

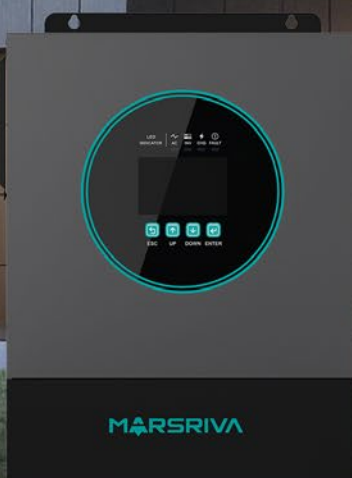


1.2kW / 2kW / 3.6kW Off-Grid Inverter

Single-Phase | High Frequency

MR-SPF1.2K-LP1-TL20E / MR-SPF2K-LP1-TL20E / MR-SPF3.6K-LP1-TL20E

- **High Performance**
Rated power 1200W / 2000W / 3600W with PF 1.0
- **Ultra-Lightweight**
Easy one-person wall-mounted installation
- **Built-in MPPT**
Supports up to 800W / 3000W / 5000W PV input
- **Broad Battery Compatibility**
Built-in CAN/RS485 for advanced BMS communication
- **Battery-Free Operation**
Supports operation without a battery under sufficient PV input conditions
- **Smart Monitoring**
Optional Wi-Fi module for real-time monitoring via app
- **Flexible Charging**
Supports combined PV and AC charging, with up to 100A total charging current



SPECIFICATION

MODEL	MR-SPF1.2K-LP1-TL20E	MR-SPF2K-LP1-TL20E	MR-SPF3.6K-LP1-TL20E
AC INPUT			
Rated Input Voltage	208/220/230/240VAC		
Voltage Range	90–280VAC (APP/GEN Mode); 170–264VAC (UPS Mode)		
Frequency Range	50/60Hz (Auto Adaptive)		
AC OUTPUT			
Rated Output Power	1200W	2000W, 1560W (Battery Only)	3600W
Rated Apparent Power	1200VA	2000VA	3600VA
Surge Power	2400VA	4000VA	7200VA
AC Output Management	Single AC Output		
Output Voltage	208/220/230/240VAC		
Power Factor	1		
Frequency	50Hz/60Hz		
Switch Time	10ms (APP/UPS/GEN Mode)		10ms (APP/UPS Mode) 60ms (GEN Mode)
Waveform	Pure Sine Wave		
Overload Capacity	102%-120% load (1min); 120%-200% load (10s)	102%-125%load (long term); 125%-250% load (10s)	102%-110%load (1min); 110%-130% load (10s)
Efficiency	Max. 90% (@12VDC)	Max. 91% (@12VDC)	Max. 92% (@24VDC)
CHARGER (PV / AC)			
Solar Charger Type	MPPT		
Max. PV Input Current		18A	
Max. PV Input Power	800W	3000W	5000W
MPPT Operating Voltage Range	17–115VDC	30–400VDC	40–450VDC
Max. PV Open Circuit Voltage	115VDC	450VDC	500VDC
Max. PV Charge Current	50A	100A	100A
Max. AC Charge Current	50A	100A	100A
Max. Total Charge Current	100A (PV + AC)	100A (PV + AC)	100A (PV + AC)
BATTERY			
Rated Battery Voltage	12VDC	12VDC	24VDC
Floating Charge Voltage	13.5VDC	13.5VDC	27VDC
Overcharge Protection	15VDC	15VDC	30.5VDC
Max. Charging Current	100A	100A	100A
Battery Type	Lithium/Lead-acid		
SYSTEM & INTERFACE			
Parallel Quantity	N/A (Single Unit Only)		
HMI	2.8-inch Segment LCD with Buttons		
Communication	BMS(RS485&CAN)/Wi-Fi(Optional)		
ENVIRONMENT & PROTECTION			
Ingress Protection	IP20		
Operating Temperature	-10°C to 50°C		
Operating Altitude	Max. 4000m (Derating above 2000m)		
Humidity	5% to 95% RH (Non-condensing)		
Storage Temperature	-15°C to 60°C		
Dimension (W × H × D)	217 × 301 × 97mm	331 × 270 × 100mm	284 × 420 ×104mm
Net Weight	3.5 kg	4.5kg	6.4kg