

# 180 WATT

**BIG POWER,  
SMALL FOOTPRINT**



## FEATURES

- High-power module (180W) using 155mm square single crystal silicon solar cells with 13.7% module conversion efficiency
- Photovoltaic module with bypass diode minimises 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: 15.5%
- White tempered glass, EVA resin and a weatherproof film, plus aluminum frame for extended outdoor use
- Output terminal: Lead wire with waterproof connector
- Certifications: IEC 61215
- SHARP modules are manufactured in ISO 9001 certified factories

## SINGLE CRYSTAL SILICON PHOTOVOLTAIC MODULE WITH 180W MAXIMUM POWER

This single crystal 180watt module features 15.5% encapsulated cell efficiency and 13.7% module efficiency. Using breakthrough technology perfected in Sharp's space cell program, the **NU-S0E3E** module allows for maximum usable power per square metre of solar array.

A safe, clean, reliable source of energy, Sharp's NU-S0E3E photovoltaic module is designed for large electrical power requirements. Based on the technology of crystal silicon solar cells developed over 45 years, this module has superb durability to withstand rigorous operating conditions and is suitable for grid connected systems.

Common applications for the Sharp NU-S0E3E include residences, office buildings, solar power stations and solar suburbs. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

**SHARP**

# NU-S0E3E – MAXIMUM POWER

## ELECTRICAL CHARACTERISTICS

Cell	48 Monocrystalline (155.55mm) <sup>2</sup> Sharp silicon solar cells
No. of Cells and Connections	48 in series
Open Circuit Voltage (Voc)	30.0V
Maximum Power Voltage (Vpm)	23.7V
Short Circuit Current (Isc)	8.37A
Maximum Power Current (Ipm)	7.60A
Maximum Power (Pm) <sup>1</sup>	Min. 171W Typical 180W
Encapsulated Solar Cell Efficiency (ηc)	15.5%
Module Efficiency (ηm)	13.7%
Maximum System Voltage	DC 1000V
Series Fuse Rating	15A
Type of Output Terminal	Lead Wire with MC Connector

Specifications are subject to change without notice  
<sup>1</sup> (STC) Standard Test Conditions: 25°C, 1 kW/m<sup>2</sup>, AM 1.5

## MECHANICAL CHARACTERISTICS

Dimensions	1318 x 994 x 46mm
Weight	16.0kg

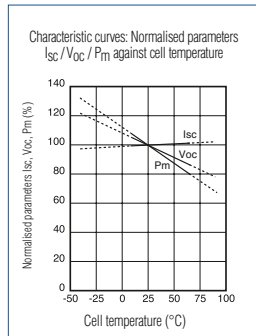
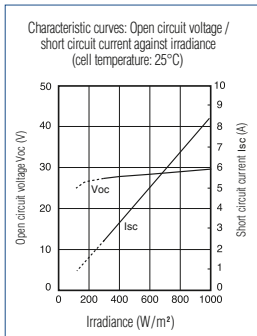
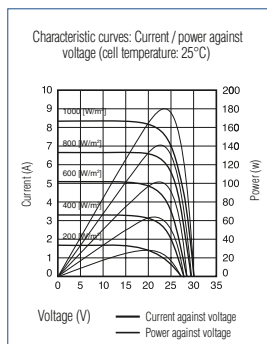
## TEMPERATURE COEFFICIENT

Temp. Coefficient of Pmax	-0.485	% / °C
Temp. Coefficient of Voc	-0.104	V / °C
Temp. Coefficient of Isc	0.053	% / °C

## ABSOLUTE MAXIMUM RATINGS

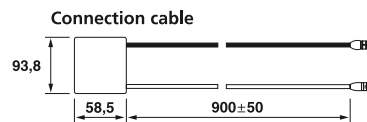
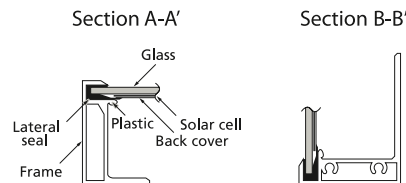
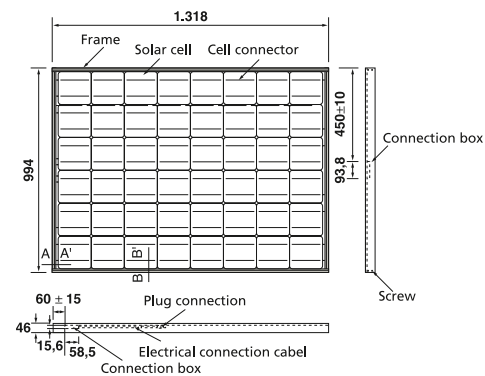
Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	3000 max.	V-DC

## IV CURVES



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## DIMENSIONS



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In the absence of confirmation by device specifications sheets, Sharp takes no responsibility for any defects that may occur in equipment using any Sharp devices shown in catalogues, data books, etc. Contact Sharp in order to obtain the latest device specification sheets before using any Sharp device.

