Suitcase-style Outdoor Power Station S2500 Specification Sheet

Customer Name	
Product Name	Suitcase-style Outdoor Power Station
Product Model	S2500
Product Code	
Specification Version	V1
Release Date	2024.5.20

Customer Confirmation		
Prepared	Reviewed	Approved

Prepared By	Reviewed	Approved

Change History

Date	Version	Modification Details	Modified By	Approved By
2024.5.20	V0	Create	蓝**	陈**

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1 Introduction

1.1 About This Product

This Product: Outdoor Power Station

Product Version: This version is for use in Mainland China and Europe.

1.2 About This Specification

This document serves as the baseline for the outdoor power station, specifying and defining the requirements for the product. It is the technical document to be followed during product development and serves as the primary reference for testing, production, marketing, and service. This document primarily describes and defines the product in terms of technical parameters and dimensions.

2 Product Overview

The outdoor power station converts AC power through a charger or bidirectional inverter into DC power, or charges via solar panel DC power, storing energy in the internal battery pack. When needed, the stored power is supplied externally, offering outputs of 48V, 24V, 12V, and 5V. It features a built-in bidirectional inverter.

Product Components:The main components include the battery pack (with BMS) and the bidirectional inverter.

3 Application Scenarios

The bidirectional inverter allows users to power appliances and tools during outdoor work or travel. Compatible devices include: mobile phones, laptops, drones, digital cameras, cameras, lighting, electric shavers, gaming consoles, handheld devices, electric tools, car refrigerators, and various emergency, travel, camping, and medical devices.

Typical scenarios: firefighting, outdoor live streaming, outdoor camping, outdoor air conditioning, refrigerators, etc.

4 Technical Parameters

	Project	S2500		Notes
	4.1 Basic Performance			
1	Appearance	No obvious cracks, scratches, or stains		
2	Dimensions (mm)	(636±10)(442±3)(205±10)		
3	Product Weight	(29±1) Kg		
4	Protection Level	IP31		
5	Rated Power	2500W		
6	Output Methods	AC: 220V		
7		DC: 12V and 5V		
8	Battery Module Nominal Voltage	25.6V		
9	Battery Module Rated Capacity	100Ah		
10	Battery Energy	2560Wh		
11	AC Output Minimum Energy	2150Wh		(25±2)°C, 800W charge, 800W discharge
12	220VAC Output Power	2500W		continuous (overheating triggers automatic protection)
13		5000W		instantaneous
14	USB Charging Port Output	QC3.0: 5V2A; PD: 5V2A		total 30W when used simultaneously
15	DC12V Output (Car Charger Output)	10A		
16	DC 24V Output	Not available by default (can be added)		
17	AC Input (Charging)	220VAC 6A		battery module charging power approx. 1200W
18	Solar Input (Charging)	Voltage: 30-400V, maximum power: 1200W		
19	Supports Simultaneous Charging and Discharging	Yes		
20	Cycle Life	1000 cycles		(25±2)°C, 800W charge, 800W discharge
21	Warranty	12 months or 1000 cycles		whichever comes first
22	Recommended SOC Usage Range	10%～90%		
23	Charging Operating Temperature	0°C～40°C		
24	Discharge Operating Temperature	-10°C～40°C		
25	Storage Temperature	Short-term (within 1 month)	-10°C～40°C	
		Long-term (within 1 year)	0°C～35°C	
26	Storage Humidity	≤95%		
27	Monthly Self-Discharge Rate	≤3%/month		(25±2)°C, stored at 30%～50% SOC

5 Transportation

The product should be packaged and transported at a state of charge (30%～60% SOC). During transportation, avoid severe vibration, impact, or compression, and protect from direct sunlight and rain.

6 Outline Diagram

Product 2D Diagram