn off the inverter into the Standby mode
Step 2	Press 5 seconds	Turn off the inverter into the off mode



LED Indicator	Colour	Function	
• Invert	Green	Solid on	Inverting mode
		Flashing	Power Assist mode
• Charge	Green	Solid on	The battery is Charging
		Flashing	The battery is fully Charged
• Fault	Red	Solid on	Fault occurs
		Flashing	Warning occurs

Button	Function
	To exit the setting mode or confirm the fault code
	To go to the previous selection
	To go to the next selection
	To enter the setting mode or confirm the selection

ECO MODE: Press the UP and DOWN button at the same time to enter ECO MODE, exit the ECO MODE by the same

⑦ Signal Interface

Silk-screen	Definition	Instruction	Cable requirement	Screw Torque	Instrument
BAT Sample	Battery temperature and voltage sample	Connect to the positive and negative terminals of the non-lithium battery pack	Bat sample cable	/	/
Remote	Dry contact input control, remote ON/OFF control	Connect to the remote switch	28-12AWG	0.57N·m	3mm straight screwdriver
ComMON	RS485 port for external monitor	Connect to the TBB Link and the Kinergy, MCK	8P8C cable	/	/
ComSync	CAN port communication input	Connect to the lithium battery pack	8P8C cable	/	/
ComSYS	System communication (RS485)	Connect to the MPPT and the BGK	4P4C cable	/	/

⑧ Power Interface

Terminal symbols	Terminal definition	Instructions	Wire Range	Screw Torque	Instrument
BAT -	Battery negative	Connect to the negative terminal of the battery pack	16-50mm ² /5-0 AWG	12N·m	13mm socket
BAT +	Battery positive	Connect to the positive terminal of the battery pack	16-50mm ² /5-0 AWG	12N·m	13mm socket
AC IN	AC Input	Connect to the grid or the generator	4-10mm ² /11-7 AWG	1.2N·m	cross screwdriver
AC OUT	AC output	Connect to the load	4-10mm ² /11-7 AWG	1.2N·m	cross screwdriver
PV IN	PV input	Connect to the PV Input	4-35mm ² /11-2 AWG	1.7N·m	cross screwdriver
PE	protective grounding	Connect to the grounding	4-10mm ² /11-7 AWG	5N·m	10mm socket

⑨ Recommended Power Distribution

Model	RiiO Sun 5KVA-S	RiiO Sun 6KVA-S
Battery cable (total length < 5m)	50mm ² /0AWG	50mm ² /0AWG
Battery Fuse/Circuit Breaker	200A	250A
PV cable (total length < 10m)	16mm ² /5AWG	16mm ² /5AWG
PV Fuse/Circuit Breaker	60A	60A
AC input cable	10mm ² /7AWG	10mm ² /7AWG
AC input Circuit Breaker	50A	50A
AC output cable	10mm ² /7AWG	10mm ² /7AWG
AC output Circuit Breaker	50A	50A
PE cable	10mm ² /7AWG	10mm ² /7AWG

REVISION	V1.0	 PURSUIT OF PERFECTION TBB POWER Co., LTD.	SHEET 2 OF 2 DRAWN BY Mika. Yuan
DATE	JAN.29th 2021		
SCALE	N.T.S		
DRAWING NUMBER	NO.TBB-AN/E-C007-V1.0	Enclosure Dimensions for RiiO Sun 5KVA, 6KVA	APPROVED BY Sky. Yi