

Topsun's Crystalline Photovoltaic Modules are manufactured under Integrated Management System (ISO 9K: ISO 14K: BS 18K) for quality and safety environment. Offers high efficiencies, consistent performance life, quality workmanship and *AR coated antimony free glass* material. High power modules precisely manufactured to achieve better module conversion efficiency in the industry. Environmental friendly product confirming to RoHS standards.

Features:

- Mono/Multi Crystalline
- 3BB/4BB Modules
- PID free
- Micro cracks free -100% EL inspected
- AR coated glass for better positive tolerance
- Zero negative tolerance
- RoHS and CE certified
- Linear degradation as per Industry standard
- Best suited for Grid Tied applications



Certifications:

- IEC 61215: 2005 Ed 2.0
- IEC 61730-1: 2013 Ed 1.2/IEC 61730-1: 2007
- IEC 61730-2: 2012 Ed 1.1/IEC 61730-2: 2007
- IEC 61701: 2012 salt mist corrosion test

Typical Electrical Characteristics at STC

IV parameters are tested at STC (Irradiance of 1000W/m², AM 1.5G and Temperature 25°C)

| Model/Type | (Pmax) | (Vmp) | (Imp) | (Voc) | (Isc) | Eff (%) |
|------------|--------|-------|-------|-------|-------|---------|
| 300 W | 300.00 | 36.00 | 8.40 | 44.00 | 9.09 | 15.52 |
| 310 W | 310.00 | 36.00 | 8.62 | 44.00 | 9.32 | 16.05 |
| 320 W | 320.00 | 36.00 | 8.90 | 44.00 | 9.81 | 16.56 |

Compliance of Simulator readings with an accuracy of class AAA (±2%)

Typical Electrical Characteristics at NOCT

IV parameters are tested at NOCT (Irradiance of 800W/m², Temp at NOCT)

| Model/Type | (Pmax) | (Vmp) | (Imp) | (Voc) | (Isc) |
|------------|--------|-------|-------|-------|-------|
| 300 W | 220.00 | 32.75 | 6.80 | 40.85 | 7.35 |
| 310 W | 227.00 | 32.75 | 6.95 | 40.85 | 7.55 |
| 320 W | 234.00 | 32.75 | 7.15 | 40.85 | 7.95 |

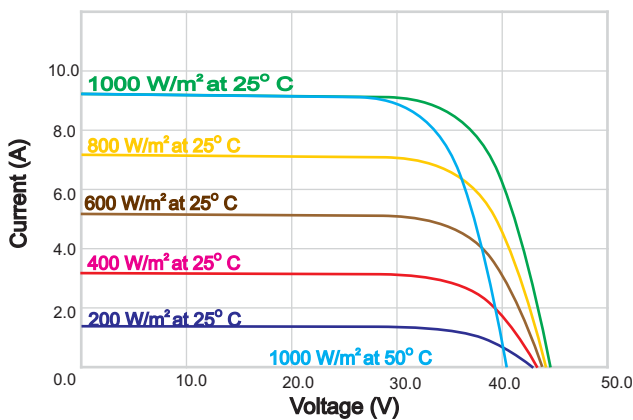
Temperature Co-efficients

| | | |
|-----------------------|------------|------|
| NOCT | 45±2 | °C |
| Pmp | -0.43 | %/°C |
| Isc | 0.05 | %/°C |
| Imp | 0.03 | %/°C |
| Voc | -0.36 | %/°C |
| Vmp | -0.45 | %/°C |
| Operating Temperature | -40 to +85 | °C |

Packing Configuration

| | |
|--------------------------|-------------|
| Each Pallet | 20 Modules |
| 20 Ft Container | 200 Modules |
| 40 Ft /40Ft HC Container | 440 Modules |

Typical IV Curves



Current/voltage dependence on irradiance and module temperature. These I-V curves indicate the effect of temperature and light intensity on module Performance.

System Design

Series Fuse Rating (Recommended): 15A

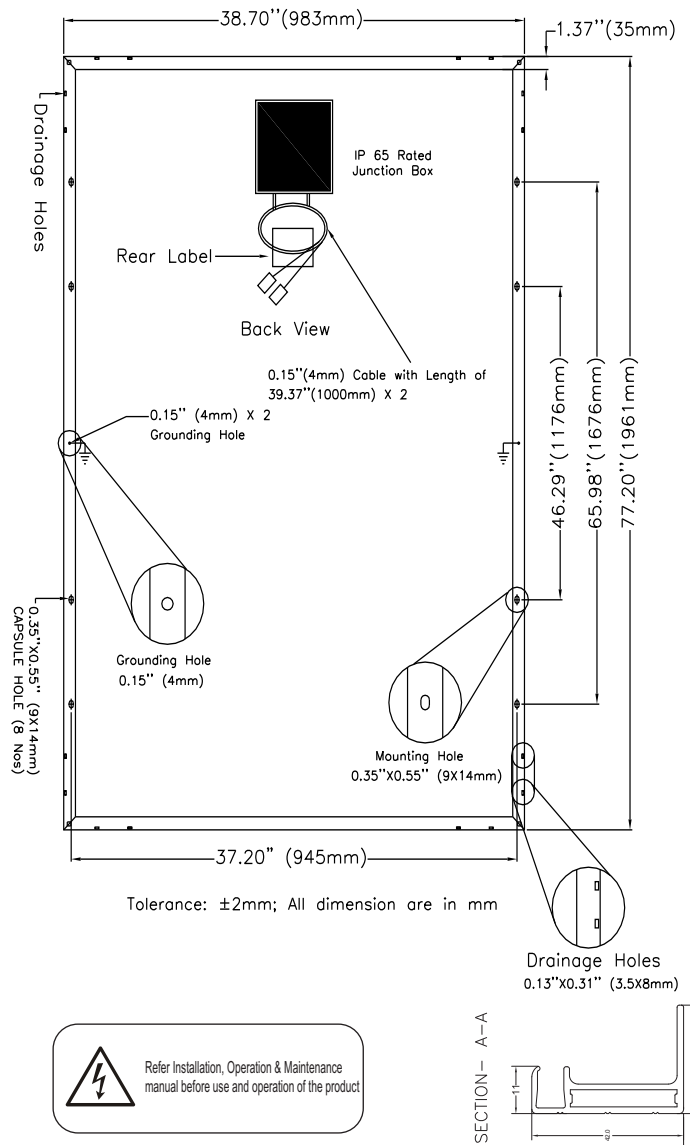
Maximum System Voltage: 1000 VDC

Static Load: 5400 Pa (113 Psf)

Module Dimension: 1961 x 983 x 42 mm

Module Weight: 26.0 kg (57.3 Lbs)

Dimensions:



NOTE: The data presented may change due to further improvements in the product.

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