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# Technical Specification of Portable Energy Storage System (12.8V30Ah384Wh)

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Model	PESS-300
Specification	AC220V 300W
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## Contents

1. Summary.....	1
1.1 Scope of Application .....	1
1.2 Electrical Specifications.....	1
2. Appearance Characteristics.....	2
2.1 Housing.....	2
3. Storage and Operating Environment.....	2
4.Notes for Battery Usage.....	3

## 1. Summary

The PESS-300 energy storage system is a small power generation device specifically designed to supply electricity to household appliances and mobile devices. It is equipped with a built-in lithium iron phosphate battery, offering strong output capacity and providing both DC and AC output modes to meet the power supply needs of various mobile products. The product supports solar charging and AC charging from the mains. It can be connected to loads such as fans, LED lights, mobile phones, computers, tablets, and TVs. It is suitable for home use, travel, emergency lighting, and outdoor work.

### 1.1 Scope of Application

This specification defines the rated parameters, electrical specifications, appearance characteristics, safety rules, environmental compatibility, and transportation and storage requirements of the "energy storage system (PESS-300)".

### 1.2 Electrical Specifications

Product specification	
Charge	1. DC5521:On-board cigarette lighter support 14.6V 5A charger input
	2. DC5521: Solar input: 15V-24V 5A 100W
	3.Two DC5521 interfaces can only charge or discharge at the same time, and cannot charge and discharge at the same time.
	4, AC input 8-word AC input interface 180V ~ 250V Rated power 200W
Output	1, AC output voltage: 2 AC sockets AC220V±5%
	2, AC output power 600W, AC output overpower protection 310W ~ 450W, AC output waveform pure sine wave, AC instant output power ≥600W, frequency 50Hz
	3, TYPE-C output: PD MAX 12V/1.5A(18W)
	4, USB-1 output: QC3.0MAX 12V/1.5A(18W)
	5, USB-2, USB-3 total output: MAX 5V/3A(15W)
	6, DC5521, vehicle cigarette lighter output: 12V/10A(120W) MAX
Weight	Net weight 2.79KG, gross weight 3.88KG
Material	PC+V0 flame retardant
Cell	Lithium iron phosphate 15AH/ section, 4 series 2 and a total of 8 sections, 384WH
Dimension	Product size: 278*129*215mm Packaging size: 350x177x390mm

## 2. Appearance characteristics

### 2.1 Housing



## 3 Storage and operating environment

Device storage	Operating environment
<p>Attention:</p> <ol style="list-style-type: none"><li>1) Please store the device in a clean and ventilated place</li><li>2) Ambient temperature: Battery: -10℃ ~ 70℃</li><li>3) Humidity: 0 ~ 90%</li><li>4) Avoid any corrosive (acid, alkali) materials</li><li>5) It is recommended to charge and discharge once a month when not used for a long time</li></ol>	<ol style="list-style-type: none"><li>1) Operating temperature: Battery: -20℃ ~ 70℃</li><li>2) Humidity: 0 ~ 90%</li><li>3) Height: <math>\leq</math> 5000m</li></ol>

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## **4. Notes for Battery Usage**

### **4.1 Prohibition**

For avoiding Storage System heat radiating, explosion, below prevent tips should be taken care of:

- a) Prohibition of disassemble or re-assembly;
- b) Prohibition of short circuited Storage System;
- c) Prohibition to use near hot source;
- d) Prohibition of dumping of into water, ocean or getting Storage System wet;
- e) Prohibition of charging near fire or under sunlight;
- f) Charge with specified charge according to charging requirement;
- g) Prohibition of inserting nail into Storage System, hammering or stepping on by foot;
- h) Prohibition of throwing;
- i) Prohibition of charging opposite or over discharging;
- j) Prohibition of charge opposite or opposite connection;