

165 WATT



FEATURES

High-power module (165W) using 125mm square multi-crystal silicon solar cells with 12.68% module conversion efficiency.

Photovoltaic module with bypass diode minimizes the power drop caused by shade.

Textured cell surface to reduce the reflection of sunlight and BSF (Back Surface Field) structure to improve cell conversion efficiency: 14.55%.

White tempered glass, EVA resin, and a weatherproof film, plus aluminum frame for extended outdoor use.

Nominal 24 DC output, perfect for grid connected systems

Output terminal: Lead wire with waterproof connector

Certifications: UL 1703, cUL

SHARP modules are manufactured in ISO 9001 certified factories

A DURABLE MODULE FOR LARGE ELECTRICAL POWER NEEDS

MULTI-SILICON PHOTOVOLTAIC MODULE WITH 165W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's NE-Q5E2U photovoltaic module is designed for large electrical power requirements. Based on the technology of crystal silicon solar cells developed over 35 years, this module has superb durability to withstand rigorous operating conditions and is suitable for grid connected systems.

Common applications for the Sharp NE-Q5E2U include residences, office buildings, solar power stations, solar villages, radio relay stations, beacons and traffic lights. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

SHARP®



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NE-Q5E2U – MAXIMUM POWER

ELECTRICAL CHARACTERISTICS

Cell	Multi-crystal silicon solar cells
No. of Cells and Connections	72 in series
Open Circuit Voltage (Voc)	43.1
Maximum Power Voltage (Vpm)	34.6
Short Circuit Current (Isc)	5.46
Maximum Power Current (Ipm)	4.77
Maximum Power (Minimum Power) (Pm) ¹	165.0(148.5)
Encapsulated Solar Cell Efficiency (ηc)	14.55
Module Efficiency (ηm)	12.68
PTC Rating (W) ²	144.87
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Type of Output Terminal	Lead Wire with MC Connector

MECHANICAL CHARACTERISTICS

Dimensions (A x B x C below)	1575 x 826 x 46mm / 62.01 x 32.52 x 1.81"
Weight	17.0kg / 37.485lbs
Packing Condition	2 pcs - 1 Carton
Size of Carton	1700 x 970 x 130mm / 66.93 x 38.19 x 5.122"
Loading Capacity (20ft container)	168 pcs - 84 carton
Loading Capacity (40ft container)	392 pcs - 196 carton

ABSOLUTE MAXIMUM RATINGS

Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	2200 max.	V-DC

IV CURVES

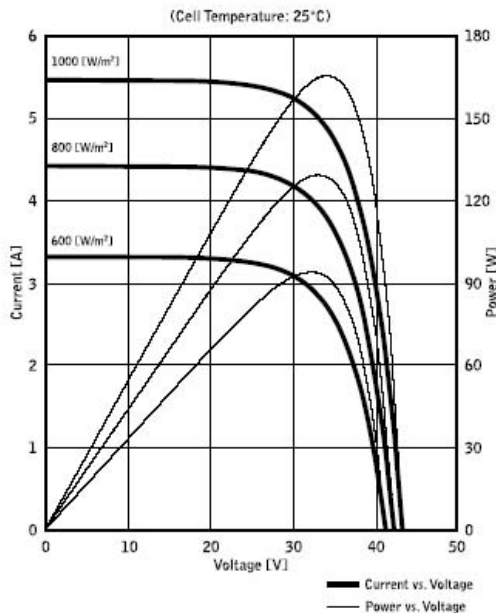
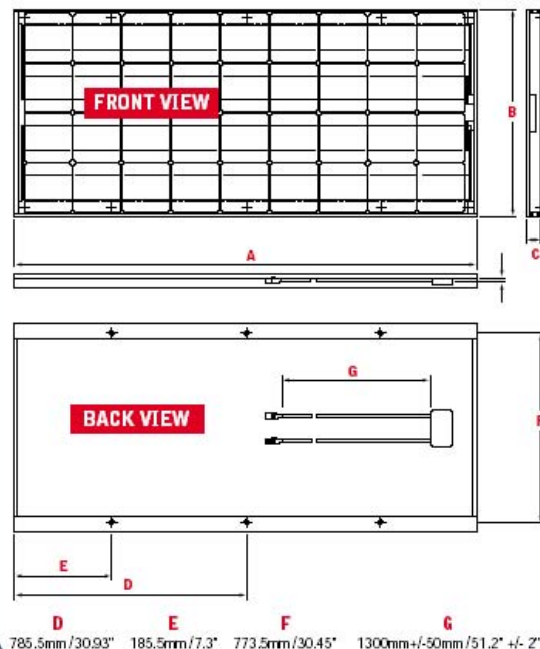


Fig. 1-2 Current, Power vs. Voltage Characteristics

DIMENSIONS



Specifications are subject to change without notice.

¹ (STC) Standard Test Conditions: 25°C, 1 kW/m², AM 1.5

² (PTC) Pacific Test Conditions: 1 kW/m², AM 1.5, 20°C, 1 m/s wind speed

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