



turn **on** solar energy

ALPHA SERIES MODULE

The Alpha Series 185 provides exceptional performance. Utilizing 72 grade A solar cells, Alpha 185W solar module is perfect for residential rooftop to megawatt size utility scale projects. The mono crystalline module is manufactured to provide excellent conversion efficiency and maximum kilowatt/hour production. All cells are individually flash tested and each assembled module is quality assured to exceed warranty performance and quality.

MODULE FEATURES

- High-efficiency solar cell construction
- Cell Conversion Efficiencies 17.29%
- Nominal 24 V DC for standard output
- Non-leaded and tin coated ribbon and wash free soldering flux
- High transmissivity low-iron 1/8" tempered glass
- Light anodized aluminum frame to prevent the occurrence of water freezing and warping
- Cross-linking rated above 80%
- Fully automatic lamination technology
- All modules are warranted to perform at 97% the first year and 82% at 25 years

eco**Solargy**inc.

ALPHA SERIES SDM-170/185-72M

MONO-CRYSTALLINE SOLAR MODULE



ALPHA SERIES MONO-CRYSTALLINE SOLAR MODULE

SDM-170/185-72M

Specifications and Data

Panel Dimensions	62.2" x 31.8" x 1.4" (1580mm x 808mm x 35mm)
Weight	33 lb (15 kg)
Cells	Mono-Crystalline 5" x 5" (125mm x 125mm)
Glass	1/8" (3.2mm) Tempered Glass
Frame	Anodized Aluminum Alloy; Color: Silver
Junction Box	IP65 Rated Junction Box with Bypass Diodes
Cable	4 mm ² solar cable (RHW AWG #12)
Connector	Multi-Contact (MC4) PV plug connectors
EVA	EVA
Backsheet	TPT

Temperature Coefficients

Nominal Operating Cell Temperature (NOCT)	118°F ± 35°F (48°C ± 2°C)
Temperature Coefficient of ISC (α)	+0.04 ± 0.015% / °C
Temperature Coefficient of VOC (β)	-(0.35 ± 0.01)% / °C
Temperature Coefficient of Pmax	-0.38% / °C

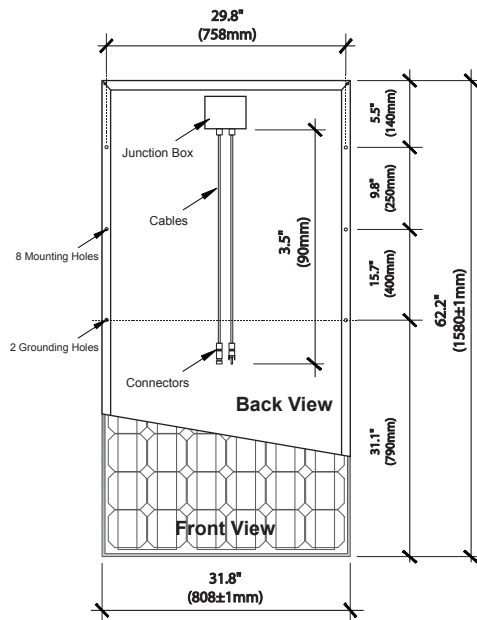
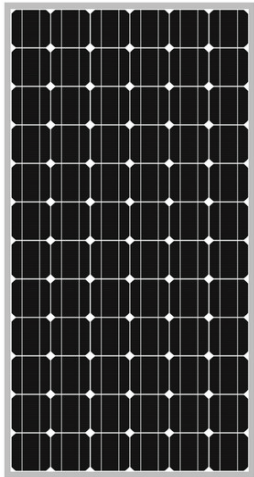
Permissible Operating Conditions

Operating Temperature	-40°F to +194°F (-40°C to +90°C)
Maximum Hail Diameter @ 43Mph (80Km/h)	up to 1" (25mm)
Wind Impact	≤ 2400 Pa
Snow Impact	≤ 5400 Pa

Electrical Data

Model	Pmax (±3%)	Vmp	Imp	Voc	Isc	Max System Voltage	Standard Test Conditions
SDM-170/185-72M	185W	36.2V	5.14A	44.7V	5.66A	DC 600V (UL)	Irradiance: 1000W/m ² AM: 1.5 Temperature: 77°F (25°C)

Dimensions



IV Curves

