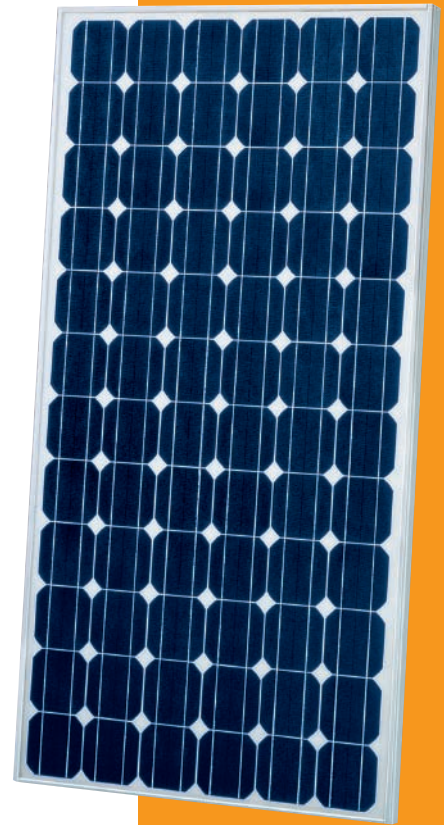


# 175 WATT

HIGH POWER. HIGH EFFICIENCY.

## MONO-CRYSTALLINE SILICON PHOTOVOLTAIC MODULE WITH 175W MAXIMUM POWER

This mono-crystalline 175 watt module features 16.2% encapsulated cell efficiency and 13.45% module efficiency. Using breakthrough technology perfected by Sharp's nearly 45 years of research and development, these modules use a textured cell surface to reduce reflection of sunlight, and BSF (Black Surface Field) structure to improve conversion efficiency. An anti-reflective coating provides a uniform blue color and increase the absorption of light in all weather conditions. Common applications include office buildings, cabins, solar power stations solar villages, radio relay stations, beacons and traffic lights. Ideal for grid-connected systems and designed to withstand rigorous operating conditions, Sharp's NT-175U1 modules offer the maximum usable power per square foot of solar array.



*Solder-coated grid results in high fill factor performance under low light conditions.*



*Sharp multi-purpose modules offer industry-leading performance for a variety of applications.*

## FEATURES

- High-power module (175W) using 125mm square mono-crystalline silicon solar cells with 13.45% module conversion efficiency
- Textured cell surface to reduce the reflected sunlight and BSF (Black Surface Field) structure to improve cell conversion efficiency: 16.20%
- Bypass diode minimizes the power drop caused by shade
- White tempered glass, EVA resin, and a weatherproof film, plus aluminum frame for extended outdoor use
- Nominal 24VDC output, perfect for grid-connected systems
- UL Listings: UL 1703, cUL
- Sharp modules are manufactured in ISO 9001 certified facilities
- 25-year limited warranty on power output (see dealer for details)

### ELECTRICAL CHARACTERISTICS

Cell	Mono-crystalline silicon
No. of Cells and Connections	72 in series
Open Circuit Voltage (Voc)	44.4V
Maximum Power Voltage (Vpm)	35.4V
Short Circuit Current (Isc)	5.4A
Maximum Power Current (Ipm)	4.95A
Maximum Power (Pmax)*	175W
Minimum Power (Pmax)*	157.5W
Encapsulated Solar Cell Efficiency ( $\eta_c$ )	16.20%
Module Efficiency Maximum Power ( $\eta_m$ )	13.45%
Maximum System Voltage	600VDC
Series Fuse Rating	10A
Type of Output Terminal	Lead Wire with MC Connector

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

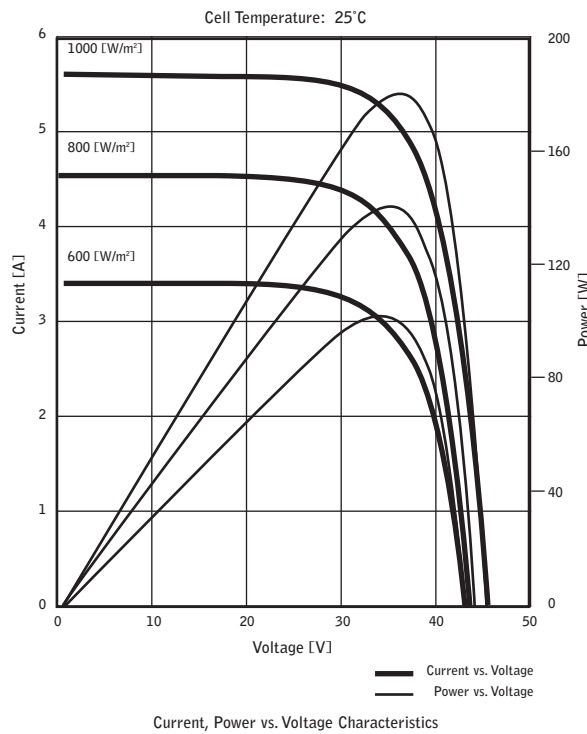
### MECHANICAL CHARACTERISTICS

Dimensions (A x B x C below)	62.01" x 32.52" x 1.8" / 1575 x 826 x 46mm
Weight	37.5lbs / 17kg
Size of Carton	66.93" x 38.19" x 5.12" / 1700 x 970 x 130mm
Packing Configuration	2 pcs per carton
Pallet Quantity	28 pcs per pallet
Loading Capacity (48 ft container)	448 pcs (16 pallets)
Loading Capacity (53 ft container)	504 pcs (18 pallets)

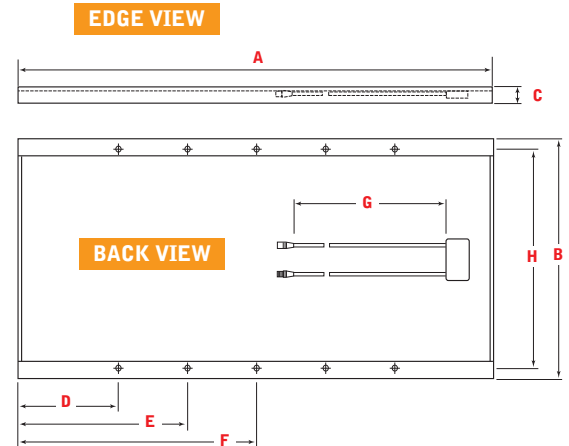
### ABSOLUTE MAXIMUM RATINGS

Operating Temperature	-40 to 194°F / -40 to 90°C
Storage Temperature	-40 to 194°F / -40 to 90°C

### IV CURVES



### DIMENSIONS



<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
62.0"/1575mm	32.5"/826mm	1.8"/46mm	7.4"/187.5mm
<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
19.2"/487.5mm	31.0"/787.5mm	51.2" +/- 2"/1300mm	30.5"/774mm

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