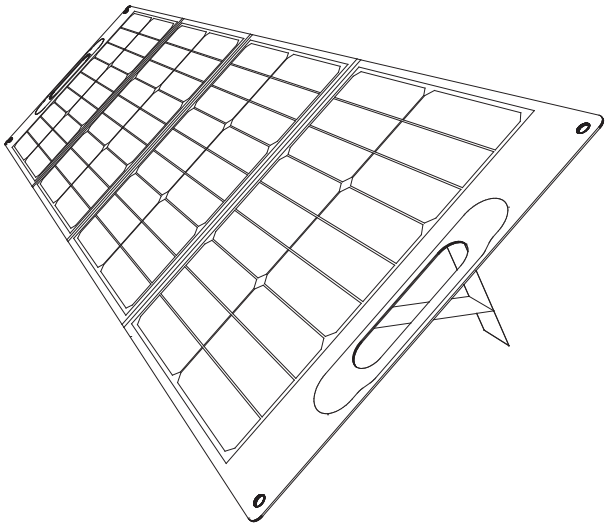
Pion Power™



SP100W
FOLDABLE SOLAR PANEL

USER MANUAL

V1.0.230904

NOTE

Warnning: As the output power of solar panels depends on light intensity and the tilt angle used, the charging power of the panel may be affected by a number of factors such as weather conditions, seasonal changes and location.

Warnning: Do not squeeze or bend the solar panel, otherwise it will cause irreversible damage and power reduction to the solar panel.

Warnning: Do not hit or scratch the solar panel with hard objects.

Warnning: Do not place heavy objects on the solar panel.

Warnning: Do not use the solar panel in harsh weather conditions such as thunderstorms, hail, or strong winds.

Warnning: Do not place this product in water or fire.

Warnning: Solar panels cannot be contacted with strongly corrosive substances.

Warnning: When you use the solar panel to charge your device, please read your device's manual to make sure we can charge it with solar panels.

SPECIFICATION

Model	SP100W
Output（MC4 and DC5521）	
Peak power (Pmax)	100W
Peak power voltage (Vmp)	19.8V
Peak power current (Imp)	5.05A
Open circuit voltage (Voc)	23.76V
Short-circuit current (Isc)	5.55A
Cell efficiency（%）	22%±1%
Tolerance（%）	±5%

Standard Tested Condition: AM=1.5 , T=25±2℃ , 1000W/㎡

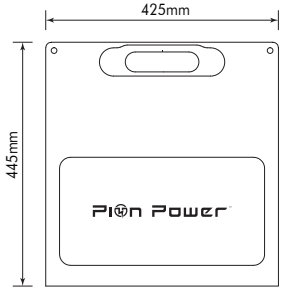
Others output	
USB 1	5V/3A (Max)
USB 2	5V/3A, 9V/2A, 12V/1.5A (Max)
Type-C	5V/9V/12V/15V/20V (3A Max)

Structure	
Cell Type	Mono-crystalline Silicon
Surface	ETFE
Number of folds	4
Folded Size	1650*425*5mm
Unfolded Size	445*425*55mm
Net weight	3.8kg
Gross weight	4.6kg
Material	Oxford fabric
Control box	Dual USB+Type-C+DC5521
Output port	0.5m MC4 Connector
Color	Black

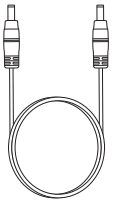
Others	
Operation temperature	-20℃ ～ 75℃

BOX CONTENTS

Check the box to make sure you have all the components listed below.
If any parts are missing, please contact Customer Service Department.



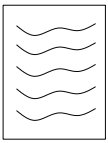
Solar Panel



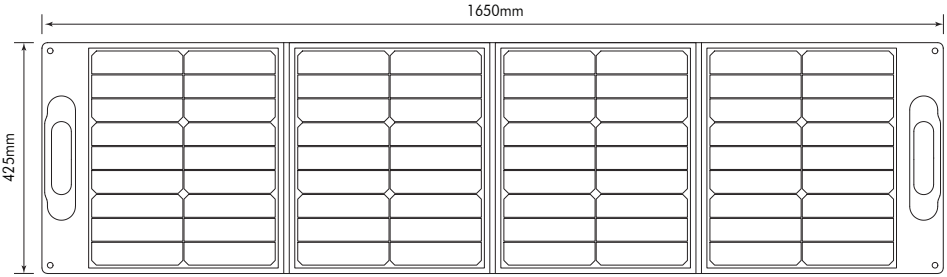
DC5521 Cable

A. 6.0×4.4 mm
B. 6.3×3.0 mm
C. 5.5×2.5 mm
D. 5.5×2.1 mm
E. 5.5×1.7 mm
F. 4.8×1.7mm
G. 4.0×1.7mm
H. 3.5×1.35mm
J. 7.4×5.0mm
K. 7.9×5.5mm

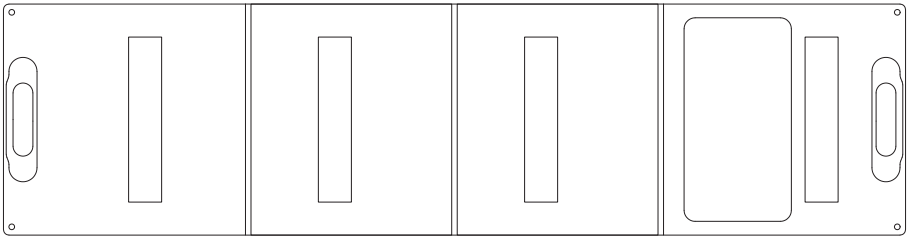
10 DC Adapters



User's Manual



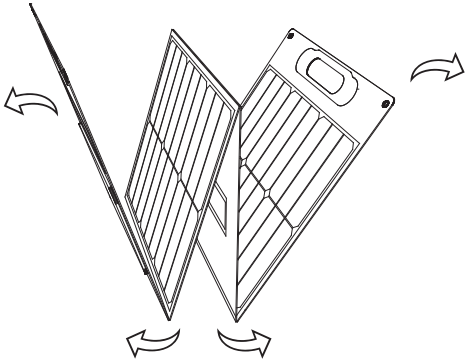
Front View



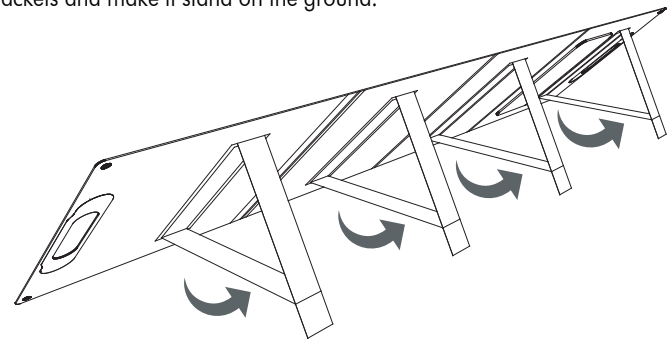
Back View

INSTALLING THE SOLAR PANEL

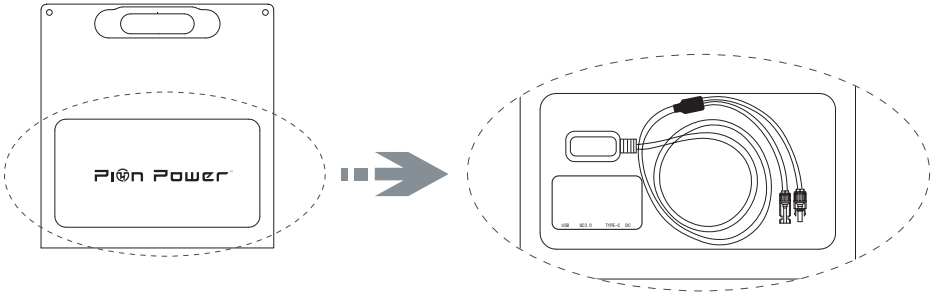
Unfold the 4-fold solar panel.



Unfold the 4 brackets and make it stand on the ground.

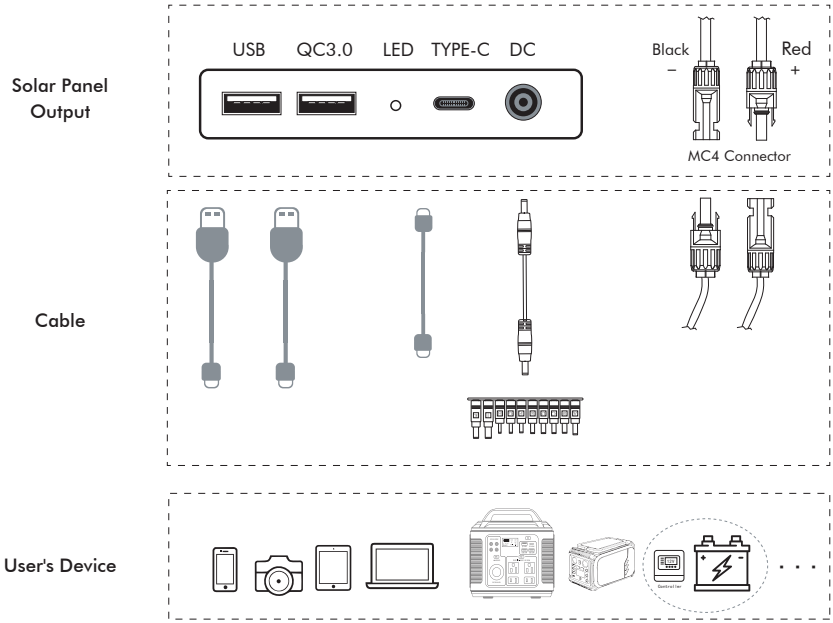


Open the pocket on the back of the solar panel.

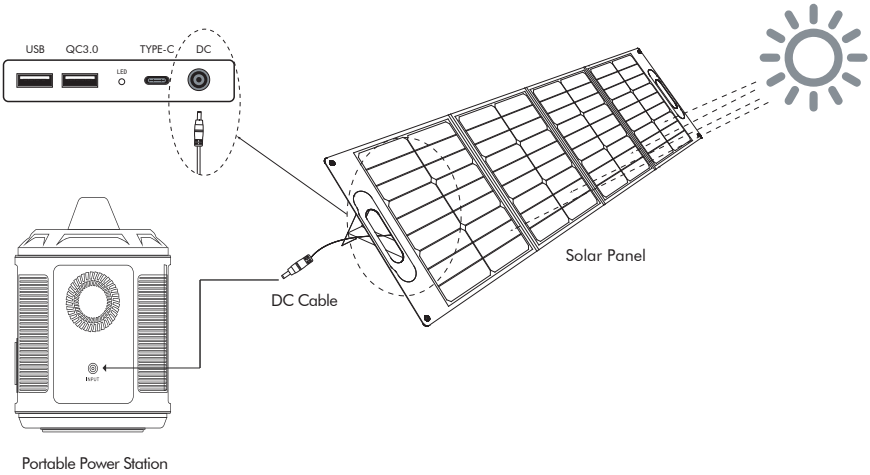


CHARGING YOUR DEVICE

Choose different cables based on device and plug it into the corresponding output port to charge.



CHARGING THE PORTABLE POWER STATION



FAQ

Are solar panels waterproof?

The surface of the solar panel is waterproof, but other parts are not.

Could solar panels be cleaned with water?

The surface of the solar panel can be wiped with a wet towel, but the solar panel cannot be rinsed with water.

What Causes Low Charging Power in Solar Panels?

Weather Conditions: Output power is reduced in rainy or cloudy weather, or when the sun is too low in the sky.
Shading: Shadows on the surface of the solar panel or placing it behind glass can significantly reduce its power output.
Angle and Position: Solar panels produce less power when they are not oriented directly towards the sun.

Can solar panels be used in extreme weather?

Please avoid using it in severe conditions such as thunderstorms, strong winds, and hail.

Do solar panels store electricity?

Solar panels convert solar energy into electrical energy, but they do not store electricity themselves.