



PORTABLE POWER STATION All-IN-ONE

PPSA 3000W/5000W (LiFePO4 51.2V 100Ah 5.12kWh)

Lithium Iron Phosphate LiFePO4 Battery



Advanced SPWM technology

Adopt fully digital voltage and current double closed-loop control



Two output modes

Two output modes of grid bypass and inverter output, and has the function of uninterrupted power supply



Four charging modes

Grid priority, solar priority and hybrid charging



LCD screen design

dynamic display of system data and operating status.



360° protection

With multiple protection functions, 360° all-round protection.



BMS protection

Smart BMS has complete short-circuit protection

| Technical Data | PPSA3000W | PPSA5000W |
|--|---|----------------------------|
| Grid module | Specification | |
| Rated input voltage | 110/120Vac | 220/230Vac |
| Input voltage range | (170Vac~280Vac) ±2% | (90Vac-280Vac)±2% |
| Frequency | 50Hz/ 60Hz (Auto Detect) | |
| Frequency range | 47±0.3Hz ~ 55±0.3Hz (50Hz) | 57±0.3Hz ~ 65±0.3Hz (60Hz) |
| Overload/short circuit protection | breaker | |
| Efficiency | >95% | |
| Transfer time (bypass and inverter) | 10ms (typical value) | |
| AC backfill protection | YES | |
| Maximum bypass overload current | 30A | 40A |
| Output voltage waveform | pure sine wave | |
| Inverter module | | |
| Rated output power | 3000 (VA) | 5000 (VA) |
| Power Factor | 1 | |
| Rated output voltage | 120Vac | 230Vac |
| Output voltage error | ±5% | ±5% |
| Output frequency range | 50Hz ± 0.3Hz | 60Hz ± 0.3Hz |
| Efficiency | >91% >92% | >92% |
| Overload protection | "(102%< load <125%) ± 10%: report an error and shut down the output after 5 minutes; (125%< load <150%) ± 10%: report an error and shut down the output after 10 seconds; Load >150% ±10%: report an error and shut down the output after 5 seconds;" | |
| Peak power | 6000VA | 10000VA |
| On-load motor capacity | 2HP | 3HP |
| Output short circuit protection | Breaker | |
| Bypass Breaker Specifications | 30A | 40A |
| Rated battery input voltage | 48V (minimum-starting voltage 44V) | |
| Battery capacity | 5120Wh | |
| Battery voltage range | 40.0Vdc~60Vdc ± 0.6Vdc (Under-voltage alarm / shutdown voltage / the over-voltage alarm/over-voltage renew...LCD Screen can be set) | |
| Power saving mode | load≤50W | |
| Grid charging | | |
| Maximum-charging current (can be set) | 40A | 60A |
| Charging current error | ± 5A _{dc} | |
| charging voltage range | 40-58V _{dc} | |
| Short circuit protection | Circuit breakers and blown fuses | |
| Circuit Breaker Specifications | 40A | |
| Overcharge protection | Alarm and turn off charging after 1 minute | |
| Solar charge | | |
| Maximum PV ,Open circuit voltage | 145V _{dc} | |
| PV Operating voltage range | 60-145V _{dc} | |
| MPPT voltage range | 60-115V _{dc} | |
| Battery voltage range | 40-60V _{dc} | |
| Maximum input power | 3400W | 4000W |
| Solar charging current range (can be set) | 0-60A | 0-80A |
| Charging short circuit protection | Blow fuse | |
| Wiring protection | Reverse polarity protection | |
| Maximum Hybrid Charge Current(PV+AC) | | |
| Maximum hybrid charge Current (can be set) | 0-120A / 0-100A-140A / 0-140A | |
| Other Specification | | |
| Charge/ Discharge Temp. | 0°C to 45 °C (32F to 113F)/ -20°C to 60°C (-4F to 140F) @60±25% Relative Humidity | |
| Storage Temp. | 0 °C to 40 °C (32F to 104F) @60±25% Relative Humidity | |
| Humidity range | 5% to 95% (Three anti-paint protection) | |
| Noise | ≤60dB | |
| Heat dissipation | Forced air cooling, adjustable wind speed | |
| Communication interface | USB/RS485(WiFi/GPRS)/Dry Node Control | |
| System Protection | Over-temperature, Over-voltage, Over-current, Over-charge, Over-discharge, Over load and Short-circuit protection. | |
| Applications | Backup Power, Camping, Fishing, Emergency, Picnic, Mobile Office, Car Charging, Livestreaming. | |

1: Test conditions:25 °C, 100 % depth of discharge (DOD), 0.2C charge&discharge
2: Refer to battery warranty letter for conditional application