

HiPerforma™ Module PLUTO245-Wde PLUTO240-Wde

SUNTECH
Solar powering a green future™

245 Watt

POLYCRYSTALLINE SOLAR MODULE

Suntech introduces the all new line of HiPerforma™ modules, featuring our new Pluto™ cells.

Features



High module conversion efficiency

(up to 14.8%), through superior cell technology and leading manufacturing capability



Positive tolerance

Guaranteed positive tolerance 0/+5% ensures power output reliability



Better energy harvest

HiPerforma™ modules have better kWh / kW ratio and produce 2-5% more electricity in the field (depending on installation & weather conditions)



Extended wind load and snow load tests

Entire module certified to withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal) *



Excellent weak light performance

Excellent performance under low light environments (mornings, evenings, and cloudy days)



Suntech current sorting process

All Suntech modules sorted and packaged by amperage, maximizing system output by reducing mismatch losses by up to 2%



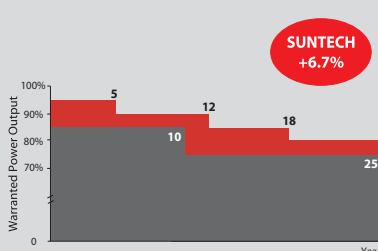
Certifications and standards:
UL1703, IEC 61215, IEC 61730, conformity to CE



Trust Suntech to Deliver Reliable Performance Over Time

- World's No.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards : ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005

Industry-leading Warranty based on Pnom



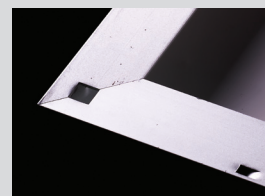
- Based on nominal power (Pnom)
- 25-year transferrable power output warranty: 5 years/95%, 12 years/90%, 18 years/85%, 25 years/80% **
- Warrants 6.7% more power than the market standard over 25 years
- 10-year material and workmanship warranty

* Please refer to Suntech Standard Module Installation Manual for details

** Please refer to Suntech Product Warranty for details

Pluto™ Cell Technology Key Features

- Pluto cells enjoy higher efficiency due to extra fine cell fingers (~30µm) which reduce surface shading and boost sunlight absorption into the cell
- Pluto cells have high shunt resistance (Rsh) which enhances low light performance



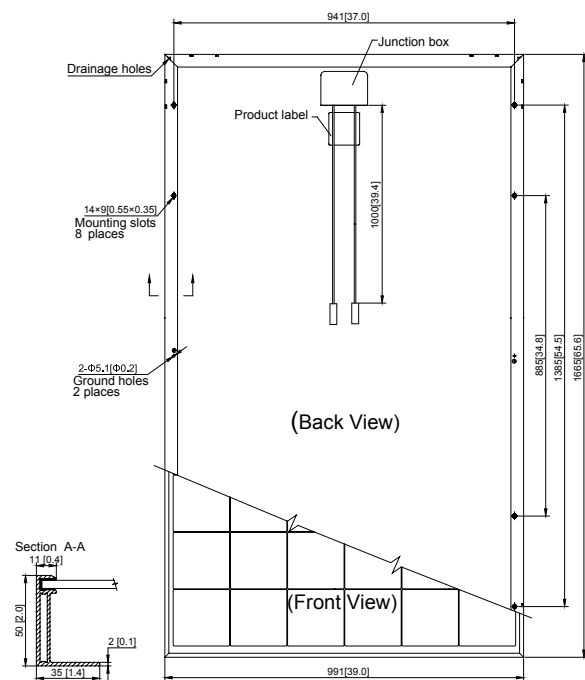
Superior Frame Design

Specially designed drainage holes and rigid construction prevent frames from deforming. Screw less frame design for a long term durability.



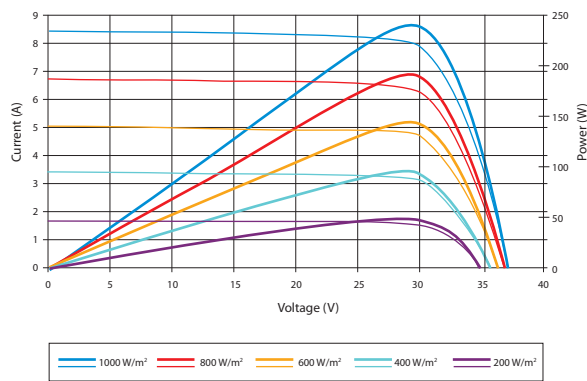
Most Modern IP67 Rated Junction Box

Supports any orientation installation. High performance low resistance connectors ensure maximum module power output for highest energy production.



Note: mm [inch]

Current-Voltage & Power-Voltage Curve (240 W)



Excellent performance under weak light conditions: at an irradiation intensity of 200 W/m² (AM 1.5, 25 °C), 96% or higher of the STC efficiency (1000 W/m²) is achieved

Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.400%/°C
Temperature Coefficient of Voc	-0.314%/°C
Temperature Coefficient of Isc	0.051%/°C

Dealer information

Specifications are subject to change without further notification.

Electrical Characteristics

STC	PLUTO245-Wde	PLUTO240-Wde
Optimum Operating Voltage (Vmp)	29.8 V	29.6 V
Optimum Operating Current (Imp)	8.23 A	8.11 A
Open Circuit Voltage (Voc)	37.2 V	36.9 V
Short Circuit Current (Isc)	8.55 A	8.46 A
Maximum Power at STC (Pmax)	245 W	240 W
Module Efficiency	14.8 %	14.5 %
Operating Module Temperature	-40°C to +85°C	
Maximum System Voltage	600 V DC (UL) / 1000 V DC (IEC)	
Maximum Series Fuse Rating	20 A	
Power Tolerance	0/+5 %	

STC: Irradiance 1000 W/m², module temperature 25°C, AM=1.5
Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

NOCT	PLUTO245-Wde	PLUTO240-Wde
Maximum Power at NOCT (Pmax)	180 W	176 W
Optimum Operating Voltage (Vmp)	27.1 V	26.9 V
Optimum Operating Current (Imp)	6.64 A	6.54 A
Open Circuit Voltage (Voc)	34.0 V	33.9 V
Short Circuit Current (Isc)	6.92 A	6.84 A

NOCT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s
Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

Mechanical Characteristics

Solar Cell	Polycrystalline 156 × 156 mm (6 inches)
No. of Cells	60 (6 × 10)
Dimensions	1665 × 991 × 50mm (65.6 × 39.0 × 2.0 inches)
Weight	19.8 kgs (43.7 lbs.)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Black anodized aluminium alloy
Junction Box	IP67 rated UL 4703, TUV (2Pfg1169:2007)
Output Cables	4.0 mm ² (0.006 inches ²), symmetrical lengths (-) 1000 mm (39.4 inches) and (+) 1000 mm (39.4 inches)
Connectors	H4 connectors (MC4 compatible)

Packing Configuration

Container	20' GP	40' GP
Pieces per pallet	21	21
Pallets per container	6	28
Pieces per container	126	588