

# ECOBOXX 160 SOLAR GENERATOR KIT

## GET TO KNOW YOUR ECOBOXX

### CHARGE IT

- The Ecoboxx 160 can be powered completely from solar power or via an AC charger.

### PLUG IT

- The Ecoboxx 160 is capable of charging devices through AC, DC or USB outlets.

## GETTING STARTED

1. Charge your Ecoboxx 160 through the input port.
2. Recharge from 20W solar panel kit or an AC charger.
3. Position the 20W solar panels at an angle facing the sun (see below).
4. Connect the Ecoboxx 160 to start charging.



## HOW TO USE YOUR ECOBOXX 160

1. AC output port: Use any AC device up to 100 watts.
2. USB output port: Accepts any standard USB cable for charging USB devices.
3. DC Car/Cigarette output port: Connect 12V devices.
4. DC 5mm output port: Connect LED lighting..

## HOW TO USE YOUR 20W SOLAR KIT

- Bracket Holes: use the brackets on the side of your panel to hang or affix permanently.
- Power Cable: 6-meter cable included.

## COMES WITH

- 20 Watt Solar Panel Kit.
- LED 3W Light
- AC Charger

## FREQUENTLY ASKED QUESTIONS

### ECOBOXX 160

#### How long can the battery last without being recharged?

To keep the battery healthy, recharge it (at a minimum) every 3 months. Failure to do so will shorten the life of the battery.

#### How do I know I have a full charge?

If the battery level indicator is completely green then it is full.

#### Is it weatherproof?

The Ecoboxx will hold up in inclement weather, but is not waterproof. Ensure the ports are dry before using.

#### What kind of battery is used with the Ecoboxx 160?

It is a sealed lead acid battery, also known as an AGM.

### 20W SOLAR PANEL KIT

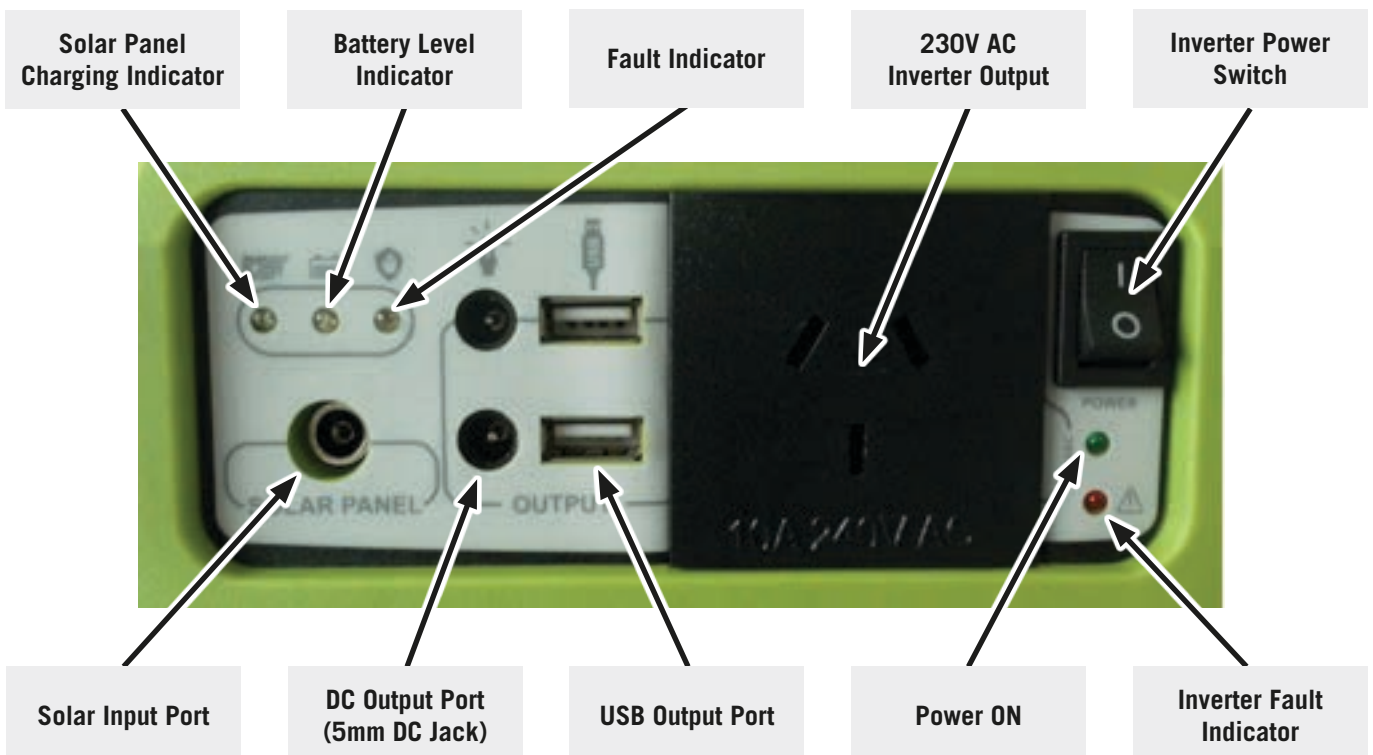
#### Is the solar panel kit waterproof?

Yes, The solar panel kit is weatherproof however ensure the connection port is dry before connection to the Ecoboxx.

#### Does the solar panel kit give a full 20-Watts?

It delivers up to 20 Watts of power, but the angle of the panels and the cloud coverage can impact its performance. Avoid the shade. It will not work indoors.

## FRONT PANEL



# ECOBOXX 160 SOLAR GENERATOR KIT

## TECHNICAL SPECS

### USAGE

Charges from the following:	Approx. charge time.
20W solar kit	8-10 hours
AC wall charger	4-5 hours

### LED INDICATORS

Solar panel charging indicator	Solid green LED indicates normal charging (0.5V higher than the battery voltage) Slow blinking green LED indicates overvoltage protection (28V~39V). Normal charging will recommence when input voltage is $\leq 26V$ Fast blinking green LED indicates over current protection (MAX. 2.0A). Normal charging will recommence after 30 sec when current is $\leq 2.0A$
Battery level indicator	Red LED: battery is very low Orange LED: battery is low Green LED: indicates half the full charge
Fault indicator (red)	Indicates overloading of AC or DC.* Indicates short circuit.*

\*Disconnect load & wait 30 second for unit to reset. Continuous overloading will damage unit and void warranty.

### INPUTS

Charging port (5mm)	16~26V, 2A max
Solar Panel	Rated Power: 20W Cell type: mono-crystalline Open circuit voltage: 21.6V

### OUTPUTS

AC (230V)	100W, modified sine wave
USB port	5V, 1.5A
12V port (5mm)	1A
12V cigarette output port	7A, 7.1~8.5A

### INTERNAL

Battery type	Lead-acid (AGM)
Battery capacity	160Wh (12V 13Ah)
Battery voltage range	11.5~14.4V
Life span	Hundreds of cycles

### GENERAL

Weight	Ecoboxx 160: 4.1 kg
Solar panel kit:	2.4 kg
Dimensions	Ecoboxx 160: 205 x 108 x 240 mm
Solar panel kit:	290 x 15 x 349 mm (each)
Warranty	12 months
Tested and Certified	SAA, CE
Operating usage temp.	0°~40°C
Optimal storage temp.	21°C



#### NOTE: MASTER POWER SWITCH

There is the master power switch at the back of the unit, it is the system power ON/OFF. We turn it OFF in ex-factory to reduce the self consumption current so that you can store for a long time.  
Please turn it ON for charging or for output, or turn it OFF when you don't need to use it for a long time.