

# POW-LVM3.5K-48V & POW-LIO48100-16S



## Residential Solar Energy Storage System

### POW-LVM3.5K-48V

#### Battery Compatibility & Communication

- Compatible with 48V lithium and lead-acid batteries.
- Support BMS communication for lithium batteries.

#### Installation & Cooling

- Wall-mounted design for space efficiency.
- Smart fan cooling for precise temperature control.

#### Output & Protection

- Pure sine wave and bypass output for uninterrupted power.
- Built-in multiple protection features.

#### Charging Capability

- Supports up to 60A solar and AC charging.
- 85-450V wide MPPT range for flexible solar input.

#### Reliability & Maintenance

- Durable components, low maintenance.
- Fault diagnosis with real-time alerts.



### POW-LIO48100-16S

#### High Capacity and Scalability

- 100A max charging current for fast charging.
- 10A continuous discharge for high-load demands.
- Supports up to 16 units, total storage up to 81.92kWh.

#### Communication and Compatibility

- RS232, RS485, CAN, and dry contact ports for integration.
- Compatible with multiple BMS protocols.
- Remote access via upper-computer apps.

#### Design and Installation

- Wall-mounted to save space.
- LCD screen for easy monitoring and configuration.

#### Safety and Performance

- A+ grade cells for stability and performance.
- Advanced BMS ensures storage safety.
- Balancing module for 6000 cycles efficiency.
- Low-voltage switch reduces standby power loss.

## Inverter Model

POW-LVM3.5K-48V

### AC Input

Input Voltage Waveform	Sinusoidal (Utility or generator)
Max. Input Power	4800W
Max. Input Current	40A
Nominal Input Voltage	110/120/127Vac
Nominal Input Frequency	50Hz/60Hz
THDi	< 3%(linear load)
Power Factor	1

### AC Output (Off-grid)

Rated Output Power	3500W
Output Voltage Regulation	110/120/127Vac
Output Frequency	50Hz/60Hz
Max. Output Current	29.2A
Peak Efficiency	93%
Max. Efficiency of Battery Inverter	88%~90%
THDv	THDv < 3% (linear load)

### Battery Parameters

Battery Type	Lithium and lead acid battery, support user define
System Voltage	48V

### AC Charging & Solar Charging Mode

Charging Algorithm	3 stages
Max. AC Charging Current	120Amp (@VI/P=230Vac)
Max. PV Array Power	3500W
PV Array MPPT Range	80~450Vdc
Max. Input Current	18A
Max. Charging Current (AC+PV)	60Amp

### General Parameters

Operating Temperature Range	-10°C~55°C
Storage Temperature	-15°C~60°C
Warranty	3 years
Dimensions	120x345x443mm
Net Weight	13.5kg

## Product Showcase (POW-LVM3.5K-48V)



## Packing Information



Qty. (pcs) **910**

Per 20 GP



Qty. (pcs) **1830**

Per 40 GP

**POWMr**

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## Battery Model

POW-LIO48100-16S

### Electronic Specifications

System Voltage	51.2V
Capacity	100Ah
Nominal Energy	5.12KWh
Constant Voltage Charging Voltage	58.4V
Max. Discharge Cutoff Voltage	43.2V
Recommended Discharge Cutoff Voltage	48V
Max. Charging Current	100A
Max. Discharge Current	100A

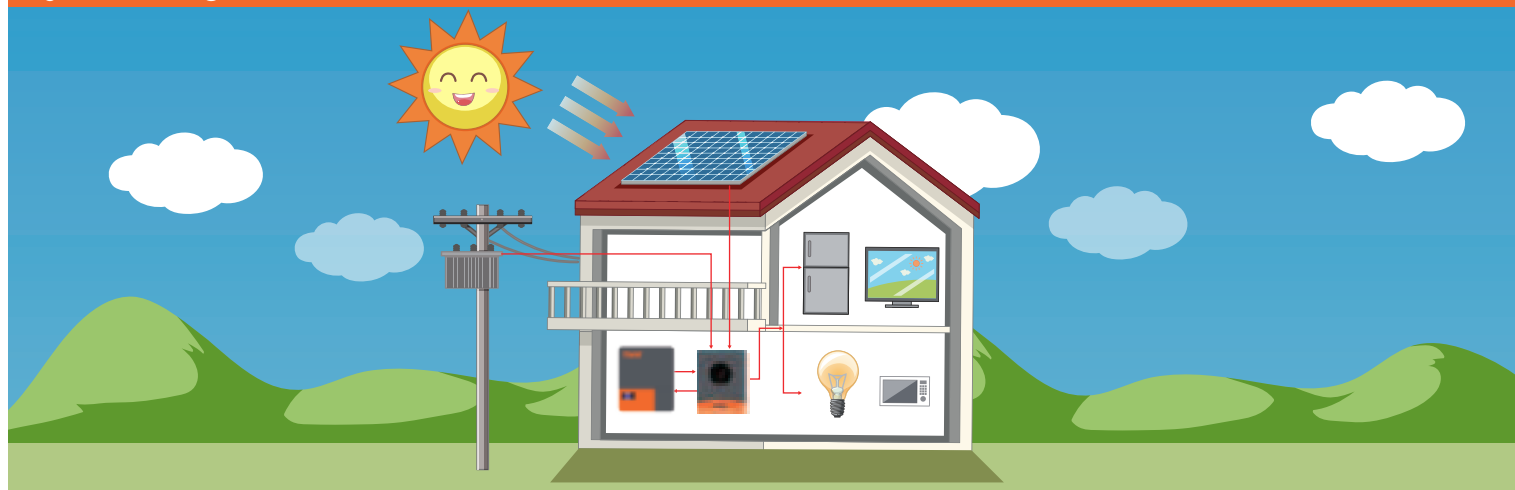
### General Information

Max. Parallel Connection of Batteries	16
Communication Interface	RS232/RS485/CAN/Dry Contac
Cycle Life	≥6000 Times @80%DOD, 25°C
Operating Temp	Charging: 0~60°C; Discharging: -10°C~65°C
Nominal Operation Altitude	< 2000m
Nominal Operation Humidity	<90%RH
IP Grade	IP21
Warranty	3 years
Battery Dimensions (LxWxH)	550x470x202mm
Net Weight	44kg

## Product Showcase (POW-LIO48100-16S)



## System Diagram



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