

ROCKSOLAR 3000W 12V Off-Grid Solar System

Product Specification Sheet

Product Overview

The ROCKSOLAR 3000W 12V Off-Grid Solar System is a complete renewable energy solution designed for cabins, cottages, RVs, workshops, remote properties, and backup power applications. This system combines high-efficiency solar panels, LiFePO4 battery storage, MPPT solar charging, and pure sine wave AC power generation to provide reliable off-grid electricity.

System Components

Component	Quantity
200W Monocrystalline Solar Panels	6
12V 200Ah LiFePO4 Batteries	2
3000W Pure Sine Wave Inverter	1
100V 20A MPPT Charge Controller	1
10AWG Solar Extension Cables	2Sets
Battery Disconnect Switch (200A)	1
2-String PV Combiner Box	1

Solar Array Specifications

Parameter	Value
Total Solar Capacity	1200W
Solar Panel Type	Monocrystalline
Number of Panels	6
Panel Rating	200W Each

Battery Specifications

Parameter	Value
Battery Chemistry	LiFePO4
Battery Capacity	12V 200Ah Each
Quantity	2
Total Storage Capacity	5.2kWh
Cycle Life	4500+ Cycles
Battery Management System	Integrated BMS

Inverter Specifications

Parameter	Value
Continuous Power Output	3000W
Surge Power	6000W
Input Voltage	12V DC
Output Voltage	120V AC
Output Waveform	Pure Sine Wave
Frequency	50/60Hz
Efficiency	Up to 94%

MPPT Charge Controller

Parameter	Value
Controller Type	MPPT
Maximum PV Voltage	100V
Maximum Charging Current	20A
Battery Compatibility	Lithium / Lead Acid
Peak Tracking Efficiency	Up to 99.5%

Environmental Specifications

Parameter	Value
Battery Operating Temperature	-20°C to 60°C
Charge Controller Operating Temperature	-20°C to 55°C
Installation Environment	Indoor / Weather-Protected

Typical Applications

- Off-grid cabins and cottages
- Tiny homes
- RV and mobile applications
- Remote workshops
- Backup power systems
- Agricultural properties
- Emergency preparedness

Warranty

- LiFePO4 Batteries: 10 Years
- Solar Panels: 10–12 Years Product Warranty
- Inverter & Electronics: 1 Year

ROCKSOLAR Canada

www.rock solar.ca