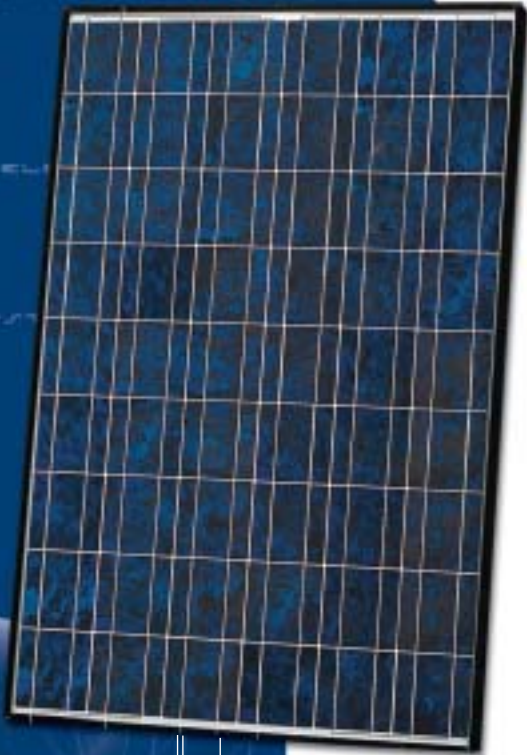


123 WATT



FEATURES

High-power module (123W) using 155mm square multi-crystal silicon solar cells with 12.39% 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: 14.13%.

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

SUPERB DURABILITY WITH IMPROVED CELL CONVERSION EFFICIENCY

MULTI-SILICON PHOTOVOLTAIC MODULE WITH 123W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's ND-L3E1U photovoltaic module is designed for a variety of 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 use in most solar systems.

Common applications for the Sharp ND-L3E1U include private residences, RVs, cabins and vacation homes, solar power stations, pumps, telemetry systems, 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.

ND-L3E1U – HIGH POWER MODULE

APPLICATIONS

- Telecommunications Systems
- Telemetry Systems
- Radio Relay Stations
- Cabins and Vacation Homes
- Solar Power Stations
- Lighting Equipment
- Solar Villages
- Residences
- RVs
- Pumps
- Traffic Signs
- Beacons

HANDLING SPECIFICATIONS

Packing Condition	2 pcs - 1 Carton
Size of Carton	160 x 78 x 13cm / 63.04 x 30.732 x 5.122"
Loading Capacity (20ft container)	196 pcs - 98 carton
Loading Capacity (40ft container)	420 pcs - 210 carton

SPECIFICATIONS

Cell	Multi-crystal silicon solar cells
	155 mm square
No. of Cells and Connections	36 in series
Application	Battery Charging System
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Maximum Power	110.7W (Min)
Dimensions	1499 x 662 x 46mm / 59.06 x 26.08 x 1.812"
Weight	14.0kg / 30.87lbs

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: ND-L3E1U

Parameters	Symbol	Min.	Typ.	Unit	Condition
Open Circuit Voltage	Voc	–	21.3	V	Irradiance: 1000 W/m ²
Maximum Power Voltage	Vpm	–	17.2	V	
Short Circuit Current	Isc	–	8.12	A	
Maximum Power Current	Ipm	–	7.16	A	Module Temperature: 25°C
Maximum Power	Pm	110.7	123.0	W	
Encapsulated Solar Cell Efficiency	η_c	–	14.13	%	
Module Efficiency	η_m	–	12.39	%	
PTC Rating – 87.60					

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 catalogs, data books, etc. Contact Sharp in order to obtain the latest device specification sheets before using any Sharp device. ©2002 Sharp Electronics Corporation

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