

# Hybrid Solar Inverter

## Single Phase - High Frequency

**Model: MR-SPH1500 / 3000 / 4200 TWIN / 6200 TWIN**

### FEATURES

- Wide PV input range, starts from 30VDC for 1.5K / 3K / 4.2K models
- Built-in communication port for BMS
- Built-in feed-in grid function
- Built-in WiFi with APP for remote monitoring and OTA firmware upgrad
- Dual AC outputs only for 4.2K / 6.2K models
- Maximum charging current 100A/120A based on models
- Battery independent design
- Battery equalization function to optimize battery performance and extend lifecycle
- Built-in anti-dust kit



### SPECIFICATION

MODEL	MR-SPH1500	MR-SPH3000	MR-SPH4200	MR-SPF6200
RATED POWER	1500VA / 1500W	3000VA / 3000W	4200VA / 4200W	6200VA / 6200W
INPUT				
Voltage	230VAC			
Selectable Voltage Range	170 – 280VAC (For PC); 90 – 280VAC (For Home Appliances)			
Frequency Range	50Hz / 60Hz (Auto sensing)			
OUTPUT				
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%			
Output Power	1500W with PV & battery, 1200W with battery only	3000W with PV & battery, 2500W with battery only	4200W with PV & battery, 4000W with battery only	6200W with PV & battery, 5000W with battery only
AC Output No.	Single	Single	Dual Outputs	Dual Outputs
Surge Power	3000VA	6000VA	8400VA	12400VA
Efficiency (Peak)	93%			
Transfer Time	10ms (For PC); 20ms (For Home Appliances)			
Waveform	Pure sine wave			
BATTERY				
Battery Voltage	12VDC	24VDC	24VDC	48VDC
Floating Charging Voltage	13.5VDC	27VDC	27VDC	54VDC
Overcharge Protection	16VDC	32VDC	32VDC	63VDC
AC CHARGING & MPPT SOLAR CHARGING				
Solar Charger Type	MPPT			
Maximum PV Array Open Circuit Voltage	350VDC	450VDC	500VDC	500VDC
Maximum PV Array Power	2000W	3000W	5000W	6500W
Maximum PV Input Current	13A	13A	18A	18A
MPP Range @ Operating Voltage	30 – 300VDC (Min. 60VDC with out battery connected)	30 – 400VDC (Min. 60VDC with out battery connected)	30 – 450VDC (Min. 60VDC with out battery connected)	90 – 450 VDC (Min. 100VDC without battery connected)
Maximum Solar Charge Current	100A	100A	120A	100A
Maximum AC Charge Current	80A	80A	100A	100A
Maximum Charge Current	100A	100A	120A	100A
PHYSICAL & COMMUNICATION				
Dimension, D x W x H (mm)	90 x 288 x 357		115 x 300 x 435	
Net Weight (kgs)	6.6	7.1	9.0	10.4
Communication Interface	RS232 / BMS / WiFi			
ENVIRONMENT				
Humidity	5% to 95% Relative Humidity (Non-condensing)			
Operating Temperature	-10°C to 50°C			
Storage Temperature	-15°C to 60°C			