

85 Watt Maximum Power POLY-CRYSTALLINE SOLAR PANEL

Features

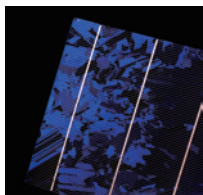
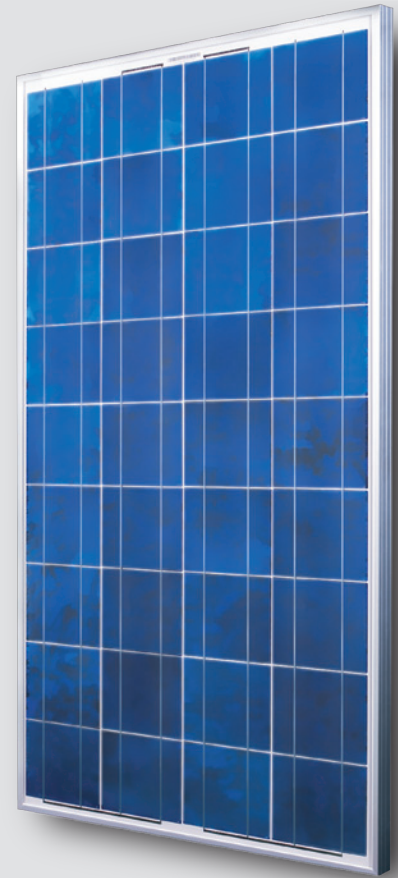
- High conversion efficiency based on leading innovative photovoltaic technologies
- High reliability with guaranteed +/-3% power output tolerance, ensuring return on investment
- Attractive appearance
- Withstands high wind-pressure and snow load, and extreme temperature variations
- Easy to install

Quality and Safety

- 25-year power output transferable warranty
- Rigorous quality control meeting the highest international standards
- ISO 9001:2000 (Quality Management System) and ISO 14001:2004 (Environmental Management System) certified factories manufacturing world class products
- UL listings: UL1703, cULus, Class C fire rating, conformity to CE

Recommended Applications

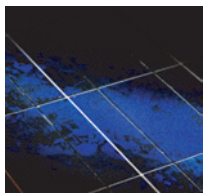
- Off-grid applications
- Remote area stand-alone applications such as base station or home lighting etc



Suntech's technology yields improvements to BSF structure and anti-reflective coating to increase conversion efficiency



Unique design on drainage holes and rigid construction prevents frame from deforming or breaking due to freezing weather and other forces



The panel provides more field power output through an advanced cell texturing and isolation process, which improves low irradiance performance



Suntech was named Frost and Sullivan's 2008 Solar Energy Development Company of the Year

Electrical Characteristics

Characteristics	STP085-12/Bb-1	STP080-12/Bb-1
Open - Circuit Voltage (Voc)	21.4V	21.2V
Optimum Operating Voltage (Vmp)	17.1V	16.8V
Short - Circuit Current (Isc)	5.32A	5.12A
Optimum Operating Current (Imp)	4.97A	4.76A
Maximum Power at STC (Pmax)	85Wp	80Wp
Operating Temperature	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	600V DC	600V DC
Maximum Series Fuse Rating	15A	15A
Power Tolerance	±3 %	±3 %

STC: Irradiance 1000W/m², Module temperature 25°C, AM=1.5

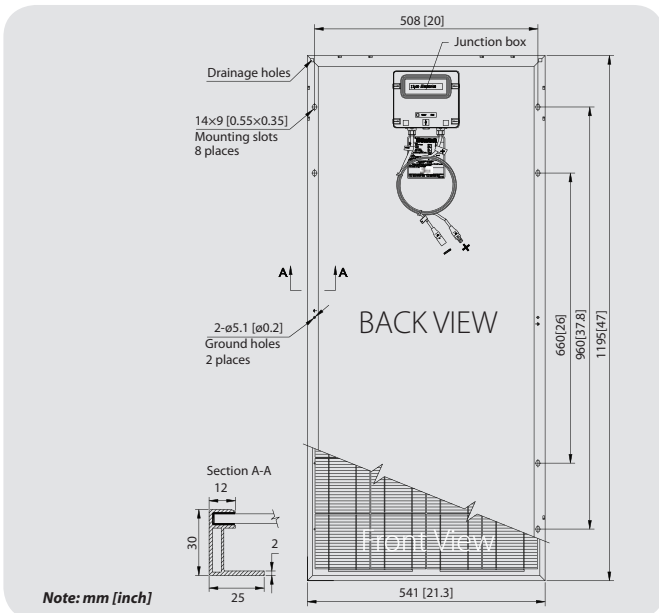
Mechanical Characteristics

Solar Cell	Poly-crystalline 125×125mm (5inch)
No. of Cells	36 (4×9)
Dimensions	1195×541×30mm (47×21.3×1.2inch)
Weight	8kg (17.6lbs.)
Front Glass	3.2 mm (0.13inch) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP65 rated
Output Cables	AIW (12AWG), symmetrical lengths (-) 750mm (29.5inch) and (+)750mm(29.5inch), MC Plug Type IV connectors

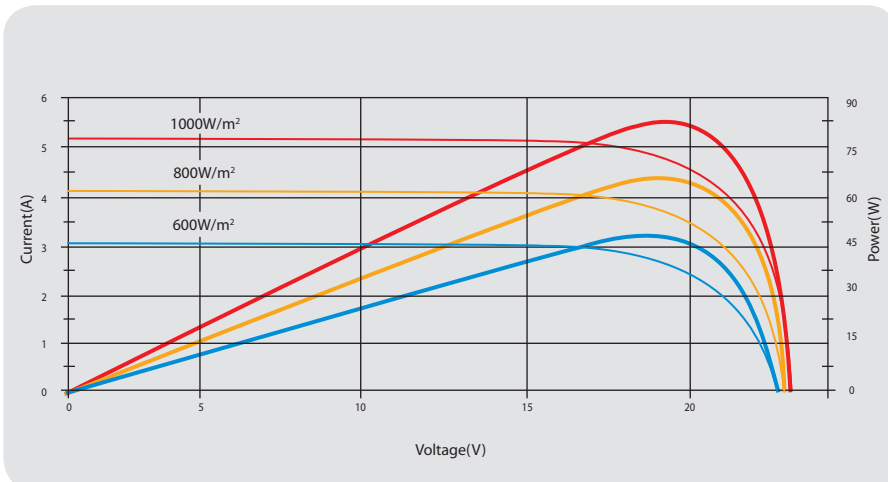
Temperature Coefficients

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficient of Pmax	-0.45 %/°C
Temperature Coefficient of Voc	-0.33 %/°C
Temperature Coefficient of Isc	0.045 %/°C

NOCT: Nominal Operating Cell Temperature (data refer to STP080)



Current-Voltage & Power-Voltage Curve (85W)



Temperature Dependence of Isc, Voc, Pmax

