

Off-Grid Solar Inverter

Single Phase - IP20 - High Frequency

Model: MR-SPF1200 / 2500 / 3000 / 5000

FEATURES

- Pure sine wave solar inverter
- Reserved communication port for BMS
- Wide PV input range
- Battery independent design
- Maximum charging current 100A
- Built-in anti-dust kit
- Battery equalization function to optimize battery performance and extend lifecycle



SPECIFICATION

MODEL	MR-SPF1200	MR-SPF2500	MR-SPF3000	MR-SPF5000
RATED POWER	1200VA / 1200W	2500VA / 2500W	3000VA / 3000W	5000VA / 5000W
INPUT				
Nominal Input Voltage	230VAC			
Input Voltage Range (Selectable)	170 – 280VAC (For PC); 90 – 280VAC (For Home Appliances)			
Nominal Input Frequency	50Hz / 60Hz (Auto sensing)			
OUTPUT				
Output Voltage Regulation	230VAC ± 5%			
Nominal Output Frequency	50Hz / 60Hz			
Waveform	Pure sine wave			
Transfer Time	10ms (For PC); 20ms (For Home Appliances)			
Surge Power	2400VA	5000VA	6000VA	10000VA
Peak Efficiency	95% at AC mode, 93% at Battery mode			
BATTERY				
Nominal Battery Voltage	12VDC	24VDC	24VDC	48VDC
Bulk Charging Voltage	14.6VDC (Flooded Battery); 14.1VDC (AGM/GEL)		29.2VDC (Flooded Battery); 28.2VDC (AGM/GEL)	
Floating Charging Voltage	13.5VDC	27VDC		54VDC
Overcharge Protection	16VDC	32VDC		63VDC
AC CHARGING & MPPT SOLAR CHARGING				
AC Charging Algorithm	3 step			
Max. PV Array Power	2000W	3000W		5000W
PV Array MPPT Voltage Range	30VDC – 300VDC (30V – 60V with battery connected)	30VDC – 400VDC (30V – 60V with battery connected)		120 – 450VDC
Max. PV Array Open Circuit Voltage	350VDC	450VDC		500VDC
Max. PV Input Current	13A			18A
Max. AC Charging Current	80A			100A
Max. Charging Current	100A (AC charging plus solar charging)			
PHYSICAL & COMMUNICATION				
Dimension, D x W x H (mm)	90 × 288 × 357		110 × 288 × 390	120 × 300 × 440
Net Weight (kg)	6.5	7.0	7.2	10
Communication Interface	RS232, BMS, WiFi			
ENVIRONMENT				
Humidity	5% – 95% Relative Humidity (Non-condensing)			
Operating Temperature	-10°C to 50°C			
Storage Temperature	-15°C to 60°C			