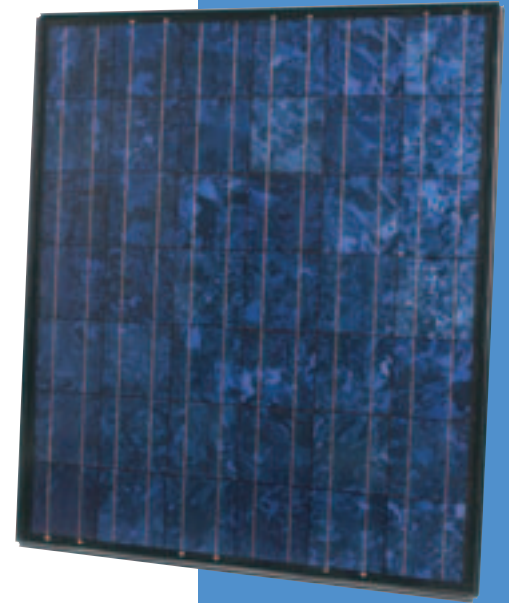


# 140 WATT

ATTRACTIVE LOOK. FLEXIBLE DESIGN.

## MULTI-CRYSTAL SILICON PHOTOVOLTAIC MODULE WITH 140W MAXIMUM POWER

Sharp's ND-NOECU photovoltaic modules offer increased aesthetics and revolutionary design integration. These residential photovoltaic modules give the clean, attractive appearance of a high-tech skylight while the black anodized aluminum frames, trim strips, and backing sheets blend beautifully with the home's exterior. In addition, an "L" hook design located along the frame's perimeter ensures easy integration with the residential system mounting hardware. As the global leader in solar manufacturing, Sharp has designed these modules with superb durability and efficiency in mind. Developed to withstand extreme heat and high winds, the ND-NOECU has an anti-reflective coating that provides a uniform blue color and increases light absorption in all types of weather. Sharp's ND-NOECU—a breakthrough in technology and aesthetics.



## FEATURES

- High-power module (140W) using 42 square multi-crystal silicon solar cells with 12.14% module conversion efficiency
- Bypass diode minimizes the power drop caused by shade
- Black anodized aluminum frame and "L" hook design located along frame perimeter for easy integration with residential system mounting hardware
- Water white, tempered glass, EVA laminate, and a weather-proof film yield long-life modules while enhancing cell performance
- Nominal 14 VDC output is an ideal match for the Sharp multi-string inverter
- Manufactured in ISO 9001 certified facilities
- 25-year limited warranty on power output (see dealer for details)
- UL Listings: UL 1703, cUL



*The laminated glass module is glazed into a high torsion black anodized aluminum frame.*



*Sharp's residential modules with black frames, trim strips, and backing sheets allow for the seamless integration of the system into the home's design.*

### ELECTRICAL CHARACTERISTICS

Cell	Multi-crystal silicon
No. of Cells and Connections	42 in series
Open Circuit Voltage (Voc)	24.85V
Maximum Power Voltage (Vpm)	19.95V
Short Circuit Current (Isc)	7.81A
Maximum Power Current (Ipm)	7.02A
Maximum Power (Pm)*	140W
Minimum Power (Pm)**	126W
Encapsulated Solar Cell Efficiency (ηc)	13.44%
Module Efficiency (ηm)	12.14%
PTC Rating (W)**	122.92
Maximum System Voltage	600VDC
Series Fuse Rating	15A
Type of Output Terminal	Lead Wire with MC Connector

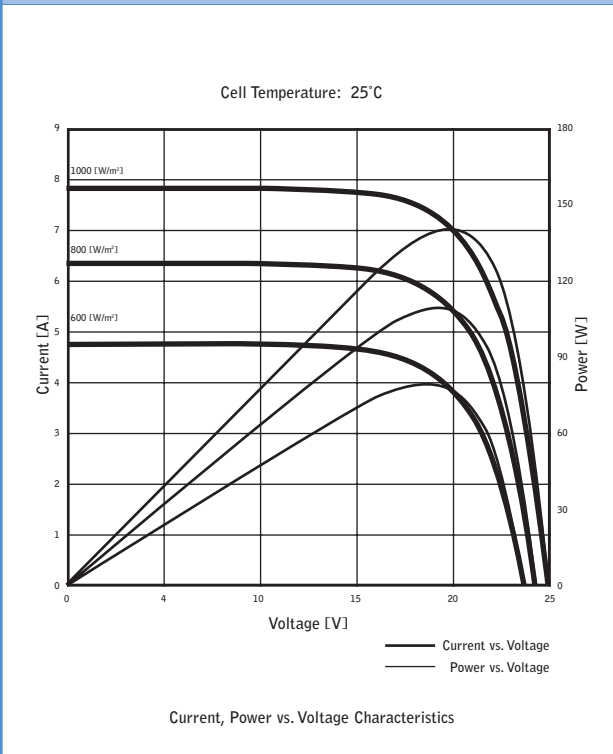
### MECHANICAL CHARACTERISTICS

Dimensions (A x B x C below)	45.87 x 38.98 x 1.81" / 1165 x 990 x 46mm
Weight	31.96lbs / 14.5kg
Packing Configuration	2 pcs per carton
Size of Carton	49.6 x 42.52 x 5.12" / 1260 x 1080 x 130mm

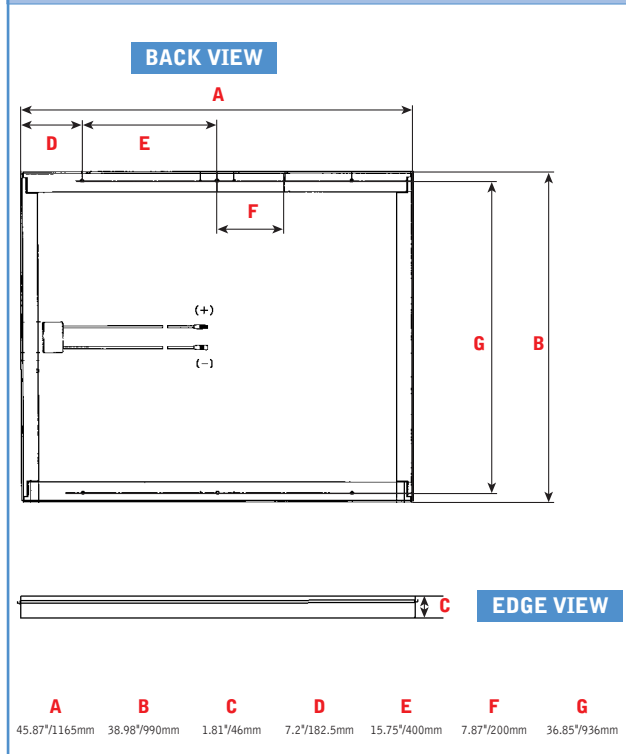
### ABSOLUTE MAXIMUM RATINGS

Operating Temperature	-40 to 194°F / -40 to +90°C
Storage Temperature	-40 to 194°F / -40 to +90°C
Dielectric Isolation Voltage	2200 VDC max.

### IV CURVES



### DIMENSIONS



Specifications are subject to change without notice.

\* (STC) Standard Test Conditions: 25°C, 1 kW/m², AM 1.5  
 \*\* (PTC) Pacific Test Conditions: 20°C, 1 kW/m², AM 1.5, 1 m/s wind speed

In the absence of confirmation by product manuals, Sharp takes no responsibility for any defects that may occur in equipment using any Sharp devices. Contact Sharp to obtain the latest product manuals before using any Sharp device.

