

We Care Solar®

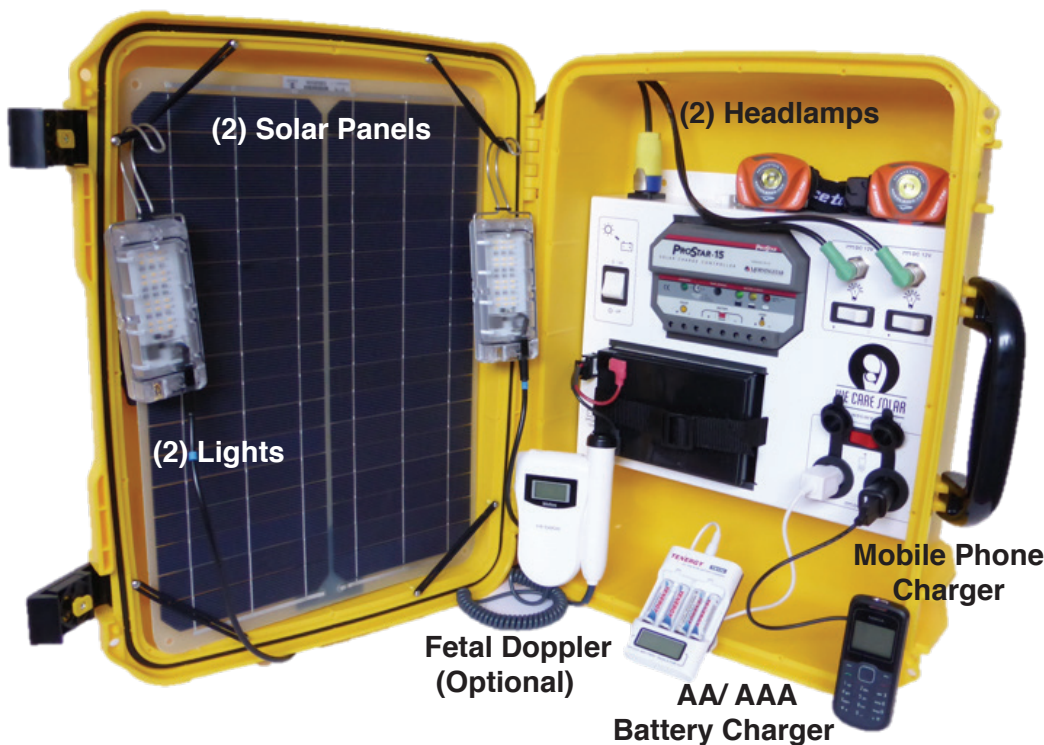
2015 Product Specifications

The We Care Solar (WCS) Suitcase is an innovative solar electric system designed to bring essential light and energy to health care. The Solar Suitcase contains an advanced solar controller to regulate the flow of electricity amongst the solar panels, battery and appliances. All the components are encased in a watertight and dust-proof suitcase made to hold up in harsh environments. The system is rugged and durable, built with the high quality components.

The WCS Solar Suitcase comes in two configurations: **Basic** and **Enhanced**.

Basic Solar Suitcase

Solar Suitcase Basic is a portable and self-contained system that provides high efficiency lighting and 12V DC electricity. It can be installed as a permanent system or used without being installed.



Size and Weight

Height: 19.75 inches (502 mm)
Width: 15.53 inches (394 mm)
Depth: 7.48 inches (190 mm)
Weight: 35 pounds (16 kg) (with internal SLA battery)

Specifications

Max. Solar Input: 250 watts
Max. Current: 15 amps
Operating Voltage: 11.4 to 14.4 volts
Operating Temperature: 0° C to 45° C

Basic Components - High Efficiency Lights

Two high-efficiency rugged LED lights (4W) have a color rendering capacity optimized for medical use. The lights connect to the suitcase via the light connector interface. The lights included in the solar suitcase run on 12 Volts DC and are designed by WCS to withstand exposure to heat, moisture, and dirt.

Size and Weight

Height: 5.0 inches (127 mm)
Width: 2.2 inches (56 mm)
Depth: 0.9 inches (23 mm)
Weight: 1.25 pound (570 g)
Cord length: 33 feet (10 m)

Specifications

Power: 4W
Color Temperature: 5000K
CRI: 85 (Ra)
Life Expectancy: >50,000 hours





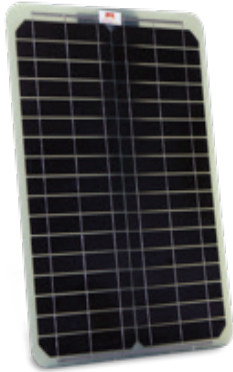
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Plastic Solar Panels



The monocrystalline solar panels used in the Basic Solar Suitcase are made on durable fiber reinforced G-10 plastic and fit directly into the Suitcase. Two 20-watt panels are included in the Solar Suitcase Basic for a total of 40 watts.

Size and Weight

Height: 17.5 inches (44.5 cm)
Width: 13 inches (33 cm)
Depth: 1/4 inch (6.4 mm)
Weight: 2 pounds (0.90 kg)

Energy

Max. Output: 20 watts
Max. Current: 1.2 amps
Voltage: 12 volts nominal
Life Expectancy: 10 years

Battery



The Sealed Lead Acid AGM battery (SLA) is nested within the Suitcase and connects directly to the Solar Controller unit.

Size and Weight

Height: 4 inches (102 mm)
Width: 6 inches (152 mm)
Depth: 4 inches (102 mm)
Weight: 10 pounds (4.5 kg)

Energy

Usable Capacity: 105 Watt-hours
Life Expectancy: 2-3 years with proper use



LFP Battery - a Lithium Ferrous Phosphate (LFP) battery that provides approximately 150 Watt-hours of usable energy, much more than the equivalent-sized SLA battery.

Size and Weight

Height: 4 inches (102 mm)
Width: 6 inches (152 mm)
Depth 4 inches (102 mm)
Weight 3.75 pounds (1700 g)

Energy

Usable Capacity: 145 Watt-hours
Life Expectancy: 4-7 years with proper use

Included Accessories



Head lamp (Quantity 2)

Adjustable headlamps are equipped with powerful LED lights and run on rechargeable AAA batteries (included).



Battery charger

The AAA/AA battery charger is used to charge both AAA and AA batteries. The 12 AAA included in the Solar Suitcase kit are used to power the headlamp, and 4 AA rechargeable batteries are included to power the Fetal Doppler in the Maternal Health Kit.



Micro USB Phone Charger

The solar suitcase includes both a single charging wire (USB to Micro-USB) and a multi-tipped charging wire able to adapt to many different phones. You can also charge phones that have a 12V DC car charger.



Optional -- Maternal Health Kit

A portable fetal heart rate Doppler allows health providers to detect the fetal heart rate. The fetal Doppler runs on rechargeable AA batteries, 4 of which are included in the Solar Suitcase.