

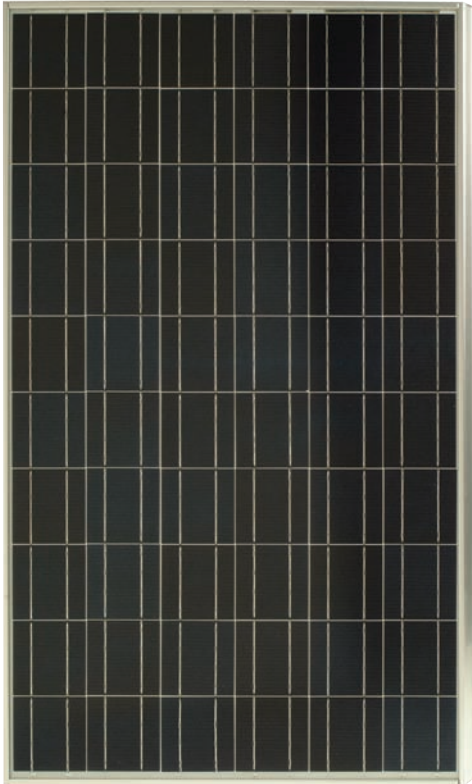
# SHARP®

solar electricity

## 230 WATT

**MULTI-PURPOSE MODULE**

NEC 2008 Compliant



**ND-230QCJ**

MULTI-PURPOSE 230 WATT  
MODULE FROM THE WORLD'S  
TRUSTED SOURCE FOR SOLAR.

Using breakthrough technology, made possible by nearly 50 years of proprietary research and development, Sharp's ND-230QCJ solar module incorporates an advanced surface texturing process to increase light absorption and improve efficiency. Common applications include commercial and residential grid-tied roof systems as well as ground mounted arrays. Designed to withstand rigorous operating conditions, this module offers high power output per square foot of solar array.

Business leaders install this module in large commercial applications, demonstrating financial astuteness and environmental stewardship.

### **ENGINEERING EXCELLENCE**

High module efficiency for an outstanding balance of size and weight to power and performance.

### **DURABLE**

Tempered glass, EVA lamination and weatherproof backskin provide long-life and enhanced cell performance.

### **RELIABLE**

25-year limited warranty on power output.

### **HIGH PERFORMANCE**

This module uses an advanced surface texturing process to increase light absorption and improve efficiency.



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



Improved Frame Technology

### **SHARP: THE NAME TO TRUST**

When you choose Sharp, you get more than well-engineered products. You also get Sharp's proven reliability, outstanding customer service and the assurance of our 25-year limited warranty on power output. A global leader in solar electricity, Sharp powers more homes and businesses than any other solar manufacturer worldwide.

**BECOME POWERFUL**

# 230 WATT

## ND-230QCJ

NEC 2008 Compliant

Module output cables: 12 AWG PV Wire

### ELECTRICAL CHARACTERISTICS

Maximum Power (Pmax)*	230 W
Tolerance of Pmax	+10%/-5%
Type of Cell	Polycrystalline silicon
Cell Configuration	60 in series
Open Circuit Voltage (Voc)	36.9 V
Maximum Power Voltage (Vpm)	29.3 V
Short Circuit Current (Isc)	8.45 A
Maximum Power Current (Ipm)	7.85 A
Module Efficiency (%)	14.1%
Maximum System (DC) Voltage	600 V
Series Fuse Rating	15 A
NOCT	47.5°C
Temperature Coefficient (Pmax)	-0.485%/°C
Temperature Coefficient (Voc)	-0.36%/°C
Temperature Coefficient (Isc)	0.053%/°C

\*Illumination of 1 kW/m<sup>2</sup> (1 sun) at spectral distribution of AM 1.5 (ASTM E892 global spectral irradiance) at a cell temperature of 25°C.

### MECHANICAL CHARACTERISTICS

Dimensions (A x B x C below)	39.1" x 64.6" x 1.8"/994 x 1640 x 46 mm
Cable Length (G)	43.3"/1100 mm
Output Interconnect Cable	12 AWG with SMK Locking Connector
Weight	41.9 lbs / 19.0 kg
Max Load	50 psf (2400 Pascals)
Operating Temperature (cell)	-40 to 194°F / -40 to 90°C

\*\*PV Wire per UL Subject 4703

### QUALIFICATIONS

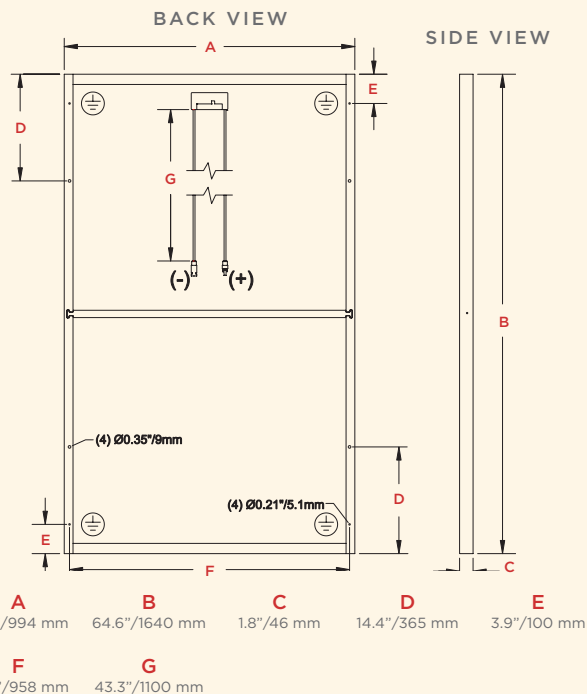
UL Listed	UL 1703
Fire Rating	Class C



### WARRANTY

25-year limited warranty on power output  
Contact Sharp for complete warranty information

### DIMENSIONS



Contact Sharp for tolerance specifications

### "BUY AMERICAN"

Sharp solar modules are manufactured in the United States and Japan, and qualify as "American" goods under the "Buy American" clause of the American Recovery and Reinvestment Act (ARRA).

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