






Maximize Solar Return with Solartech Sapphire Modules

Key Features

-  Multicrystalline modules designed for residential commercial and utility applications, rooftop or ground mount
-  High output, 17.38% highest conversion efficiency
-  Designed for IEC DC 1000V applications
-  Commit protection in the severest weather conditions with certified EVA, Back sheet foil, and Junction box
-  Ensure 5400pa snow loads and 2400pa wind loads with high transparent tempered glass and robust anodized aluminum frame

Reliable Quality

- Positive power tolerance : 0 ~ +3%
- 100% EL double-inspection ensures modules are defects free
- Potential Induced Degradation (PID) Resistant

Comprehensive Certificates

- IEC 61215, IEC 61730 and CE
- ISO 9001: 2008: Quality management systems
- ISO 14001: 2004: Environmental management systems
- OHSAS 18001: 2007: Occupational health and safety management systems

Warranty

- 10-year limited product warranty, 25-year limited power output warranty (90% for 10 years, 80% for 25 years)



SAPPHIRE CELL INSIDE

275W-285W



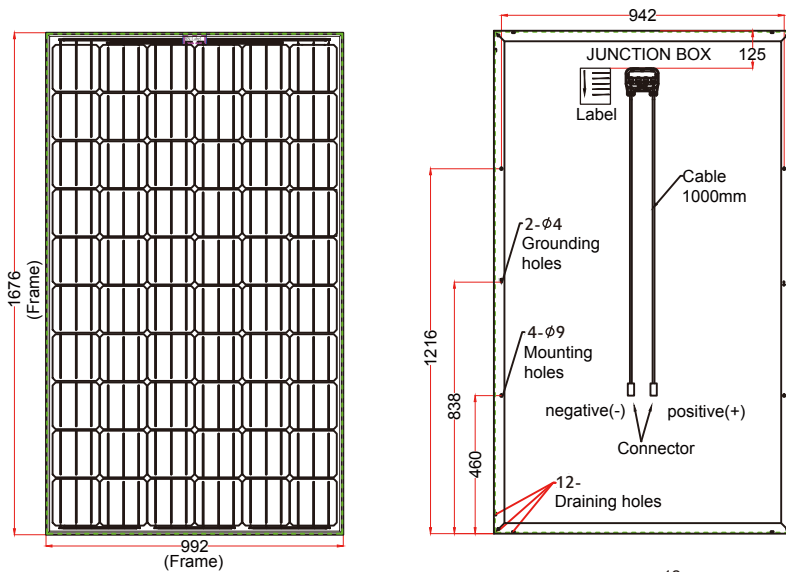
SEC-6M-60-3BB Series
Mono-Crystalline Photovoltaic Modules



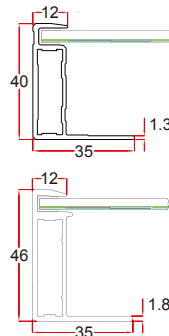
SEC-6M-60-3BB Series 275W-285W

Mono-Crystalline Photovoltaic Modules

Mechanical Data

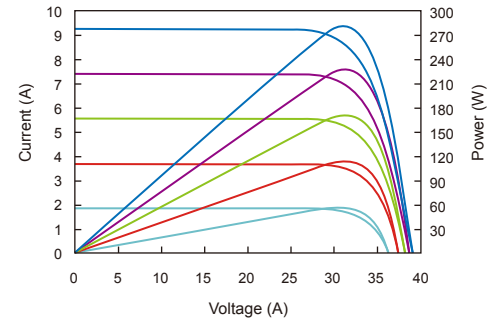


Dimension: 1676mm x 992mm x 40mm (46mm)
 Cells: 60 polycrystalline 156x156mm cells
 Connection: Junction box above IP65 with 3 bypass diodes
 Cable: 4mm² x 1.0m with Tyco or MC4 compatible connectors
 Frame: Anodized aluminum
 Weight: 40mm : 19 kg / 41.85 lbs
 46mm : 20 kg / 44.05 lbs



IV Curve

IV and P_{MAX} Curves with different radiation levels at 25°C
 = 1000W/m² = 800W/m² = 600W/m² = 400W/m² = 200W/m²



Temperature Coefficient

Temp. Coeff. of I_{SC} = 0.06%/C
 Temp. Coeff. of V_{OC} = -0.38%/C
 Temp. Coeff. of P_{MAX} = -0.42%/C

Maximum Operation

Operational Temperature: -40°C to +85°C
 (-40°F to +185°F)
 Maximum System Voltage: 1000V DC
 Maximum Reverse Current: 15A
 Maximum Load: Snow loads 5400pa or 550kg/m²
 Wind loads 2400pa

Electrical Characteristics @ STC*

| Module Number | SEC-6P-60-XXX-3BB, XXX = Nominal Power P _{MAX} [W _P] | | |
|--|---|-------|-------|
| Nominal Power P _{MAX} [W _P] | 275 | 280 | 285 |
| Power Tolerance ** | +3% | +3% | +3% |
| Nominal Voltage V _{MAX} [V] | 32.78 | 32.87 | 32.95 |
| Nominal Current I _{MAX} [A] | 8.39 | 8.52 | 8.65 |
| Open Circuit V _{OC} [V] | 39.20 | 39.50 | 39.80 |
| Short Circuit I _{SC} [A] | 9.00 | 9.10 | 9.20 |
| Efficiency Eff [%] | 16.77 | 17.08 | 17.38 |

*STC: Standard Test Conditions, measurement at radiation strength 1,000 W/m², spectral distribution AM 1.5, temperature 25°C, in accordance with EN 60904-3

**Power tolerance can be adjusted on requests

NOCT: Nominal Operating Cell Temperature, 45.3 +/- 2°C, measurement at radiation strength 800 W/m², AM 1.5, Air temperature 20°C, wind speed 1m/s

Specifications are subject to change without notice

Warranty

10 year limited product workmanship warranty

25 year limited power output warranty: 90% minimum rated power for 10 years, 80% minimum rated power for 25 years

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