

High-efficiency photovoltaic module using silicon nitride multicrystalline

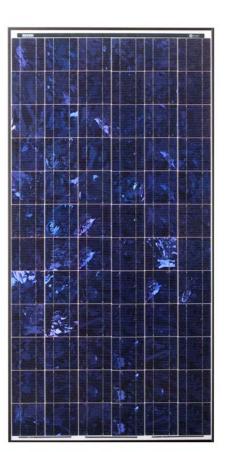
Performance

Rated power (P _{max})	170W
Power tolerance	±9%
Nominal voltage	24V
Limited Warranty ₁	25 years

Configuration

SX 170B	Bronze frame with output cables and
	polarized Multicontact (MC) connectors
SX 160B	Bronze frame with output cables and
	polarized Multicontact (MC) connectors

Electrical Characteristics² Maximum power (P _{max}) ³	SX 170B 170W	SX 160B 160W
Voltage at Pmax (Vmp)	35.4V	35.0V
Current at Pmax (I _{mp})	4.8A	4.6A
Warranted minimum P _{max}	155W	145W
Short-circuit current (I _{sc})	5.0A	4.8A
Open-circuit voltage (V _{oc})	44.2V	43.8V
Temperature coefficient of I _{sc}	(0.065±0.015)%/°C	
Temperature coefficient of V _{oc}	-(160±20)mV/°C	
Temperature coefficient of power	-(0.5±0.05)%/ °C	
NOCT (Air 20°C; Sun 0.8kW/m ² ; wind 1m/s)	47±2°C	
Maximum series fuse rating	1	5A
Maximum system voltage	600V (U.S. NEC & IEC 61215 rating)	



SX 170B

Mechanical Characteristics

Dimensions	Length: 1593mm (62.8") Width: 790mm (31.1") Depth: 50mm (1.97")		
Weight	15.0 kg (33.1 pounds)		
Solar Cells	72 cells (125mm x 125mm) in a 6x12 matrix connected in series		
Output Cables	RHW AWG# 12 (4mm ²) cable with polarized weatherproof DC rated Multicontact connectors; asymmetrical lengths - 1250mm (-) and 800mm (+)		
Diodes	<i>IntegraBus</i> ™ technology includes Schottky by-pass diodes integrated into the printed circuit board bus		
Construction	Front: High-transmission 3mm (1/8 th inch) tempered glass; White back; Encapsulant: EVA		
Frame	Anodized aluminum alloy type 6063T6 Universal frame; Color: bronze		

1. Warranty: Power output for 25 years. Freedom from defects in materials and workmanship for 5 years. See our website or your local representative for full terms of these warranties.

2. These data represent the performance of typical SX 170/160 products, and are based on measurements made in accordance with ASTM E1036 corrected to SRC (STC.)

3. During the stabilization process that occurs during the first few months of deployment, module power may decrease by up to 3% from typical P_{max}.

Quality and Safety

Qualification Test Parameters

Static load front and back (e.g. wind)

Temperature cycling range Humidity freeze, damp heat

Front loading (e.g. snow)

Hailstone impact

ESTI

Module power measurements calibrated to World Radiometric Reference through ESTI (European Solar Test Installation at Ispra, Italy); Certified to IEC 61215

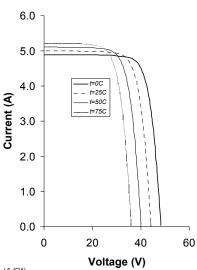
-40°C to +85°C (-40°F to 185°F)

25mm (1 inch) at 23 m/s (52mph)



Listed by Underwriter's Laboratories for electrical and fire safety (Class C fire rating)



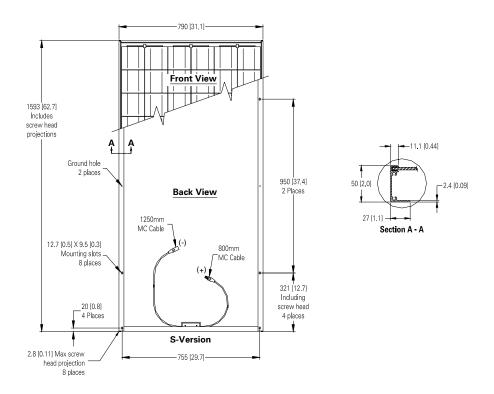


Dimensions in brackets are in inches. Unbracketed dimensions are in millimeters. Overall tolerances ±3mm (1/8")

85% RH

50psf (2400 pascals)

113psf (5400 pascals)



Included with each module: self-tapping grounding screws, instruction sheet, and warranty document.

Note: This publication summarizes product warranty and specifications, which are subject to change without notice.

