

Hybrid Solar Inverter

Single Phase - IP20 - High Frequency

Model: MR-SPF1.2K(3.6K/5K/6.5K)-LP1-TL20E

FEATURES

- High frequency inverter with small size and light weight
- Pure sine wave AC output
- Solar and utility grid can power loads at the same time
- With CAN/RS485 for BMS communication
- With the ability to work without battery
- WIFI module for monitoring
- Dual AC output
- Feed-in to grid function



SPECIFICATION

MODEL	MR-SPF1.2K-LP1-TL20E	MR-SPF3.6K-LP1-TL20E	MR-SPF5K-LP1-TL20E	MR-SPF6.5K-LP1-TL20E
RATED POWER	1.2kVA / 1.2kW	3.6kVA / 3.6kW	5kVA / 5kW	6.5kVA / 6.5kW
INPUT				
Nominal Voltage	208 / 220 / 230 / 240VAC			
Voltage Range	170 – 264VAC (UPS Mode); 90 – 280VAC (APP/GEN Mode)			
Frequency Range	50 / 60Hz ±10Hz (Auto sensing)			
OUTPUT				
Nominal Output Voltage	208 / 220 / 230 / 240VAC ± 5%			
Output Power	1.2KW	3.6KW	Rated 5kW; 4kW(Only Battery)	6.5kW (with PV input); 6kW (without PV input)
Surge Power	2 times of rated power			
Nominal Output Frequency	50 / 60Hz ± 0.1% (Batt. Mode)			
Efficiency	92% (Max.)	92% (Max.)	93.5% (Max.)	94% (Max.)
Transfer Time	10ms (UPS/APP Mode); 20ms (GEN Mode)			
BATTERY				
Nominal Battery Voltage	12VDC	24VDC	24VDC	48VDC
Battery Voltage Range	10VDC-15VDC	20VDC-30.5VDC	20VDC-30.5VDC	40VDC-61VDC
Battery Type	Lead-acid / Lithium / User-defined			
AC CHARGING & SOLAR CHARGING				
Solar Charger Type	MPPT	MPPT	MPPT	MPPT
Max. PV Input Power	1kW	5kW	9kW	9kW
Max. PV Input Current	14A	18A	27A	27A
MPPT Voltage Range	15 – 100VDC	40 – 450VDC	60 – 450VDC (Min. 80VDC without battery connected)	
Max. PV Open Circuit Voltage	125VDC	500VDC	500VDC	500VDC
Max. Solar Charging Current	120A	100A	160A	120A
Max. AC Charging Current	60A	100A	160A	120A
Max. Hybrid Charging Current	60A	100A	160A	120A
PHYSICAL & COMMUNICATION				
Dimension, W x H x D (mm)	228 × 347 × 99.5	284 × 420 × 104	336 × 410 × 110	336 × 410 × 110
Net Weight (kg)	4.5	6.4	8.4	10.0
Communication Interface	BMS(485/CAN), Dry-contact, WiFi Module			
ENVIRONMENT				
Humidity	5% to 95% Relative Humidity (Non-condensing)			
Operating Temperature	-10°C to 50°C			
Storage Temperature	-15°C to 60°C			