

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

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.

NE-Q5E2U – MAXIMUM POWER

APPLICATIONS

- Grid Connected Residential Systems
- Office Buildings
- Solar Power Stations
- Solar Villages
- Villas, Mountain Cottages
- Telecommunication Systems
- Telemetry Systems
- Pumps
- Lighting Equipment
- Traffic Signs
- Radio Relay Stations
- Beacons

HANDLING SPECIFICATIONS

Packing Condition	2 pcs - 1 Carton
Size of Carton	170 x 97 x 13cm / 66.98 x 38.218 x 5.122"
Loading Capacity (20ft container)	168 pcs - 84 carton
Loading Capacity (40ft container)	392 pcs - 196 carton

SPECIFICATIONS

Cell	Multi-crystal silicon solar cells
	125 mm square
No. of Cells and Connections	72 in series
Application	DC 24V system
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Maximum Power	148.5W (Min)
Dimensions	1575 x 826 x 46mm / 62.05 x 32.44 x 1.812"
Weight	17.0kg / 37.485lbs

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

OUTPUT TERMINAL

Type of Output Terminal	Lead Wire with MC Connector
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ELECTRO-OPTICAL CHARACTERISTICS: NE-Q5E2U

Parameters	Symbol	Min.	Typ.	Unit	Condition
Open Circuit Voltage	Voc	–	43.1	V	Irradiance: 1000 W/m ²
Maximum Power Voltage	V _{pm}	–	34.6	V	
Short Circuit Current	Isc	–	5.46	A	
Maximum Power Current	I _{pm}	–	4.77	A	Module Temperature: 25°C
Maximum Power	P _m	148.5	165.0	W	
Encapsulated Solar Cell Efficiency	η _c	–	14.55	%	
Module Efficiency	η _m	–	12.68	%	
PTC Rating – 87.80					

Specifications are subject to change without notice.

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