Solar Suitcase

Advanced solar controller, sockets, controls, and battery -- all in a water-and-dust tight suitcase, made to hold up in harsh environments. System contains an integrated 12V, 20Ah battery, which is charged by a solar panel. Suitcase has two light sockets, two 12VDC accessory (lighter) sockets, two USB ports, and two expansion ports to allow for optional accessories or additional lights. A 40’ homerun cable and all necessary installation hardware is included. Custom display and user-interface make operation simple and intuitive.

**Size and Weight**
- **Height:** 19.75 inches (501.6 mm)
- **Width:** 15.53 inches (394.4 mm)
- **Depth:** 7.48 inches (190 mm)
- **Weight:** 32 pounds (14.5 kg)

**Power**
- **Max. Power:** 240 watts
- **Max. Current:** 20 amps
- **Operating Voltage:** 11.4 to 14.4 volts
- **Operating Temp.:** 0° C to 40° C

LED Lights

Four high-efficiency, rugged, LED lights provide up to 720 lumens and have a color-rendering capacity suitable for medical use. Two lights connect to the Solar Suitcase via the integrated light sockets and two connect through the Light Expansion Box. They are designed by We Care Solar to withstand exposure to heat, moisture, dirt and impact.

**Size and Weight**
- **Height:** 4.5 inches (11 cm)
- **Width:** 2 inches (5 cm)
- **Depth:** 1 inch (2.5 cm)
- **Cord:** 33 feet (10 m)
- **Weight:** 1.1 pounds (0.5 kg)

**Power**
- **Load:** 1-6 watts (dimmable)
- **CRI:** >91 (R9>70)
- **Color Temp:** 4950 K

Battery

One 20Ah Lithium Ferrous Phosphate (LFP) battery provides lightweight and rugged energy storage.

**Size and Weight**
- **Height:** 6.6 inches (167 mm)
- **Width:** 3 inches (77 mm)
- **Length:** 7.2 inches (181.5 mm)
- **Weight:** 6.7 pounds (3.0 kg)

**Power**
- **Max Capacity:** 256 watt-hours
- **Max Usable Capacity:** 256 watt-hours
- **Life Expectancy:** 4-7 years

Light Expansion Box

The Light Expansion Box provides switches and sockets that can be installed in a room up to 40’ (12.1m) from the Solar Suitcase. The box supports two additional lights and connects to the Solar Suitcase via the expansion socket located on the Solar Suitcase control panel.

**Weight**
- **Weight:** 1.7 pounds (.77 kg)
Headlamps

Adjustable LED headlamps are charged with the included micro-USB cable. The micro-USB cable plugs into one of the Solar Suitcase’s USB ports.

Thermometer

The infrared thermometer enables touchless temperature detection. The LCD color-coded display indicates when forehead temperatures are above the normal range. The thermometer uses two rechargeable AAA batteries. Four rechargeable AAA batteries are included. A Tenergy AA/AAA battery charger (detailed below) is also included.

Fetal Doppler

The portable fetal Doppler allows health workers to detect the fetal heart rate. The fetal Doppler uses two rechargeable AA batteries. Four rechargeable AA batteries are included. A Tenergy AA/AAA battery charger (detailed below) is also included.

Battery Charger

The Tenergy rechargeable battery charger can charge both AA (fetal Doppler) and AAA (thermometer) rechargeable batteries. The battery charger plugs into one of the Solar Suitcase’s 12VDC sockets.

Solar PV Panel

The Solar Suitcase comes with a 100 watt high efficiency monocrystalline PV module. The Solar Suitcase is also compatible with a range of solar panels, which can be sourced from local suppliers.

**Included Panel**

- Max Power: 100 W
- Cell Configuration: 3x24 Monocrystalline silicon
- Open-circuit voltage (Voc): 21.6V
- Dimensions: 20.24” x 52.13”
- Weight: 17.2 lbs

**Also compatible with panels that meet the below specifications**

- Power: 100-240 W
- Open-circuit voltage (Voc): 12-50V