



DLXNY-ST03 Portable Solar Power Experiment Box

■ Overview

• The portable solar power experimental box is a solar photovoltaic power system which can provide practical teaching, testing, demonstration platform for the solar cell, controller and the sine wave inverter working principles. The working process is that the solar cell modules convert solar energy into low-voltage DC power firstly, then charging 12V battery through the controller, at the same time it will charge the inverter at the backside, inverter converts 12V DC into 220V AC, supply power to all kind of loads.

■ Technical Parameter

• Total dimension: 470×560×260mm

Accumulator capacity: 12V/7AH

• Input voltage: AC220V/50Hz/60Hz

• Working environment: $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$, $\leq 85\%$ RH

• Solar cell module: Power: 10W Voltage: 18.0V Current: 0.56A

Open-circuit voltage: 22.30 Short-circuit current: 0.60A

• Solar controller: Rated Output Voltage, Current: 12V/2A; Battery overcharge protection: 14.40±0.2V, recover:

13.8±0.2V Battery discharge protection: 10.80±0.2V, recover: 12.5±0.2V Two output modes: Common on/off mode,

Electric on/off mode.

• Inverter

Rated input voltage: 10~15V Rated output voltage: AC220V±10%, 50Hz/60Hz;DC5V Output wave: Sine wave

Rated output power: 150W Low voltage shut down: 9V~10V Overpressure shutoff: 14.5~15.5

Temperature protection: ≥65°C Transfer efficiency: >90%

Protection function: overload, overvoltage, short circuit, low tension, high temperature, reverse