

# Off-Grid Solar Inverter

## Single Phase - IP20 - High Frequency

Model: MR-SPF12K-LP1-TL20E

### FEATURES

- Dual outputs, for smart load management
- Built-in Wi-Fi for mobile monitoring (Android/iOS APP)
- Supports USB On-the-Go function
- Detachable LCD control panel
- Reserved communication ports for BMS (RS485, CAN), RS232
- Configurable input voltage ranges for home appliances and PC
- Configurable AC/PV output usage timer and prioritization
- Configurable AC/PV charger priority via LCD control panel
- Compatible to utility mains or generator power
- Overload /Over temperature / short circuit protection
- Smart battery charger design for optimized battery performance
- Parallel operation with 6 units



### SPECIFICATIONS

<b>MODEL</b>	<b>MR-SPF12K-LP1-TL20E</b>
<b>RATED POWER</b>	<b>12000VA/12000W</b>
<b>PARALLEL CAPABILITY</b>	Yes, 6 units
<b>INPUT</b>	
Nominal Input Voltage	230VAC
Input Voltage Range (Selectable)	170 – 280VAC (For PC); 90 – 280VAC (For Home Appliances)
Nominal Input Frequency	50Hz / 60Hz (Auto sensing)
<b>OUTPUT</b>	
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	24000VA
Peak Efficiency	95% at Line mode, 93% at Inverter mode
<b>PV INPUT</b>	
Max. PV Array Power	15000W (7500W*2)
MPPT Operating Voltage Range	90 – 450VDC
Max. PV Array Open Circuit Voltage	500VDC
Max. PV Input Current	27A*2 (Max. 45A)
<b>BATTERY &amp; CHARGING</b>	
Battery Type	Lead-acid, Lithium, User-defined
Nominal Battery Voltage	48VDC
Max. AC Charging Current	200A
Max. Charging Current (AC+PV)	200A
<b>GENERAL</b>	
Communication	USB, RS232, BMS(485,CAN), WiFi Module, Dry-contact
Certification	EMC, LVD
<b>PHYSICAL &amp; ENVIRONMENT</b>	
Dimension, D x W x H (mm)	147.4 × 432.5 × 553.6
Net Weight (kg)	18.4
Humidity	5% – 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 60°C