

## **Standard Solar Panel 250W – User Manual**

### **Standard Solar Panel 250W Metadata**

Model: SP-250-STD

Category: solar\_panels

Tags: solar\_panels, SP-250-STD, Cirrus, Renewable Energy, Standard Solar Panel 250W

#### **1. Standard Solar Panel 250W Overview**

Durable all-weather panel suitable for most installations.

#### **2. Standard Solar Panel 250W Intended Use**

Designed for residential and light commercial renewable-energy applications. Any other use may void the warranty and pose safety risks.

#### **3. Standard Solar Panel 250W Safety Information**

- a. Always de-energize circuits at the combiner box and apply lock-out/tag-out before wiring work.
- b. Use fall-arrest systems when working on rooftops; ensure anchors are rated  $\geq 5$  kN.
- c. Wear DC-rated gloves and keep tools insulated to mitigate arc-flash hazards.

#### **4. Standard Solar Panel 250W Prerequisites**

- a. Read this manual in full before installation.
- b. Ensure local electrical codes and permits are satisfied.
- c. Have the following tools: multimeter, torque wrench, crimping tool, PPE.

#### **5. Standard Solar Panel 250W Installation Guide**

- a. Perform shade analysis to target  $\leq 10$  % annual shading.
- b. Tilt modules to site latitude  $\pm 10^\circ$ ; orient south-facing in the northern hemisphere.
- c. Use wind/snow-load-rated stainless hardware; comply with ASCE-7-22.
- d. Route cables in UV-resistant conduit; label per NEC 2024 Article 690.

#### **6. Standard Solar Panel 250W Configuration & Operation**

Refer to the controller or inverter interface to set voltage and charging parameters. Adjust based on battery chemistry or site requirements.

#### **7. Standard Solar Panel 250W Maintenance Schedule**

- a. Rinse with de-ionized water when soiling losses exceed 5%.
- b. Inspect wiring and connectors annually for corrosion or damage.
- c. Track daily production; investigate drops >10 % from baseline.

#### 8. Standard Solar Panel 250W Troubleshooting

- a. **No Output / Zero Power:** Check PV input voltage; verify connectors.
- b. **Low Power Output:** Inspect for shading, soiling, or loose wiring.
- c. **System Fault Code:** Consult controller/inverter fault table; reset after corrective action.

#### 9. Standard Solar Panel 250W Technical Specifications

Specification	Value
Power Output	250W
Voltage	24V
Dimensions	68 x 36 x 1.5 inches
Weight	45 lbs
Warranty	20 years performance, 12 years product
Efficiency	19.2%
Operating Temperature	-40°C to +85°C

#### 10. Regulatory & Standards

- a. IEC 61215
- b. IEC 61730
- c. NEC 2024 Article 690
- d. UL 1703

#### 11. Standard Solar Panel 250W Warranty & Support

Warranty: 20 years performance, 12 years product

For assistance, contact Cirrus support: [support@cirrus.com](mailto:support@cirrus.com) or +1-800-CIRRUS-1.