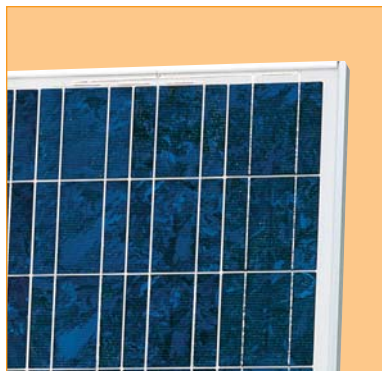


165 WATT

HIGH-POWERED MODULE. SUPERIOR PERFORMANCE.

MULTI-CRYSTAL SILICON PHOTOVOLTAIC MODULE WITH 165W MAXIMUM POWER

Sharp's NE-165U1 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.



Solder-coated grid results in high fill factor performance under low light conditions.



Sharp multi-purpose modules offer industry-leading performance for a variety of applications.

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: UL 1703, cUL
- Sharp modules are manufactured in ISO 9001 certified facilities
- 25-year limited warranty on power output (see dealer for details)

ELECTRICAL CHARACTERISTICS

Cell	Multi-crystal silicon
No. of Cells and Connections	72 in series
Open Circuit Voltage (Voc)	43.1V
Maximum Power Voltage (Vpm)	34.6V
Short Circuit Current (Isc)	5.46A
Maximum Power Current (Ipm)	4.77A
Maximum Power (Pm)*	165W
Minimum Power (Pm)**	148.5W
Encapsulated Solar Cell Efficiency (η_c)	14.44%
Module Efficiency (η_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

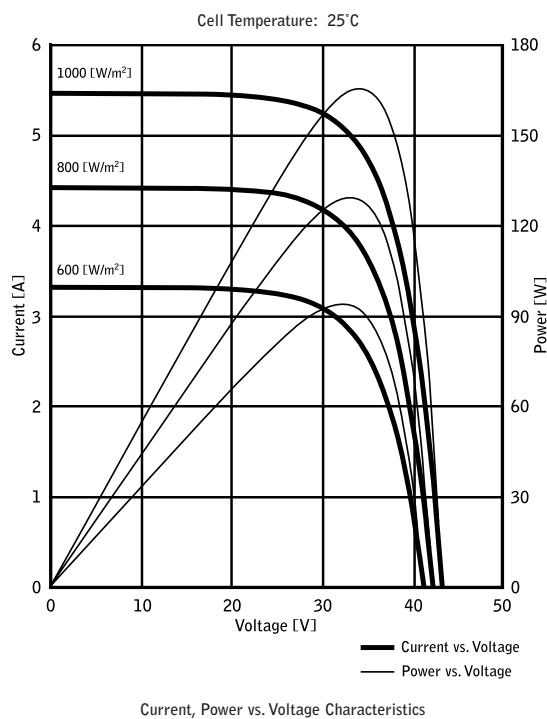
MECHANICAL CHARACTERISTICS

Dimensions (A x B x C below)	62.01 x 32.52 x 1.81" / 1575 x 826 x 46mm
Weight	37.485lbs / 17.0kg
Packing Configuration	2 pcs per carton
Size of Carton	66.93 x 38.19 x 5.12" / 1700 x 970 x 130mm
Loading Capacity (20 ft container)	168 pcs (84 cartons)
Loading Capacity (40 ft container)	392 pcs (196 cartons)

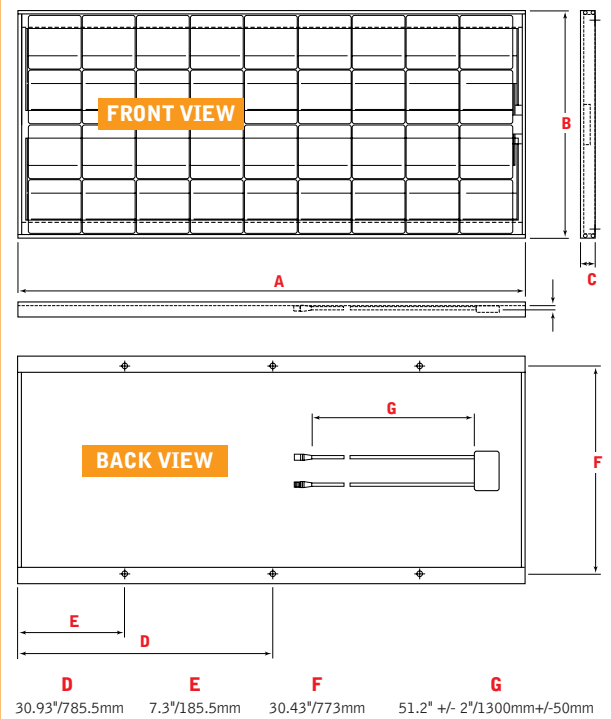
ABSOLUTE MAXIMUM RATINGS

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.

IV CURVES



DIMENSIONS



Specifications are subject to change without notice.

* (STC) Standard Test Conditions: 25°C, 1 kW/m², AM 1.5
 ** (PTC) Pacific Test Conditions: 20°C, 1 kW/m², AM 1.5, 1 m/s wind speed

In the absence of confirmation by product manuals, Sharp takes no responsibility for any defects that may occur in equipment using any Sharp devices.
 Contact Sharp to obtain the latest product manuals before using any Sharp device.

