

User's Manual

Water-proof foldable solar panel

BL-400M

1、 Product views

1.1 Folded views



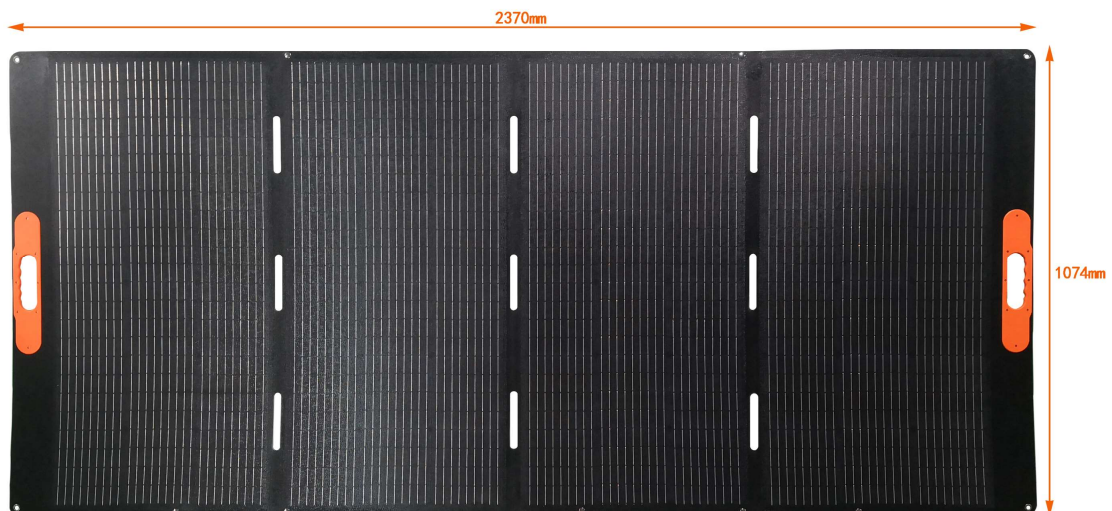
**Folded front view
(with optional PV interface)**



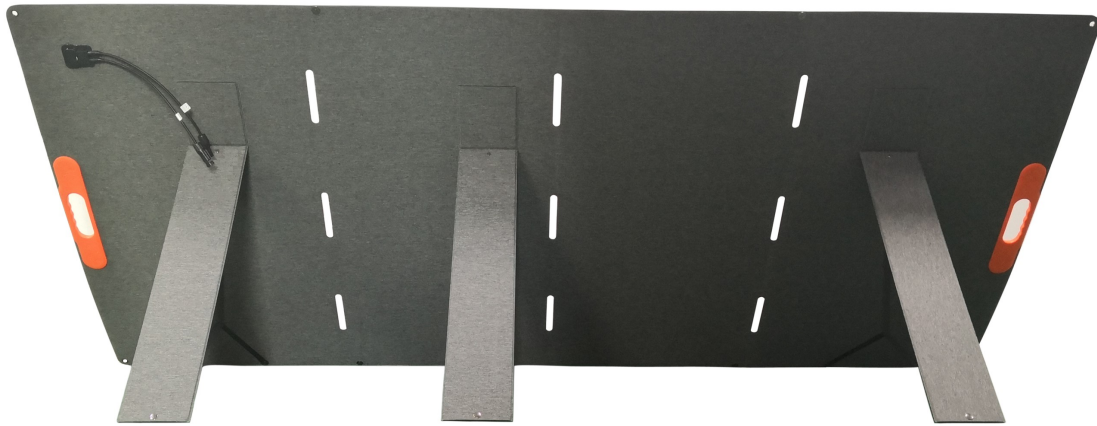
Folded front view

1.2 Expanded views

Expanded front view



Expanded back view



2. Product features

This product is designed for charging energy storage system in outdoor sunlight. It is easy to connect, convenient for transportation and maintenance.

- Foldable solar panel is lightweight and compact shaped, with an integrated magnetic carrying handle /magnetic bracket which makes it easy to open and close. The support stand offered with solar panel is suitable for outdoor carrying and use.
- Solar panel is encapsulated of FR-4 glass fibre sheet substrate + EVA + ETFE protective film lamination, its lifespan could be up to 10 years.
- Produced with high-efficiency grade A monocrystalline silicon cells, the photovoltaic efficiency of the cells is more than 22.6%.
- Waterproof and dirt-resistant, easy to clean.
- Suitable for charging energy storage batteries with rated voltage DC48-72V (need to connect PV charging controller separately).
- Has a certain degree of drop resistance. As 400W solar panel is heavier and can only withstand a drop height of 0.3 meters or less. Do not hit the front of the solar panel to sharp objects to avoid damage on the internal solar cells.
- Standard cable length is 0.5m, PV connector is MC4.
- With waterproof fabric and process, it can be used under raining.

Note: It should not contact with seawater and other conductive/corrosive liquid, which may lead to internal short circuit. In case of this happens, please rinse the product surface with clean water and dry it)

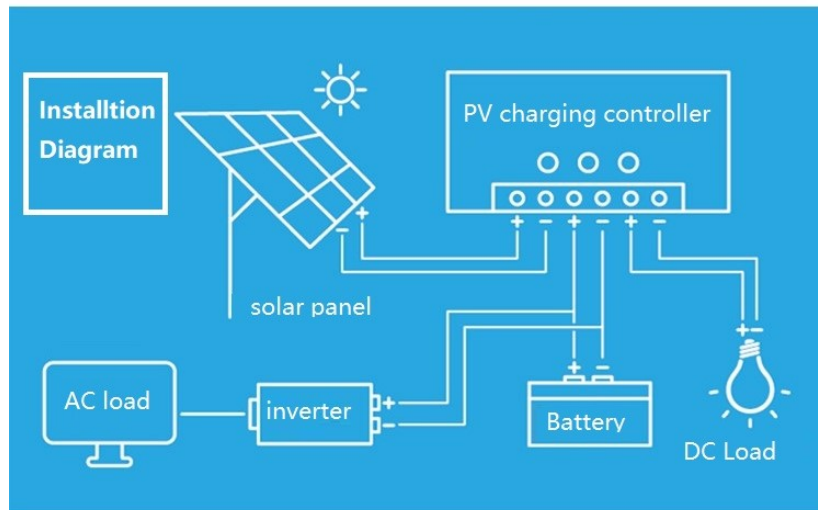
3. Technical data

Model	BL400M-24-C
Peak power Pm(W)	400W
Open circuit voltage Voc(V)	84.0V
Max. power voltage Vmp(V)	72.0V
Max. power current Imp(A)	5.56A
Short circuit current Isc(A)	6.3A
Solar cells Efficiency	22.0%
Solar panel model & number	4 pcs
Folding size	1074*631*45mm
Deployment size	2370*1074*25mm
Net weight	16.6kg
solar cell	high-efficiency grade A monocrystalline silicon cells
Output port	MC4
solar folding handbag material	waterproof
NOCT/Operating temperature	48±2°C /-40°C- +85°C
Storage temperature	-10°C- +30°C
Waterproof grade	IP67
Power/voltage/current temperature factor	-0.35%/°C ; -0.272%/°C; +0.044%/°C
Lifespan/ Warranty	≥10 years / 1 year
STC standard test condition	irradiance:1000W/m2, temperature:25°C,AM:1.5
Dimension/weight:	Package: 1130*90*695mm Gross weight: 18.5KG/Package Maser package: 1155*195*730 mm (2pcs/maser) gross weight: 39KG/master

4. Instruction for use

4.1 Installtion diagram

Note: Make sure battery connected to controller before connecting solar panel to controller.



4.2 Operation Instruction

- The solar panel should be placed in direct sunlight and adjusted to the appropriate angle to receive light for maximum power generation.
- This product is suitable for charging portable energy storage power supply equipment with rated voltage DC 48-70V (need to be with built-in solar charging protection) or battery.

Warning: Do not connect the solar panels directly to charge the battery. PV charging controller must be installed to protect the battery from overcharging or to prevent the wrong connection which may cause damage or personnel injury. If the charged device is an integrated energy storage machine, please follow its instruction to connect the solar panel.

- Ensure the correct connection of positive / negative poles to PV charging controller / energy storage system.
- Check the specification, power, current, voltage of PV charging controller / battery / energy storage system, ensure these values are within the limit of solar panel, otherwise it may cause damages and other results.
- The voltage of solar panel under sunlight has exceeded the human body safety voltage.
- Warning: To prevent electric shock, do not contact or short-circuit the solar panel when solar panel is working on the sunlight.
- Warning: To prevent electric shock, stop use the solar panel if it is damaged.
- To use it carefully, it is strictly prohibited to heavily drop, press, impact the solar panel otherwise cells would be damaged.