

HiPerforma™ Module PLUTO190-Ade PLUTO185-Ade

NEW

SUNTECH
Solar powering a green future™

190 Watt

MONOCRYSTALLINE SOLAR MODULE

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

Features



High module conversion efficiency (up to 14.9%), through superior manufacturing technology



Proprietary Gallium-F22 doping process dramatically reduces initial light-induced degradation to <1%, thus delivering better power and performance over time



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



Guaranteed 0-5W positive power output tolerance ensures high reliability



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



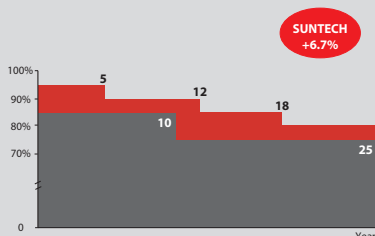
HiPerforma™ modules are lead free



Trust Suntech to Deliver Reliable Performance Over Time

- World's leading 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
- Certification and standards: IEC 61215, IEC 61730, conformity to CE

Industry-leading warranty



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

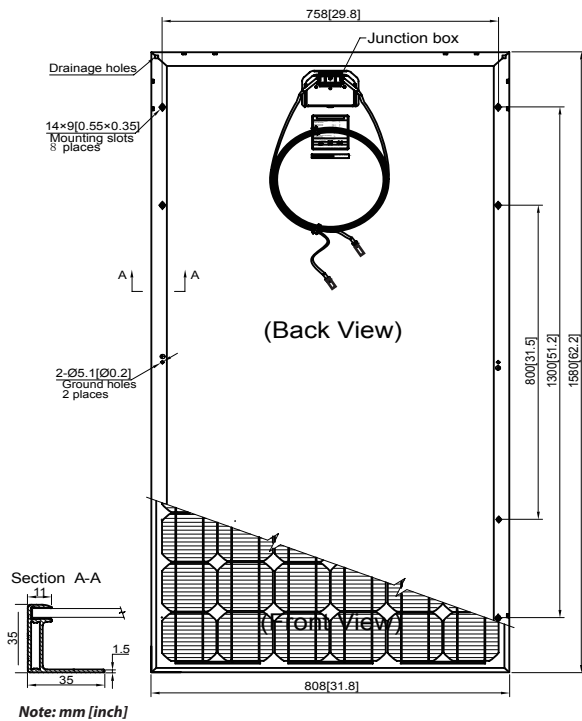


Specially designed drainage holes and rigid construction prevent frame from deforming or breaking due to freezing weather and other forces

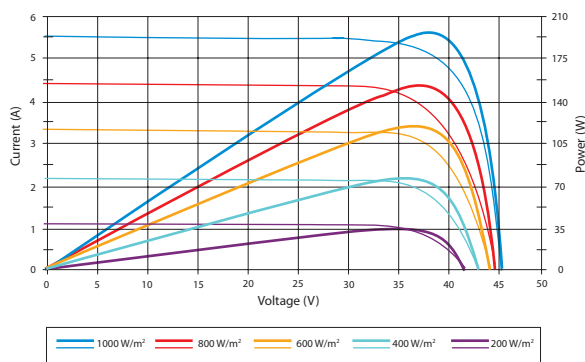


Latest IP67 rated junction box improves module performance stability with enhanced thermal isolation.

HiPerforma™ Module PLUTO190-Ade PLUTO185-Ade



Current-Voltage & Power-Voltage Curve (195 W)



Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.38 %/°C
Temperature Coefficient of Voc	-0.29 %/°C
Temperature Coefficient of Isc	0.046 %/°C

Dealer information box

Electrical Characteristics

STC	PLUTO190-Ade	PLUTO185-Ade
Optimum Operating Voltage (Vmp)	37.8 V	37.3 V
Optimum Operating Current (Imp)	5.03 A	4.96 A
Open - Circuit Voltage (Voc)	45.4 V	45.2 V
Short - Circuit Current (Isc)	5.43 A	5.39 A
Maximum Power at STC (Pmax)	190 W	185 W
Module Efficiency	14.9%	14.5%
Operating Temperature	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	1000 V DC	1000 V DC
Maximum Series Fuse Rating	15 A	15 A
Power Tolerance	0 / +5 W	0 / +5 W

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

NOCT	PLUTO190-Ade	PLUTO185-Ade
Maximum Power (W)	140 W	136 W
Maximum Power Voltage (V)	34.4 V	34.1 V
Maximum Power Current (A)	4.06A	4.00 A
Open Circuit Voltage (Voc)	40.9 V	40.7 V
Short Circuit Current (Isc)	4.39 A	4.33 A
Efficiency Reduction (from 1000 W/m² to 200 W/m²)	<4%	<4%

NOCT: Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s

Mechanical Characteristics

Solar Cell	Monocrystalline 125 × 125 mm (5 inches)
No. of Cells	72 (6 × 12)
Dimensions	1580 × 808 × 35 mm (62.2 × 31.8 × 1.4 inches)
Weight	15.5 kgs (34.1 lbs.)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated
Output Cables	H+S Radox Solar Cable 4.0 mm² (0.006 inches²), symmetrical lengths (-) 1000 mm (39.4 inches) and (+) 1000 mm (39.4 inches), Radox Solar connectors

Packing Configuration

Container	20' GP	40' GP
Pieces per pallet	26	26
Pallets per container	12	28
Pieces per container	312	728

Specifications are subject to change without further notification.