

## SOLAR POWER SOLUTIONS

Solar Power Industries produces a line of standard sized solar modules designed and certified for use in both grid-connected and off-grid applications.

Series connected 156 mm square multicrystalline silicon solar cells comprise each solar module to ensure that every module delivers the advertised power rating with tolerances as good as  $\pm 3\%$ . "Plug-n-Play" leads on the junction boxes simplify the installation process.

### ADDITIONAL KEY FEATURES

- Aluminum anodized frame and tempered glass laminate provides for maximum protection in rugged applications
- Junction box with "Plug-n-Play" leads provides ease of installation
- Three bypass diodes for additional cell protection
- Accommodates grid connected application or remote battery charging
- Advanced processing technology and automated production facilities with high quality standards

### CERTIFICATIONS

- UL 1703, TUV and IEC 61215 Certification

### WARRANTY

- Free from defects in materials and workmanship for 5 years
- 90% power output for 10 years
- 80% power output for 25 years



**Residential Application**  
System Size: 4.4kW  
Location: Pittsburgh, PA



**Carnegie Mellon University**  
System Size: 12.0KW D.C.  
Location: Pennsylvania

## ELECTRICAL SPECIFICATIONS AT STC

Maximum Power (MP)	200 W
Voltage at MP	26.6 V
Current at MP (I <sub>mp</sub> )	7.51 A
Short Circuit (I <sub>sc</sub> )	7.9 A
Open Circuit (V <sub>oc</sub> )	32.72 V
Tolerance at MP	+/-3%
Nominal Voltage (V <sub>mp</sub> )	26.6 V
Maximum series fuse rating	12 A
Maximum system voltage	600/1000 V DC

\* Measured at (STC) Standard Test Conditions: 1000W/m<sup>2</sup>, 25 °C, AM 1.5

## MECHANICAL SPECIFICATIONS

Solar Cells	54 Multicrystalline Solar Cells (156x156mm) in Series
Front Cover	3.2mm Glass
Encapsulant	EVA
Back Cover	TPT
Frame	Clear Anodized Aluminum
Diodes	3 Bypass
Junction Box	Plug-n-Play
Output Cables	Tyco w/Solarlok Connectors
Dimensions	1428 x 992 x 50mm / 58.35 x 39.06 x 1.97in.
Weight	17.9kg / 39.55lbs

\* Specifications are subject to change without notice.

### TEMPERATURE SENSITIVITIES

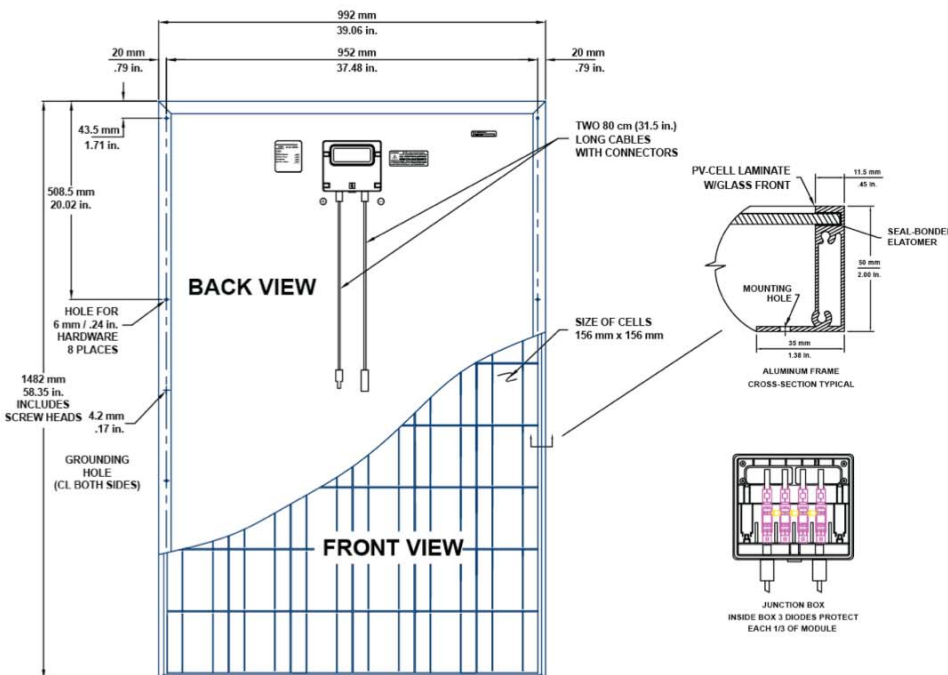
For Nominal 200 W Module

Power:	-1.00 W / °C
Open Circuit Voltage:	-0.115 V / °C
Short Circuit Voltage:	+0.0026 A / °C

### QUALIFICATION TEST PARAMETERS

Humidity Freeze, Damp Heat:	85% RH, 1000 Hrs
Temperature Cycling:	-40 °C to +90 °C, 200 Cycles
Electrical Isolation:	2200 Vdc
Static Load Front & Back:	2400 Pa
Hailstone Impact:	25 mm Steel Ball at 23 m/s

### BI-156-200W MODULE DIAGRAM



### BI-156-200W I-V CURVES

