

Mini All-in-one Energy Storage System

SMA series : MSF-1KW12.8V100AHP;MSF-1KW12.8V314AHP;
MSF-2KW25.6V100AHP;MSF-2KW25.6V314AH



MSF series integrates PV MPPT, inverter, controller, and battery into one set. It is an independent small solar BESS station, specifically designed to bring comfort and great convenience as well as high efficiency to households.



- Integrated: Integrated PV modules, inverters, LFP batteries, BMS. DC/AC coupling compatibility with various PV components/grid conditions for flexible PV capacity.
- Hybrid: PV, grid and battery modes are available
- High-Efficiency: High PV/charge-discharge efficiency, intelligent energy dispatching, pure sine wave inverter output.
- High Safety & Reliability
- long cycle life, Easy maintenance.
- Multi-protection : overcharge/discharge, short circuits etc.
- Low-Carbon & Silent Adaptation: <40dB noise, compact/aesthetic residential design style



MSDS



Technical Data

Model	MSF-1KW 12V100AHP	MSF-1KW 12V314AHM	MSF-2KW 24V100AHM	MSF-2KW 24V314AHM
Solar Input Data				
Efficiency	>85%	>97%		
Charging Method	PWM	MPPT		
Max. PV Voltage	50V	145V		
Rated AC Charging Current	5~10A	30A	60A	
Max.PV Power	500W	800W	1600W	
Float Charging Voltage	13.7V		27.4V	
AC Input Data				
Rated Voltage	220VAC (Standard) / 110VAC (Customized)			
Charging Current	12A (10-20A Adjustable)	15A (12-15A Adjustable)	20A (15-30A Adjustable)	
Inverter				
Rated Power	1000W		2000W	
Output power	800VA		1600VA	
Output Voltage	220VAC (Standard) / 110VAC (Customized)			
Output Frequency	50Hz / 60Hz			
Output Waveform	Pure Sine Wave			
DC Output Data				
High Voltage Protection	16VDC		32VDC	
High Voltage Recovery	15.2VDC		30.4VDC	
Low Voltage Recovery	13VDC		26VDC	
Low Voltage Protection	11VDC		22VDC	
5VDC USB Output Port	2 Units (MAX 2A)			
12VDC Output Port	2 DC Ports (MAX 5A)			
Battery				
Battery Type	LiFePO4/Gel / Lead-acid			
Battery Voltage	12.8V		25.6V	
Battery Specification	100AH	314AH	100AH	314AH
Rated Chagr Battery Voltage	13.7V		27.4V	
Overcharge Protection Voltage	14.2VDC		28.4VDC	
General Data				
Warranty	Inverter 2-year ; LiFePO4 Battery: 2-Year / 5-year Customized			
Operating Temperature	0°C~40°C			
Storage Temperature	-25°C~55°C (LiFePO4 Battery: -10°C~50°C)			
Operating Humidity	10%~90% RH (Non-condensing)			
Dimensions (W*D*H)	260*410*440mm 320*515*545mm (Packaged)		380*434*539mm 480*535*640mm (Packaged)	
Safety Standard	EN-IEC 60335-1, EN-IEC 60335-2-29, IEC 62109-1 , CE, UN38.3, MSDS			