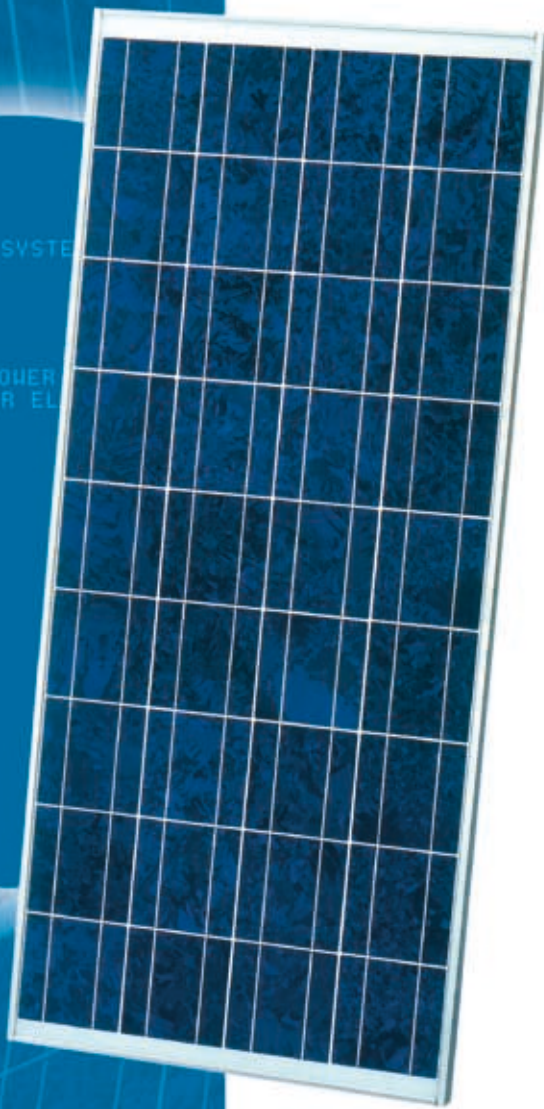


# 130 WATT

**DESIGNED FOR  
LARGE ELECTRICAL  
POWER REQUIREMENTS**



## FEATURES

- High-power module (130W) using 155mm square multi-crystal silicon solar cells with 13.1% 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: 15.0%
- 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
- 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 45 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 the world's leading manufacturer 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 (155mm) <sup>2</sup><br>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) | 15.0%   |
| Module Efficiency (ηm)                  | 13.1%   |
| Maximum System Voltage                  | DC 540V   |
| Series Fuse Rating                      | 10A   |
| Type of Output Terminal                 | Lead Wire with 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 | 1491 x 671 x 46mm |
| Weight     | 14.0kg            |

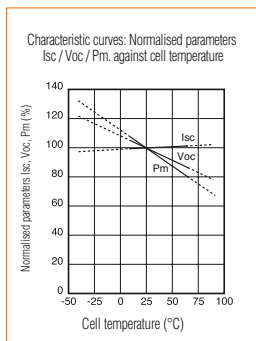
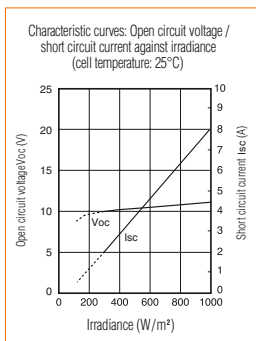
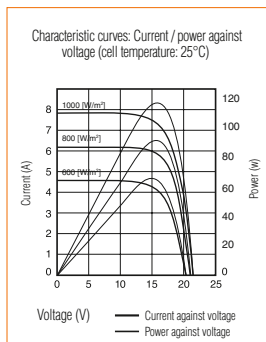
## TEMPERATURE COEFFICIENT

|                           |        |        |
|---------------------------|--------|--------|
| 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

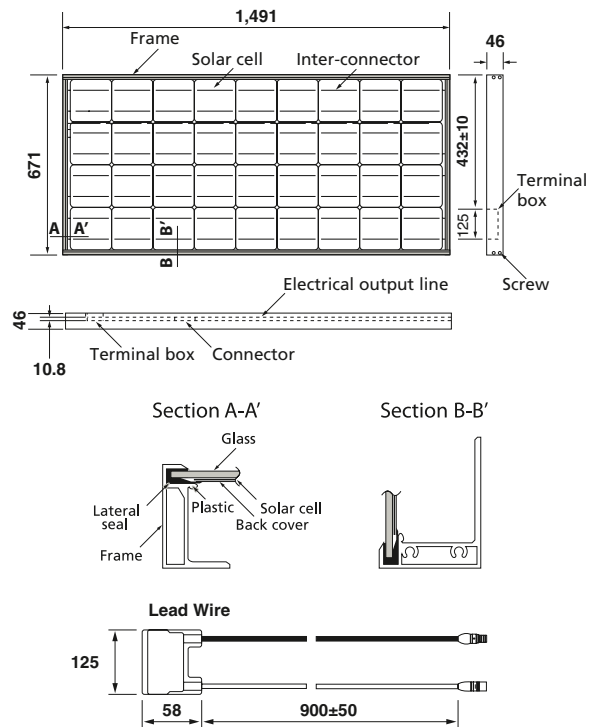
| Parameters                   | Rating     | Unit |
|------------------------------|------------|------|
| Operating Temperature        | -40 to +90 | °C   |
| Storage Temperature          | -40 to +90 | °C   |
| Dielectric Voltage Withstood | 600 max.   | V-DC |

## IV CURVES



Specifications are subject to change without notice

## DIMENSIONS



Specifications are subject to change without notice

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.

