

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
- Two 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



Middle Road Fire Department
Project Location: Pennsylvania
System Size: 3.2KW D.C.



ELECTRICAL SPECIFICATIONS AT STC

Maximum Power (MP)	120 W
Voltage at MP	17.6 V
Current at MP (I _{mp})	6.81 A
Short Circuit (I _{sc})	7.46 A
Open Circuit (V _{oc})	21.82 V
Tolerance at MP	+/-3%
Nominal Voltage (V _{mp})	17.6 V
Maximum series fuse rating	12 A
Maximum system voltage	600/1000 V DC

* Measured at [STC] Standard Test Conditions: 1000W/m², 25 °C, AM 1.5

MECHANICAL SPECIFICATIONS

Solar Cells	36 Multicrystalline Solar Cells (156x156mm) in Series
Front Cover	3.2mm Glass
Encapsulant	EVA
Back Cover	TPT
Frame	Aluminum
Diodes	2 Bypass
Junction Box	Plug-n-Play
Output Cables	Tyco w/Solarlok Connectors
Dimensions	1480 x 676 x 50mm / 58.27 x 26.61 x 1.97in.
Weight	12.83kg / 28.3lbs

* Specifications are subject to change without notice.

TEMPERATURE SENSITIVITIES

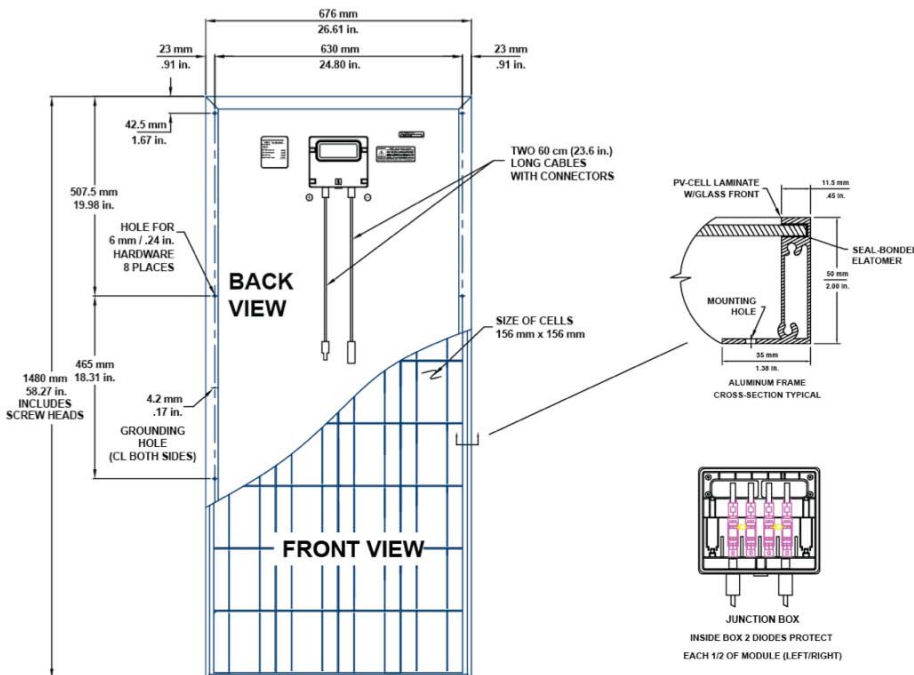
For Nominal 120 W Module

Power:	-0.6 W / °C
Open Circuit Voltage:	-0.077 V / °C
Short Circuit Voltage:	+0.0022 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-156-120W MODULE DIAGRAM



BI-156-120W I-V CURVES

