

# 130 WATT

**DESIGNED FOR  
LARGE ELECTRICAL  
POWER REQUIREMENTS**



## FEATURES

- High-power module (130W) using 156.5mm square multi-crystal silicon solar cells with 13.0% module conversion efficiency
- Photovoltaic module with bypass diode minimises the power drop caused by shade
- Anti reflection coating and BSF (Back Surface Field) structure to improve cell conversion efficiency: 14.7%
- White tempered glass, EVA resin and a weatherproof film, plus aluminum frame for extended outdoor use
- Nominal 12 volt output for battery charging applications
- Output terminal: Lead wire with waterproof connector
- Certifications: IEC 61215 & IEC 61730
- SHARP modules are manufactured in ISO 9001 certified factories

## POLYCRYSTALLINE SILICON PHOTOVOLTAIC MODULE WITH 130W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's **ND-130T1J** photovoltaic module is designed for a variety of electrical power requirements. Based on the technology of crystal silicon solar cells developed over 50 years, this module has superb durability to withstand rigorous operating conditions and is suitable for use in most solar systems.

Common applications for the Sharp ND-130T1J include office buildings, private residences, RVs, cabins, vacation homes, solar power stations, pumps, beacons and lighting equipment. As one of the world's leading manufacturer's of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

**SHARP**

# ND-130T1J – MULTI-PURPOSE MODULE

## ELECTRICAL CHARACTERISTICS

Cell	Multi-crystalline (156.5mm) <sup>2</sup> Sharp silicon solar cells
No. of Cells and Connections	36 in series
Open Circuit Voltage (Voc)	22.0V
Maximum Power Voltage (Vpm)	17.4V
Short Circuit Current (Isc)	8.09A
Maximum Power Current (Ipm)	7.48A
Maximum Power (Pm) <sup>1</sup>	Min. 123.5W Typical 130W
Encapsulated Solar Cell Efficiency (ηc)	14.7%
Module Efficiency (ηm)	13.0%
Maximum System Voltage	DC 600V
Series Fuse Rating	15A
Type of Output Terminal	Lead Wire with Connector MC3

<sup>1</sup> (STC) Standard Test Conditions: 25°C, 1 kW/m<sup>2</sup>, AM 1.5

## MECHANICAL CHARACTERISTICS

Dimensions	1491 x 671 x 46mm
Weight	14.0kg

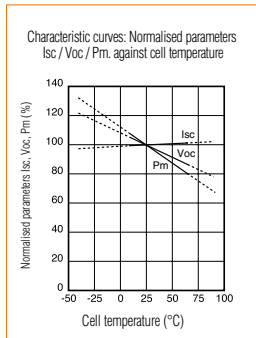
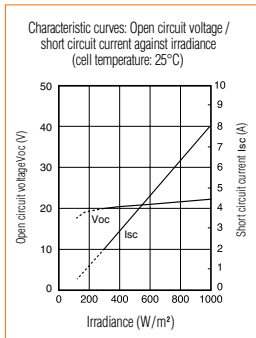
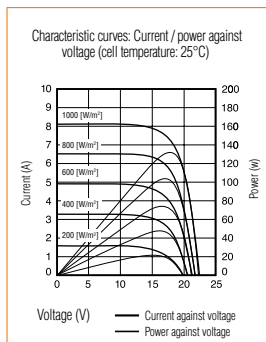
## TEMPERATURE COEFFICIENT

Temp. Coefficient of Pmax	-0.485	% / °C
Temp. Coefficient of Voc	-0.078	V / °C
Temp. Coefficient of Isc	0.053	% / °C

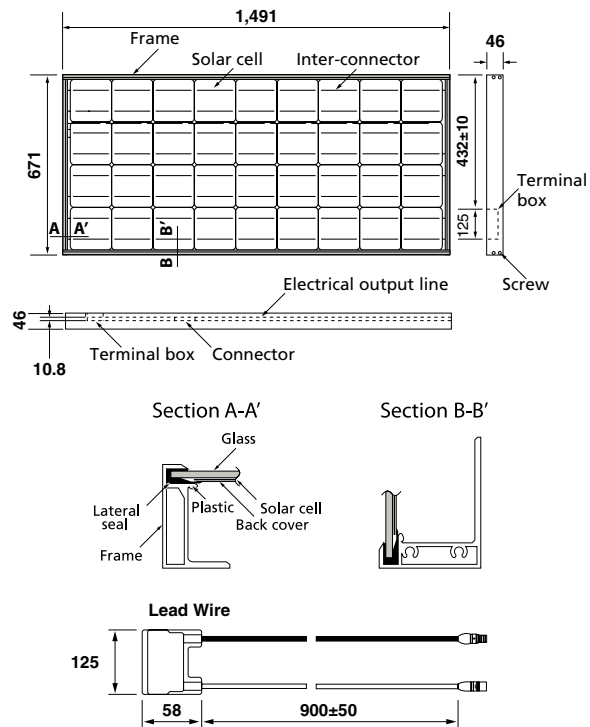
## ABSOLUTE MAXIMUM RATINGS

Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	600 max.	V-DC

## IV CURVES



## DIMENSIONS



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.

- Design and specifications are subject to change without prior notice.
- Colour variations to products may occur due to printing.
- All information and technical details are correct as at product release date.

**SHARP**

SHARP CORPORATION OF AUSTRALIA PTY LTD  
 ABN 40 003 039 405  
 1 Huntingwood Drive, Huntingwood, NSW 2148  
 PO Box 6827, Blacktown, NSW 2148  
 Tel: (02) 9830 4600 Fax: (02) 9672 1208  
 www.sharp.net.au

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