



■ Features

- Built-in UPS function (AC by-pass)
- Pure sine wave output (THD<3%)
- Bi-directional inverter technology
- Intelligent APP control
- BMS charge and discharge protection mode
- Intelligent temperature control cooling fan
- AC/vehicle/solar charging methods
- Automotive-grade lithium iron phosphate blade battery
- Intelligent digital display screen
- Protections :OVP/UVP/OLP/OCP/OTP/UTP etc
- 3-year warranty

■ Applications

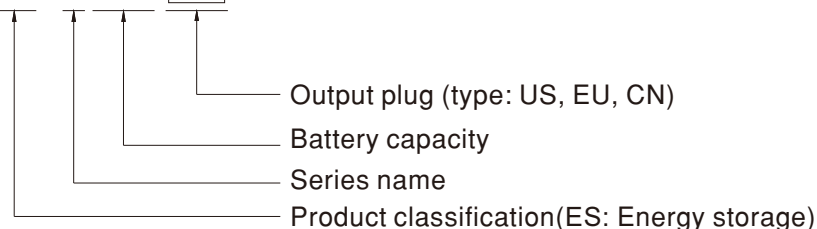
- Outdoor camping
- Automotive rescue
- Outdoor live streaming
- Mobile office
- Emergency power outage
- Street vending power

■ Description

ES-S500 is a 500W portable energy storage power station, with 512Wh battery capacity, using lithium iron phosphate blade cell, equipped with USB, DC, AC, automotive cigarette lighter and other common power output interfaces. It can provide stable and reliable power support for laptops, drones, photography lights, projectors, electric fans, kettles and cars. With solar panel charging, mains charging, vehicle charging and other charging methods, the use of more flexible and convenient. It is suitable for outdoor camping, outdoor live broadcast, outdoor construction, location shooting, family emergency electricity and other scenes with high power consumption.

■ Model Encoding

ES - S500 - EU

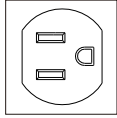
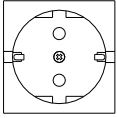
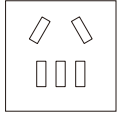




SPECIFICATION

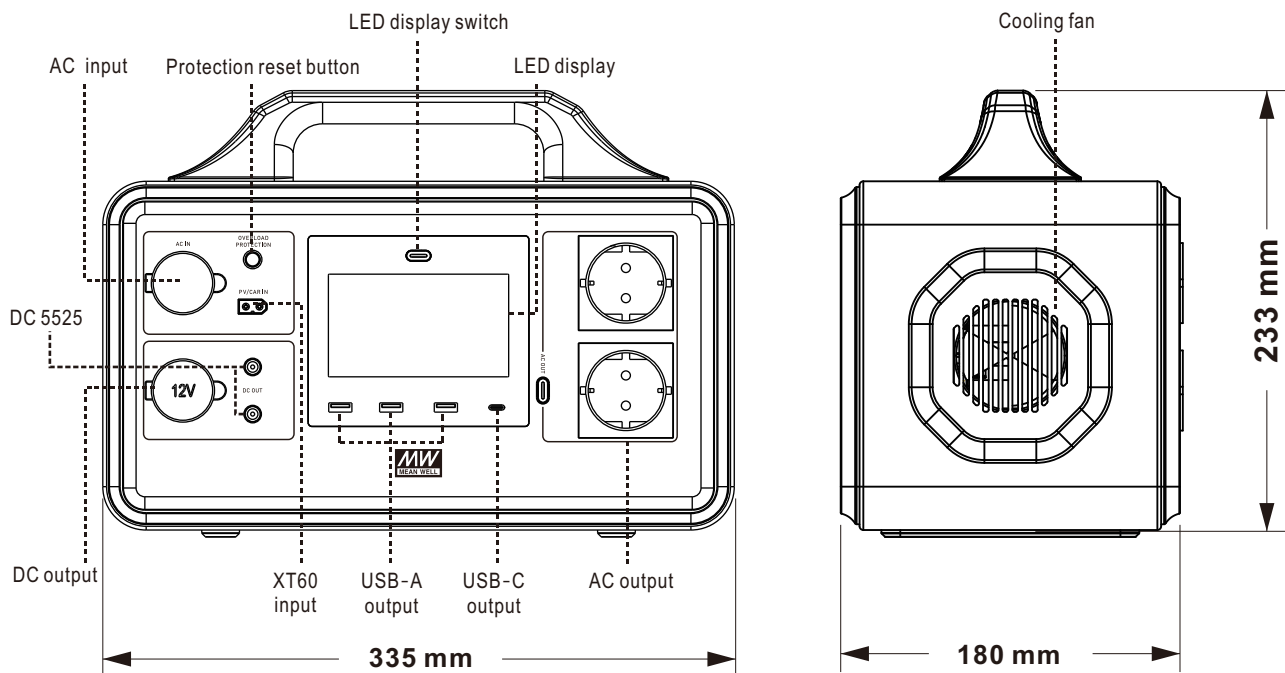
MODEL		ES-S500- ☐			
		☐ =CN	☐ =EU	☐ =US	
BATTERY	CAPACITY		512Wh		
	CELL CHEMISTRY		LiFePO4		
	SINGLE CELL CAPACITY		27Ah@3.2V/pcs		
	LIFECYCLE		4000+(Post-cycle capacity ≥80%)		
	BATTERY MANAGEMENT SYSTEM		OVP/UVLP/OLP/OTP/UTP etc		
	SOLAR CHARGING SYSTEM		MPPT Charge controller		
INPUT	AC (500W max.)	VOLTAGE	200~240V	200~240V	100~120V
		CURRENT	10A		
		FREQUENCY	50Hz	50Hz	60Hz
	DC (200W max.)	VOLTAGE	11~30V		
		CURRENT	10A		
OUTPUT	AC	RATED POWER	500W max		
		VOLTAGE	230V@50HZ	230V@50HZ	120V@60HZ
		AC REGULATION	± 10%		
		UPS SWITCHING TIME	20ms		
		WAVEFORM	Pure sine wave(THD≤3%)		
	USB-C (100W max.)	DC	PD3.0, 5V/3A , 9V/3A , 12V/3A , 15V/3A , 20V/5A		
		RIPPLE	200mV		
		LOAD REGULATION	± 5%		
	3*USB-A (12W max.)	DC	5V/2.4A		
		RIPPLE	200mV		
		LOAD REGULATION	± 5%		
	DC5525/ VEHICLE (120W max.)	DC	12V/10A		
		RIPPLE	300mV		
		LOAD REGULATION	± 20%		
	TOTAL POWER		650W		
	PEAK POWER		1000W/300ms		
SAFETY & EMC	SAFETY STANDARDS		IEC62368-1:2018, IEC 62477-1:2012, AMD1:2016, EN 62477-1:2012/A12:2021, GB4943.1-2022, GB31241-2022approved		
	EMC EMISSION	Parameter	Standard	Test Level / Note	
		Conducted emission	EN 55032:2015+A11+A1,EN 301 489-1 /-17		Class A
		Radiated emission	EN 55032:2015+A11+A1,EN 301 489-1 /-17		Class A
		Harmonic current	IEC 61000-3-2, EN 301 489-1/-17		Class A
		Voltage flicker	IEC 61000-3-3, EN 301 489-1/-17		Clause 5
	EMC IMMUNITY	Parameter	Standard	Test Level / Note	
		ESD	EN 301 489-1 /-17, EN 61000-4-2		Level 3,8KV air; level2: 4KV contact
		RS	EN 301 489-1 /-17, EN 61000-4-3		Level 2
		EFT	EN 301 489-1 /-17, EN 61000-4-4		Level 2,1KV
		Surge	EN 301 489-1 /-17, EN 61000-4-5		Level 3,1KV/Line-Line 2KV/Line-Earth
		Conducted	EN 301 489-1 /-17, EN 61000-4-6		Level 2
		Voltage Dips and Interruptions	EN61000-4-11, EN 301 489-1 /-17, EN 55035		0% residual voltage for 0.5cycle, 0% residual voltage for 1cycle, 0% residual voltage for 250cycle , 70% residual voltage for 25cycle
	OTHERS	DISPLAY		Mobile APP/TFT display	
STORAGE TEMP.		-10℃~45℃			
WORKING TEMP.		Charge:0℃~40℃ Discharge:-10℃~45℃			
MATERIAL		ABS+PC/Metal			
WEIGHT		7.5kg			
DIMENSION		335*180*233mm			
NOTE	1.All parameters not specified above are measured at rated load , 25℃ of temperature. 2.Load regulation is measured from 0% to 100% rated load. 3.Ripple are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uF & 47uF parallel capacitor. ※ Product Liability Disclaimer : For detailed information ,please refer to https://www.meanwell.com/serviceDisclaimer.aspx				

■ AC Output Socket

MODEL NO.	ES-S500- ☐		
Socket type			
	TYPE-US	TYPE-EU	TYPE-CN
	By Request	In Stock	In Stock
Country	USA	EUROPE	CHINA
Certificate	---		

■ Mechanism Dimension and Panel Introduction

(unit: mm, tolerance: ± 1 mm)



■ APP Download and Instructions

Power Zero can connect all your devices via Bluetooth or wi-fi to track your energy use and production in real time, dynamically display the status data of the device in real time.

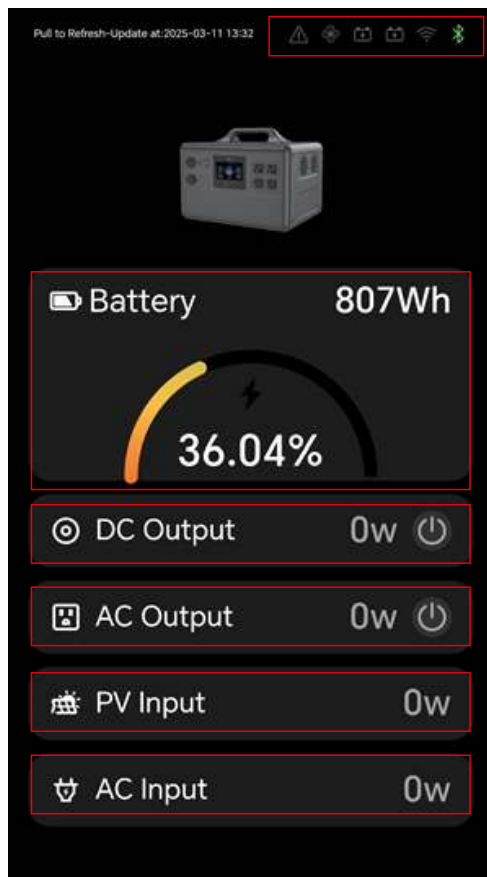
1. Software installed

Scan the QR code and install the opened app on your smartphone.



This software could be operated on mobile phones with Android 6.0 and IOS12.0 or above, refer to the user manual for details

2. Equipment home page



→ Display of product alarm, fan, Wi-Fi, and Bluetooth status

→ Battery remaining power and percentage

→ DC output power display and ON/OFF control

→ AC output power display and ON/OFF control

→ PV output power display

→ AC input power display

■ CHARGING MODE



■ TYPICAL APPLICATIONS



Outdoor Camping



Live Streaming



Power Outage



Drone Filming



Roadside Assistance



Remote Working



Market Stalls

■ Duration Reference



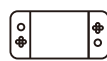
26times

Phone(3095mah)



4times

Laptop(95wh)



25times

Switch(16wh)



9times

Drone(43.6wh)



28times

Camera(14wh)



80h

LED Camping Lamp(5w)



1.1h

Rice Cooker(350w)



28h

Car Refrigerator(60w)



40min

Electrickettle(600w)



6h

Projector(65w)



34h

Smart Speaker(12w)



8h

Electric Fan(50w)

■ Accessory List

※ Standard accessories

	ES-S500-CN	ES-S500-EU	ES-S500-US
AC power cord			
Manual			

※ Optional accessories (Need to be ordered separately)

MW's Order NO.	Item
PSWG-ES-CAR CHARGER	
PFF5USB3.2C10G5A1M	