



Modified Sine Wave Inverter

1224 Series



SP-200USB-1224
SP-350USB-1224



ES-800USB-1224
ES-1000USB-1224



ES-1200USB-1224



Features

- Accept both 12V & 24V Battery Type
- Energy Saving Mode
- Microcontroller Integrated
- Compact Design with Aluminum Housing
- LED Indicators for Inverter States
- Input & Output Fully Isolation
- Intelligent Temp & Load Cooling Fan
- Multi Pre-Alarm & Shutdown Alarm Protections:
Battery Type Detection / Polarity Reverse / Low Voltage
Short Circuit / Overheat / Overload
- 100% Made in Taiwan

Model	SP-200USB-1224	SP-350USB-1224	ES-800USB-1224	ES-1000USB-1224	ES-1200USB-1224	
System						
Continuous Power	DC 12V	150W	300W	600W	800W	1000W
	DC 24V	200W	350W	800W	1000W	1200W
Surge Power	DC 12V	300W	600W	1200W	1600W	2000W
	DC 24V	400W	700W	1600W	2000W	2400W
Output Voltage	100/110/120 VAC; 220/230/240 VAC					
Output Waveform	Modified Sine Wave					
Output USB Ports	Type A(QC3.0) x 1, Type C(PD30W) x 1		Type A(5VDC, 2.1A) x 1			
Standby Current (Normal)	< 0.5A					
Standby Current (Saving)	-		0.03~0.15A			
Output Regulation	+5% / -8% Intelligent AVR		< ±5% Intelligent PWM			
Output Frequency	50/55/60 Hz Crystal Controlled		50/60 Hz switchable by DIP			
Input Voltage	DC 12V: 10~15V; DC 24V: 20~30V					
Input Voltage Auto-Switch	YES					
Efficiency	> 85%					
Protection						
Input Type Auto-Detection	YES					
Input Polarity Reverse	Fuse					
Input Low Voltage	DC 12V: < 10.5V Pre-Alarm, < 9.5V Shutdown & Alarm DC 24V: < 21V Pre-Alarm, < 20V Shutdown & Alarm					
Short Circuit	YES					
Overheat	> 60°C Pre-Alarm, > 65°C Shutdown & Alarm					
Overload	DC 12V	> 150W Pre-Alarm, > 180W Shutdown	> 350W Pre-Alarm, > 360W Shutdown	> 680W Pre-Alarm, > 720W Shutdown	> 900W Pre-Alarm, > 950W Shutdown	> 1100W Pre-Alarm, > 1190W Shutdown
	DC 24V	> 200W Pre-Alarm, > 250W Shutdown	> 380W Pre-Alarm, > 420W Shutdown	> 880W Pre-Alarm, > 900W Shutdown	> 1200W Pre-Alarm, > 1300W Shutdown	> 1350W Pre-Alarm, > 1500W Shutdown
Cooling	Intelligent Fan					
Mechanical						
Fuse	15A x 1PCS	35A x 1PCS + 15A x 1PCS	25A x 4PCS	25A x 6PCS	25A x 8PCS	
AC Outlets	EU: 1; USA: 2					
Dimension (L x W x H) (mm)	155 x 73 x 73 mm	180 x 73 x 73 mm	290 x 137 x 79 mm	345 x 137 x 19 mm	405 x 137 x 79 mm	
Net Weight	0.66 kg	1 kg	1.8 kg	2.2 kg	2.6 kg	
RC (Standard) Accessory	-		YES			