

# 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%



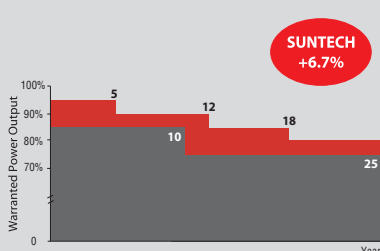
Certifications and standards:  
UL1703, IEC 61215, IEC 61730, conformity to CE



#### Trust Suntech to Deliver Reliable Performance Over Time

- World's No.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivalled 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



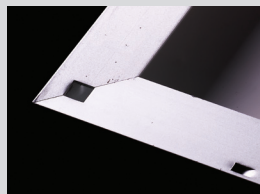
- Based on nominal power (Pnom)
- 25-year transferrable power output warranty: 5 years/95%, 12 years/90%, 18 years/85%, 25 years/80% \*\*
- Warrants 6.7% more power than the market standard over 25 years
- 10-year material and workmanship warranty

\* 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

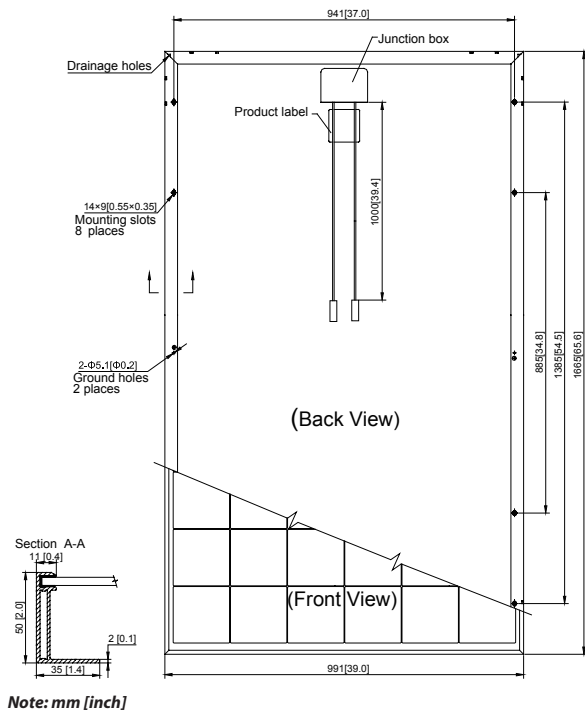
Specially designed drainage holes and rigid construction prevent frames from deforming. Screw less frame design for a long term durability.



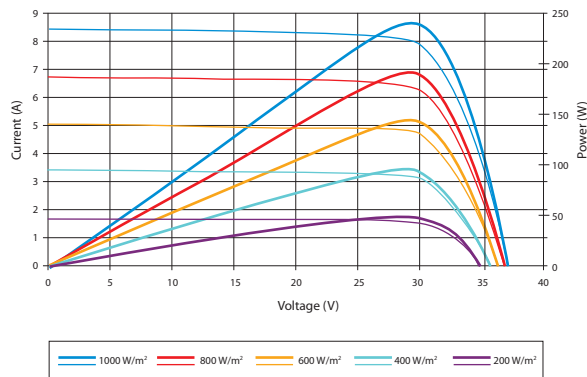
##### Most Modern IP67 Rated Junction Box

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

# HiPerforma™ Module PLUTO245-Wde PLUTO240-Wde



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



Excellent performance under weak light conditions: at an irradiation intensity of 200 W/m<sup>2</sup> (AM 1.5, 25 °C), 96% or higher of the STC efficiency (1000 W/m<sup>2</sup>) 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

## 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/m<sup>2</sup>, 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/m<sup>2</sup>, 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 <sup>2</sup> (0.006 inches <sup>2</sup> ), 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