## **1.SOLAR GENERATOR**

This product uses 5016117 lithium iron phosphate cells for energy storage, combined in a 16S1p configuration to form a 51.2V/100Ah battery pack. The portable energy storage power supply is equipped with safety protections such as overcharging, overdischarging, overcurrent, short circuit, overtemperature, and overload. It can meet the charging needs of a wide range of electronic devices, including mobile phones, satellite phones, digital cameras, drones, car refrigerators, tab-lets, LED lights, laptops, outrdoor lighting, medical equipment, etc.



😚 www.pysunpower.com 🔀 info@pysunpower.com

| SPEC                                      | IFICATION                                 |  |  |
|---|---|--|--|
| Size:                                     | 478*433*600/688mm(After stretching)       |  |  |
| Cell type:                                | IF50160117 lithium iron phosphate         |  |  |
| Single cell and battery pack:             | 100Ah/3.2V; 100Ah/51.2V                   |  |  |
| Work modes:                               | Normal / ECO / BAT mode                   |  |  |
| Build-in inverter rated power:            | 5000W                                     |  |  |
| Input voltage (VDC):                      | 40-58.4V                                  |  |  |
| PV input voltage range and rated current: | MPPT 120-450V,10A                         |  |  |
| PV input max power:                       | 7000W                                     |  |  |
| Output voltage:                           | AC 220V                                   |  |  |
| Output frequency (Hz):                    | 50 / 60Hz±5%                              |  |  |
| Start-up no-load current:                 | < 0.8A                                    |  |  |
| Peak output power:                        | 8000w                                     |  |  |
| AC charging parameter input:              | AC 95V - 285V                             |  |  |
| AC charging maxmium input power:          | 2500W                                     |  |  |
| Output waveform:                          | Pure Sine Wave                            |  |  |
| Harmonics:                                | < 5%                                      |  |  |
| Conversion efficiency:                    | ≥ 94%                                     |  |  |
|   | 1. USB: 5V / 2.1A * 2;                    |  |  |
| DC output:                                | 2. DC 5521 terminal: 12V / 4A * 2;        |  |  |
|   | 3. TYPE-C * 2                             |  |  |
|   | Battery Power, AC input and Output Status |  |  |
| LCD screen display:                       | and Voltage, Load Capacity, Frequency.    |  |  |
| Noise:                                    | < 45dB                                    |  |  |
| Operating environment temperature:        | 0~50 ℃                                    |  |  |
| Storage environment temperature:          | -20°C~ +65°C                              |  |  |
| Sixfold protection:                       | Input under-voltage, over-voltage,        |  |  |
|   | anti-reverse connection protection,       |  |  |
|   | Output Overload, Over-Temperature,        |  |  |
| AC charging parameter input:              | Short-Circuit Protection.                 |  |  |

😚 www.pysunpower.com 🔀 info@pysunpower.com

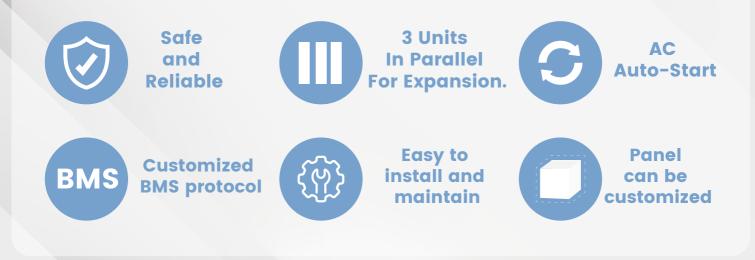
# **2.PACK & RACK BATTERY**

This product features AC auto-start and lithium battery pre-charge functions, enabling the capability of parallel expansion with up to three units. It possesses high stability, reliability, and practicality, providing reliable backup power protection for critical equipment such as data centers and high-speed highway ETC gantry systems.

### **Upgraded Advantages**

- ·High Degree of Product Integration, Meticulous Control Logic
- ·Wide Voltage Input Range
- Backend Energy Efficiency Management
- **Remote Monitoring of Operational Data**
- ·Standardized, Modular, Systematic Design Philosophy
- **Facilitating Rapid Parallel Expansion**
- **•Three-level BMS Protection Function**
- ·Multi-Scenario Applications in Peak Shaving, Valley Filling,

**Emergency Backup Power, and other Modes** 





| SPECIFICATION             |  |                      |                      |                      |  |
|---------------------------|--|----------------------|----------------------|----------------------|--|
| Battery Power System:     | 192-50   | 192-100              | 384-50               | 384-100              |  |
| Nominal Voltage:          | 192V   | 192V                 | 384V                 | 384V                 |  |
| Nominal Capacity:         | 50Ah   | 100Ah                | 50Ah                 | 100Ah                |  |
| Dimension(W*D*H)(mm)      | 600*<br>600*<br>1000   | 600*<br>800*<br>1400 | 600*<br>800*<br>1400 | 600*<br>800*<br>2000 |  |
| Weight:                   | 110KG  | 180KG                | 200KG                | 350KG                |  |
| Charging Method:          | CC/CP/VP   |                      |                      |                      |  |
| Recharging Current:       | 0.2C standard 1C maximum continuous charging current   |                      |                      |                      |  |
| Charge Cutoff Voltage:    | 438V/CELL  |                      |                      |                      |  |
| Discharge Method:         | CC/CP/VP   |                      |                      |                      |  |
| Discharge Current:        | 0.5C standard 1.5C maximum continuous discharge current  |                      |                      |                      |  |
| Discharge Cutoff Voltage: | 324V/CELL  |                      |                      |                      |  |
| Display:                  | LCD  |                      |                      |                      |  |
| Communication Interface:  | 485/232/Can  |                      |                      |                      |  |
| Operating Temperature:    | Charging: 0~+50℃ Discharging: -20~+55℃   |                      |                      |                      |  |
| Storage Temperature:      | Short-term storage: -10~+45°C (<3 months,SOC:20%~60%)<br>Long-term storage: -10~+40°C (<1 year,SOC:30%~60%)<br>Recharge every 3 months |                      |                      |                      |  |
| Storage Humidity:         | 5%~95%   |                      |                      |                      |  |
| Shipping Status:          | Voltage: 380~420V SOC: 30%~50%   |                      |                      |                      |  |

😚 www.pysunpower.com 🔀 info@pysunpower.com

#### **3. Lithium battery**

#### LiFePO4 Battery-Advantage





LFP100-12(12.8V100Ah)

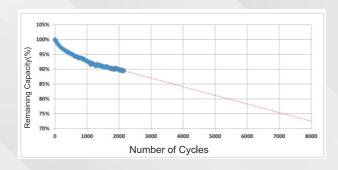
#### Application

- Electric vehicles, electirc mobility
- Solar/wind energy storage system
- UPS,backup power
- Telecommunication
- Medical equipment
- Lighting

### Specification

Longer Cycle Life: Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery,helping to minimize replacement cost and reduce total cost of ownership.

- Lighter Weight: About 40% of the weight of a comparable lead acid battery.A 'drop in' replacement for lead acid batteries.
- Higher Power: Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.
- Wider Temperature Range: -20°C ~ 60°C.
- Superior Safety: Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging of short circuit situation.
- Increased Flexibility: Modular design enables deployment of up to four batteries in series and up to ten batteries in parallel.

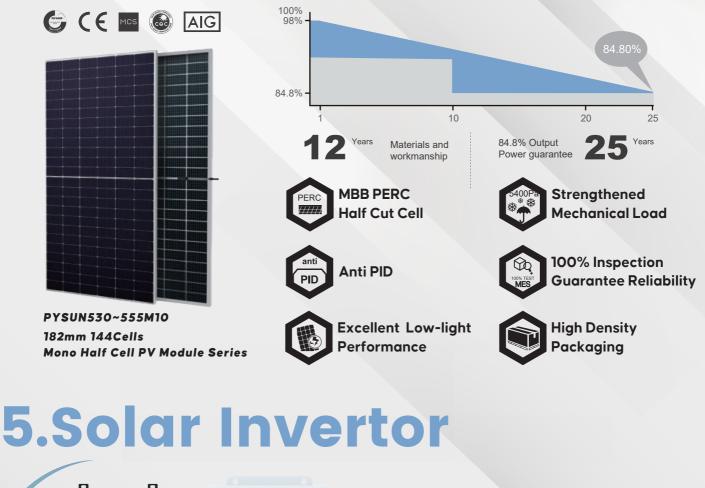


|                    | Nominal Voltage           | 12.8V   |  |
|--------------------|---------------------------|---|--|
|                    | Nominal Capacity          | 100Ah / 150Ah / 200Ah (optional)                                      |  |
|                    | Energy                    | 1280Wh  |  |
| Electrical         | Internal Resistance       | ≤150mΩ  |  |
| Characteristics    | Cycle Life                | >2000 cycles @1C 100%DOD  |  |
|                    | Months Self Discharge     | <3%   |  |
|                    | Efficiency of Charge      | 100% @0.2C  |  |
|                    | Efficiency of Discharge   | 96~99% @1C  |  |
|                    | Charge Voltage            | 14.6±0.2V   |  |
|                    | Charge Mode               | 0.2C to 14.6V, then 14.6, charge current 0.02C(CC/CV)                 |  |
| Standard Charge    | Charger Current           | 50A   |  |
|                    | Max. Charge Current       | 100A  |  |
|                    | Charge Cut-off Voltage    | 14.8V±0.2V  |  |
|                    | Continuous Current        | 100A  |  |
| Standard Discharge | Max. Pulse Current        | 300A(<3s)   |  |
|                    | Discharge Cut-off Voltage | 10V   |  |
|                    | Charge Temperature        | 0 ℃ to 55 ℃ (32F to 113F) @60?25% Relative Humidity                   |  |
| Environmental      | Discharge Temperature     | -20 °C to 60 °C (-4F to 140F) @60?25% Relative Humidity               |  |
| Linviolinientai    | Storage Temperature       | 0 $^\circ C$ to 40 $^\circ C$ (32F to 104F) @60?25% Relative Humidity |  |
|                    | Water Dust Resistance     |   |  |
|                    | Cell & Method             | 3.2V100AH-4S1P  |  |
|                    | Plastic Case              | ABS   |  |
|                    | Dimensions (in./mm.)      | 332*176*221 mm  |  |
| Mechanical         | Weight (lbs./kg.)         | 10.3Kg  |  |
|                    | Terminal                  | M8  |  |
|                    | Protocol (optional)       | NO  |  |
|                    | BMS                       | 4S100A  |  |

www.pysunpower.com

info@pysunpower.com

## **4.SOLAR PANEL**





Support 6 units in parallel

- Time-solt charging & discharging
- Up to 99.9% MPPT tracking efficiency
  Simple to install and easy to use
  - Support Li-ion battery BMS communication and BMS dual acivation

Up to 200A charging current

Comprehensive protection