

# 440W Monocrystalline Solar Panel for Power Generation

This 440W monocrystalline solar panel is designed for efficient power generation in solar power systems. Its Tier One PV technology ensures reliable performance and long-term durability.



## ADDITIONAL IMAGES

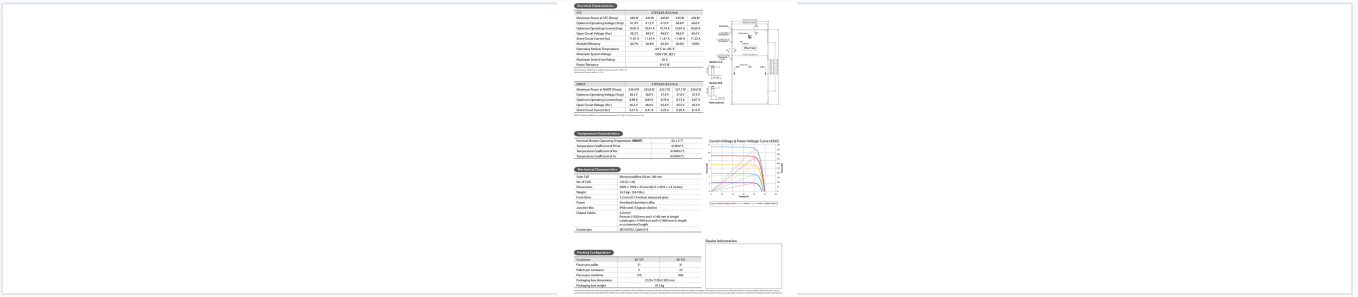


## Product Overview

### High-Efficiency Solar Power Solution

This 440W monocrystalline solar module is engineered with 144 half-cut cells to deliver superior power output and exceptional performance in low-light conditions. Designed for both residential and utility-scale projects, the module features advanced cell technology to minimize mismatch losses and enhance overall energy conversion efficiency. With its rugged construction and industry-leading performance warranty, it provides a reliable, sustainable power solution even in demanding environmental conditions like coastlines and arid regions.

## Electrical Performance



Detailed mechanical dimensions and electrical characterization data for the 440W module.

### Performance Metrics (STC)

**440 W**

Maximum Power (P<sub>max</sub>)

**20.2 %**

Module Efficiency

**48.8 V**

Open Circuit Voltage (V<sub>oc</sub>)

**11.47 A**

Short Circuit Current (I<sub>sc</sub>)

### Operating Characteristics

Parameter	Value
Max System Voltage	1500 V DC
Max Series Fuse Rating	20 A
Power Tolerance	0/+5 W
NMOT Max Power	332.7 W

## Mechanical Data

### Physical Construction

- Dimensions: 2095 x 1039 x 35 mm
- Weight: 24.5 kg
- 144 Monocrystalline silicon 166 mm cells
- 3.2 mm tempered front glass
- Anodized aluminum alloy frame
- IP68 rated junction box with 3 bypass diodes

## Compliance and Reliability

### Warranty Period

- 12-year product warranty
- 25-year linear performance warranty
- 98% power output in first year
- 84.8% power output at 25th year

### Certifications & Standards

IEC 61215, IEC 61730, ISO 9001, ISO 14001, ISO 45001, CE, TUV NORD