User Guide
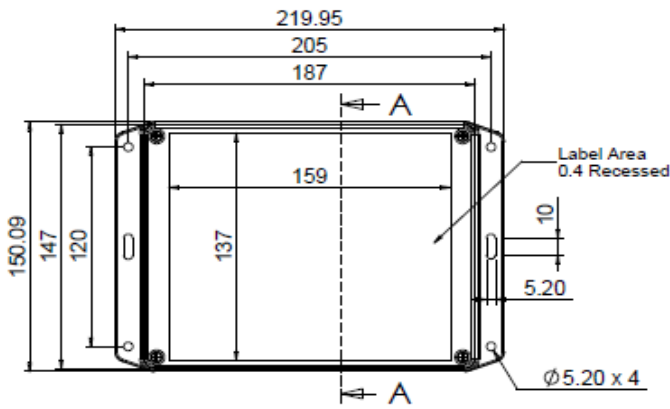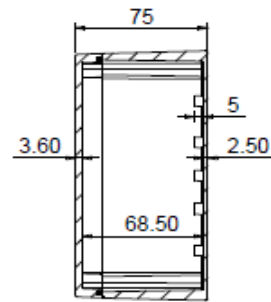
1. Product Description

- Series Name：Arc-solar Box P

- Outer Dimension (L×W×H): 187×147×75 (±0.5) mm；Weight : 520 g

- PV Module Specification：

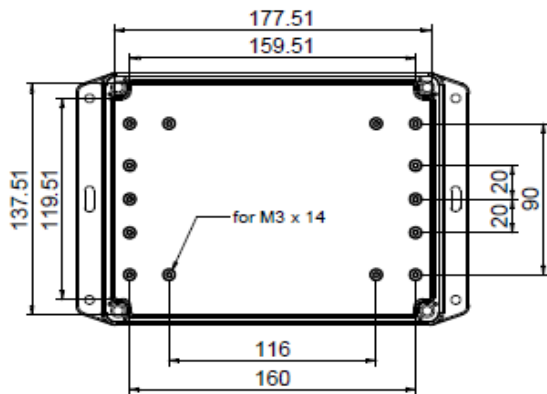| Item	Specification
Open-circuit Voltage (V_{oc}; V)*	2.66 (±5%)
Short-circuit Current (I_{sc}; mA)*	1,750 (±5%)
Max. Power Output (mW)*	3,050 (±5%)
*: Data measured under 1 Sun Condition (1,000 W/m^2 with AM1.5 spectrum)	

- Drove by Flexwave's optimize-designed power management.

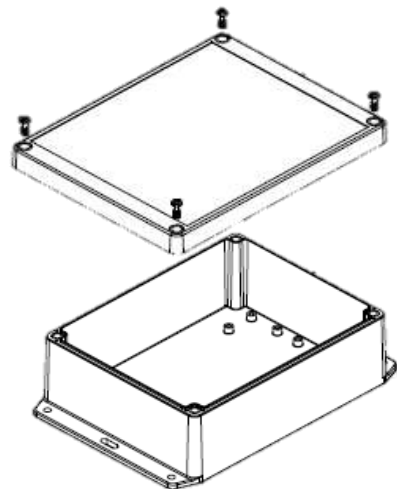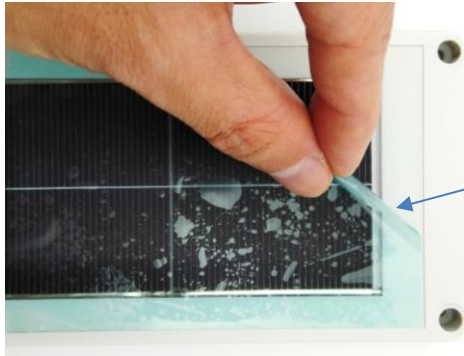 - Polycarbonate-made box with IP67 degree of protection.

Top view

Section A-A

Inner view

2. Installation：

a. Remove the protect film on surface.

b. Install fully charged battery before plugging in functional device.

c. Place Oring into the groove inside of top cover and make sure flat side of Oring face out.

d. Recommended Lid Screw Torque: 30 ozf-in (21 cN-m).

e. Users can drill sizeable holes to fix waterproof joints for alternative applications.

Remove the protect film.

M3.5 Stainless Screws

Top Cover
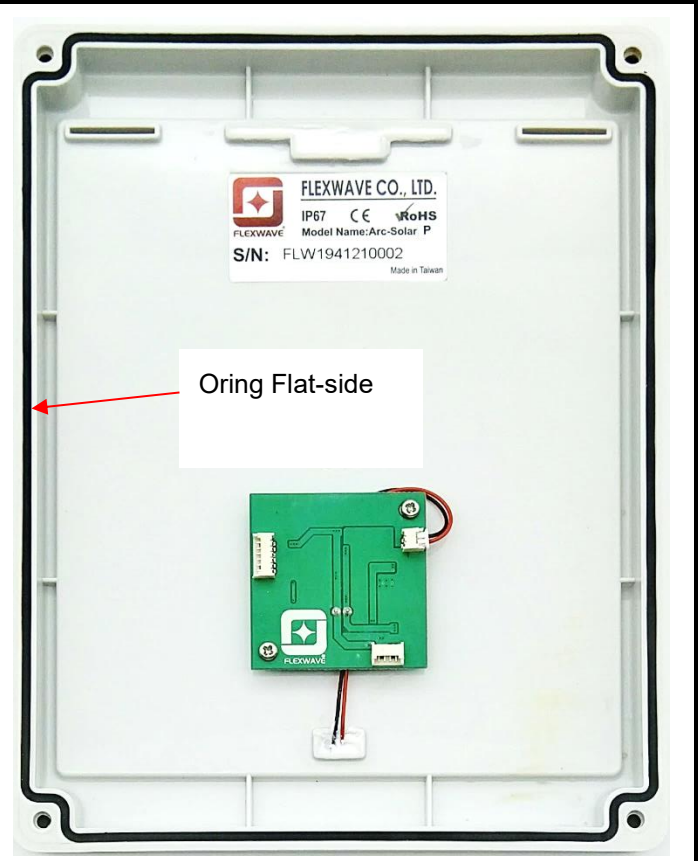
Oring Round-side↑
Oring Flat-side↓

Oring

0.7mm washer glued
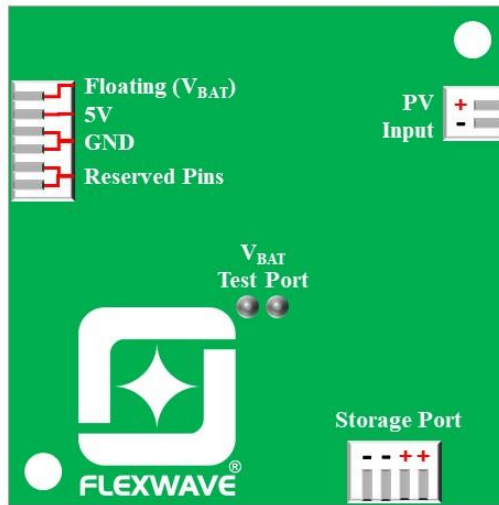
Self-drilling waterproof joint

Housing

FLEXWAVE CO., LTD.
IP67   CE   RoHS
Model Name:Arc-Solar P
S/N: FLW1941210002
Made in Taiwan

Oring Flat-side

3. Function Description

- The charging Voltage of the Max. Power Point Tracking (MPPT) system is 4.2V(maximum).

- Storage device is an essential/ necessary component for maintaining output system stable.

- The floating pin provides battery voltage with a limited current.

- Model type of connectors: Molex / JST pitch 1.25 mm (Female).

- The following picture illustrates the functions of the smart power system.

The function diagram of Power Management.

Power Manager		Min.	TYP.	Max./	Unit
Charging voltage of storage port.				4.2	V
Peak output current of 5V output.				900	mA
Quiescent current.	MPPT System		85	120	μA
	5V step-up output.		100	250	
Accuracy of V_{BAT}, V_{SYS}.		-5		+5	%
Recommended operating ambient condition. (Depends on usage of chargeable batteries)		-10		65	°C

* Must have battery protection board when adopting rechargeable battery.

4. Warranty and Maintenance

● Please read the following information before using to ensure use products safely/ products safety.

> Do not throw Arc-solar box P into the water.

> Do not puncture, crush, throw or drop the box.

> Do not bring sharp objects to rub against the box, to avoid scratches and damage.

> Away from flammable products and petrochemical oil/gas.

● Clean the surface by ethanol or clean water.

5. Certificates

● IP67 degrees of protection provided by Arc-solar box manufactured by Flexwave are certified by SGS according to IEC 60529 Edition 2.2:2013.

● European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) are certified by BUREAU VERITAS CONSUMER PRODUCTS SERVICES (H.K.) LIMITED, TAIWAN BRANCH.

● CE-EMC are certified by Weishang Certification Co., Ltd.

Suggestion-Screw board / Stainless stand instruction

Assembly instruction：

a. Remove screws from stand.

b. Screw board and stand together after setting stand's angle.

c. Use screw and hex nut to screw board to 4corners of Arc solar Box. (Red dotted line)

If you don't want to use screw and hex nut, feed locking strap through yellow line area to make it firm.

a	b
c	d