

SSI

135
180
200
225
270



FEATURES

- High efficiency 156 mm multi-crystalline - 2 busbar & 3 busbar cells.
- Wide range of power with high Watt density.
- Bypass diodes to avoid effect of partial shading.
- Anodized Aluminum alloy frame and tempered glass for rugged protection in hostile environments.
- Manufactured in a state-of-the-art, automated production facility.
- IEC 61215, IEC 61730 and CE Certified
- Tested and certified for UL 1703 standards
- ISO:9001-2008 Certified Manufacturing Facility

Module Family with 156 mm Multi Crystalline Cells

The Solar Semiconductor's family of multi-crystalline PV modules offers models ranging from 135 to 270 W. These modules employ 156 mm cells and are designed for grid connect as well as off-grid applications. Other custom modules may also be configured.

The 156 mm multi-crystalline cells lay embedded in transparent EVA, behind tempered glass. The glass is inset deep in the frame thereby ensuring maximum protection. The back of the module is sealed with a high-quality backsheet. The junction box has no hollow cavities, is water tight, and is resistant to temperature and UV radiation.

At SSI, quality is not an after thought, it is designed into our modules and is ensured by automated production with minimal manual intervention. Each and every module is thoroughly tested for performance.

Certifications to ensure product safety and performance are provided and all modules are backed by a twenty-five year industry-leading warranty.



Performance under Standard Test Conditions
(1000W/m², AM 1.5, 25°C)

	SSI-M6-135	SSI-M6-180	SSI-M6-200	SSI-M6-225	SSI-M6-270
	SSI-3M6-135	SSI-3M6-180	SSI-3M6-200	SSI-3M6-225	SSI-3M6-270
Peak Power (Pmax,W)	135	180	200	225	270
Power Tolerance (%)	±3	±3	±3	±3	±3
Max Power Voltage (Vmp)	17.8	23.7	26.3	29.6	35.5
Max Power Current (Imp)	7.58	7.59	7.60	7.60	7.61
Open Circuit Voltage (Voc)	22.3	29.7	33.0	37.1	44.5
Short Circuit Current (Isc)	8.22	8.24	8.26	8.28	8.30
Module Efficiency (%)	13.43 - 14.18				

Note: Tolerance for other electrical parameters is ± 10%.

Physical Parameters

No of cells	36	48	54	60	72
Module Dimensions (mm)	1500 X 670	1340 X 990	1500 X 990	1660 X 990	1987 X 994
Module Thickness (mm)	42	42	42	42	50
Approx Weight. (Kgs)	13	17	18	20	27

Operating Conditions

Ambient Temperature (°C)	-40 to +90
Maximum System Voltage (V DC)	600 (US), 1000 (EU)
Hail (25 mm Ø) Impact Velocity (M/Sec)	23
Snow load factor	5400 Pa

Cell Temperature Coefficients

Open Circuit Voltage	-0.35 % /°C
Short Circuit Current	0.05 % /°C
Nominal Power	-0.46 % /°C

Component Materials

Solar Cells	Multi-crystalline Silicon
Cell Dimension (mm)	156 X 156

Mechanical Characteristics

Output Terminal	PV Connectors
Cable	No. 12 AWG, 4 mm ²
Frame	Silver Anodized Aluminum Alloy
Junction Box	IP65 Junction box with 4 terminals
Glass	4 mm tempered for SSI-M6-270 & SSI-3M6-270, 3.2 mm for others

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