

HiPerforma™ Module PLUTO220-Udm PLUTO215-Udm

SUNTECH
Solar powering a green future™

220 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 15.0%), through superior cell technology and leading manufacturing capability



Positive tolerance
Guaranteed positive tolerance from 0~5W ensures power output reliability



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



Suntech's TruPower™
Suntech's TruPower™ process neutralizes the initial LID effect



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



Withstand high wind and snow loads
Entire module certified to withstand high wind loads (2400 Pascal) and snow loads (5400 Pascal) *



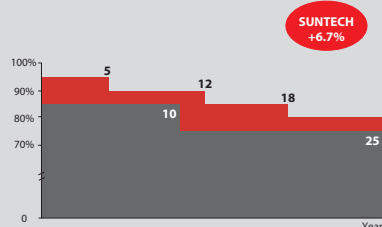
Certifications and standards:
IEC 61215, IEC 61730, conformity to CE



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 and ISO 14001: 2004

Industry-leading warranty



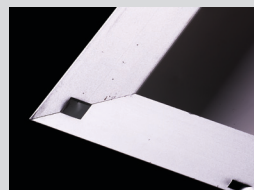
- Warrants 6.7% more power than the market standard over 25 years
- 25-year transferrable power output warranty: 5 years/95%, 12 years/90%, 18 years/85%, 25 years/80% **
- Based on nominal power
- 5 years material and workmanship warranty

* 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 have a sleek appearance 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

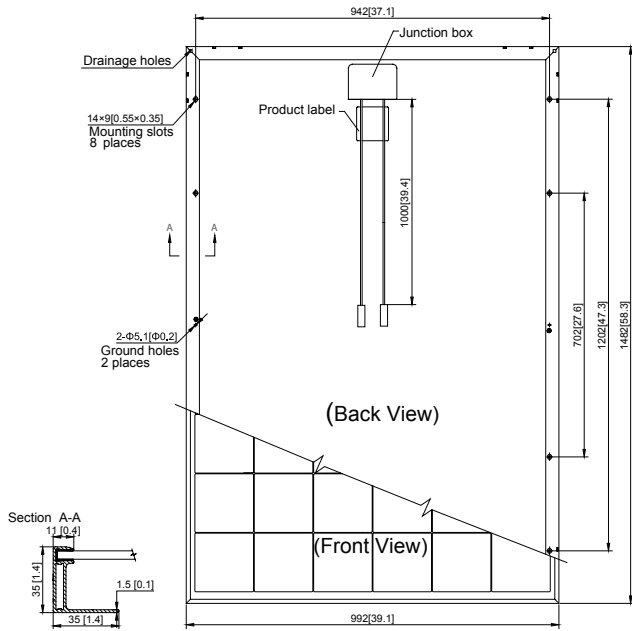


Specially designed drainage holes and rigid construction prevent frame from deforming or breaking due to freezing weather and other forces.

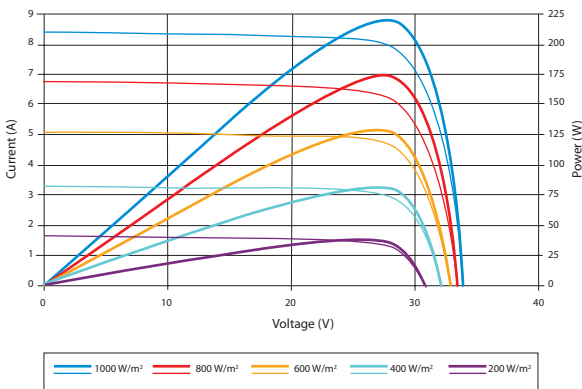


Latest IP67 rated junction box improves module performance stability. High performance connectors provide low resistance interconnection to ensure the full utilization of module power output.

HiPerforma™ Module PLUTO220-Udm PLUTO215-Udm



Current-Voltage & Power-Voltage Curve (220 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

Electrical Characteristics

STC	PLUTO220-Udm	PLUTO215-Udm
Optimum Operating Voltage (Vmp)	27.8 V	27.4 V
Optimum Operating Current (Imp)	7.92 A	7.85 A
Open - Circuit Voltage (Voc)	33.5 V	33.2 V
Short - Circuit Current (Isc)	8.40 A	8.30 A
Maximum Power at STC (Pmax)	220 W	215 W
Module Efficiency	15.0 %	14.6 %
Operating Module Temperature	-40 °C to +85 °C	
Maximum System Voltage	1000 V DC (IEC) / 600 V DC (UL)	
Maximum Series Fuse Rating	20 A	
Power Tolerance	0 / +5 W	

STC: Irradiance 1000 W/m², module temperature 25°C, AM=1.5
Power measurement tolerance: ± 3%

NOCT	PLUTO220-Udm	PLUTO215-Udm
Maximum Power (W)	162 W	158 W
Maximum Power Voltage (V)	25.3 V	25.1 V
Maximum Power Current (A)	6.38 A	6.31 A
Open Circuit Voltage (Voc)	30.8 V	30.5 V
Short Circuit Current (Isc)	6.80 A	6.73 A

NOCT: Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s
Power measurement tolerance: ± 3%

Mechanical Characteristics

Solar Cell	Polycrystalline 156 × 156 mm (6 inches)
No. of Cells	54 (6 × 9)
Dimensions	1482 × 992 × 35 mm (58.3 × 39.1 × 1.4 inches)
Weight	16.8 kgs (37.0 lbs.)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated TUV (2Pfg1169:2007), UL 4703, UL 44
Output Cables	4.0 mm ² (0.006 inches ²), symmetrical lengths (-) 1000 mm (39.4 inches) and (+) 1000 mm (39.4 inches)
Connectors	RADOX® SOLAR integrated twist locking connectors

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

Packing Configuration

Container	20' GP	40' GP	40' HC
Pieces per pallet	26	26	26
Pallets per container	6	14	28
Pieces per container	156	364	728

Dealer information



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