



SOLAR MODULES

SOLAR MODULE SHARP 165 WATTS SHARP

MULTI-CRYSTALLINE SILICON PHOTOVOLTAIC MODULE WITH 165 W MAXIMUM POWER

Sharp's NE-160U1 photovoltaic modules offer high-powered performance and industry-leading durability for large electrical power requirements. Using advanced technology perfected by Sharp's nearly 45 years of research and development, these modules use a textured cell surface to reduce reflection of sunlight, and BSF (Black Surface Field) structure to improve conversion efficiency. An anti-reflective coating provides a uniform blue color and increases the absorption of light in all weather conditions. Common applications include office buildings, cabins, solar power stations, solar villages, radio relay stations, beacons, and traffic lights. Ideal for grid-connected systems and designed to withstand rigorous operating conditions, Sharp's NE-165U1 modules are a breakthrough in technology and reliability.



FEATURES

- High-power module (165W) using 125mm square multi-crystal silicon solar cells with 12.68% module conversion efficiency
- Bypass diode minimizes the power drop caused by shade
- Improved cell conversion efficiency: 14.44%
- Water white, tempered glass, Eva laminate, plus aluminum frame for extended outdoor use
- Nominal 24VDC output perfect for grid-connected systems
- UL Listings' 1703, cUL
- Sharp modules are manufactured in ISO 9001 certified facilities
- 25-year limited warranty on power output (see dealer for details)

ELECTRICAL CHARACTERISTICS

Cells	Multi-crystalline silicon
No. of cells and connections	72 in series
Open Circuit Voltage (Voc)	43.1V
Maximum Power Voltage (Vmp)	34.6V
Short Circuit Current (Isc)	5.46A
Maximum Power Current (Imp)	4.77A
Minimum Power (Pm)*	148.5W
Maximum Power (Pmax)*	165W
Encapsulated Solar Cell Efficiency (ηc)	14.44%
Module Efficiency (m)	12.68%
PTC Rating (W)**	144.80
Maximum System Voltage	600VDC
Series Fuse Rating	10A
Type of Output Terminal	Lead Wire with MC Connector



MECHANICAL CHARACTERISTICS

Dimensions (A x B x C below)	62.01 x 32.52 x 1.81"
Weight	1575 x 826 x 46mm
	37.485lbs / 17.0kg
Packing Configuration	2 pcs per carton
Size of Carton	66.93 x 38.19 x 5.12"
Loading Capacity (20 ft container)	1700 x 970 x 130mm
	168 pcs (84 cartons)
	392 pcs (196 cartons)

ABSOLUTE MAXIMUM RATINGS

Parameter	Rating
Operating Temperature	-40 to 194°F / -40 to +90°C
Storage Temperature	-40 to 194°F / -40 to +90°C
Dielectric Isolation Voltage	2200 VDC max.

* Specifications are subject to change without notice.