

STP190S - 24/Ad+

SUNTECH

Solar powering a green future™

190 Watt

MONOCRYSTALLINE SOLAR MODULE

Features



High module conversion efficiency

(up to 14.9%), through superior cell technology and leading manufacturing capability



Positive tolerance

Guaranteed positive tolerance from 0~5% ensures power output reliability



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) *



Suntech current sorting process

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



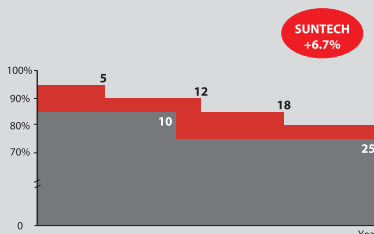
Certifications and standards:
IEC 61215, IEC 61730, conformity to CE



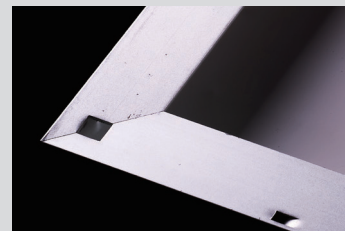
Trust Suntech to Deliver Reliable Performance Over Time

- 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



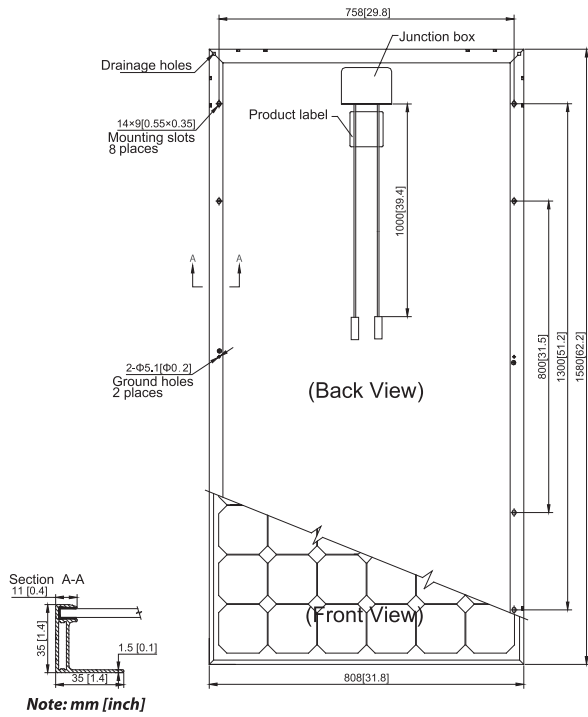
Specially designed drainage holes and rigid construction prevent frame from deforming or breaking due to freezing weather and other forces.



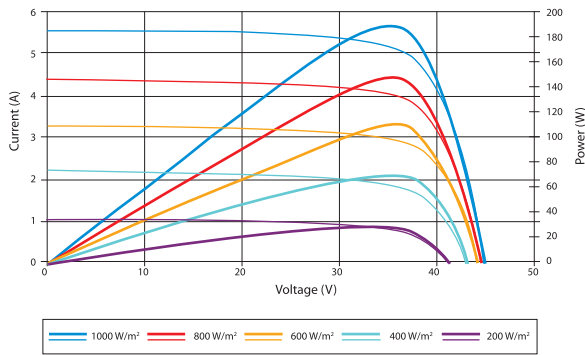
Latest IP67 rated junction box improves module performance stability. High performance connectors provide low resistance interconnection to ensure the full utilization of module power output.

* Please refer to Suntech Standard Module Installation Manual for details.
** Please refer to Suntech Product Warranty for details.

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Current-Voltage & Power-Voltage Curve (190S-24)



Excellent performance under weak light conditions: at an irradiance intensity of 200 W/m² (AM 1.5, 25 °C), 95.5% 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 | -0.45 %/°C |
| Temperature Coefficient of Voc | -0.34 %/°C |
| Temperature Coefficient of Isc | 0.050 %/°C |

Dealer information

Specifications are subject to change without further notification

Electrical Characteristics

| STC | STP190S-24/Ad+ |
|---------------------------------|---------------------------------|
| Optimum Operating Voltage (Vmp) | 36.6 V |
| Optimum Operating Current (Imp) | 5.20 A |
| Open - Circuit Voltage (Voc) | 45.2 V |
| Short - Circuit Current (Isc) | 5.62 A |
| Maximum Power at STC (Pmax) | 190 W |
| Module Efficiency | 14.9% |
| Operating Module Temperature | -40 °C to +85 °C |
| Maximum System Voltage | 1000 V DC (IEC) / 600 V DC (UL) |
| Maximum Series Fuse Rating | 15 A |
| Power Tolerance | 0/+5 % |

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

| NOCT | STP190S-24/Ad+ |
|-----------------------------|----------------|
| Maximum Power (W) | 139 W |
| Maximum Power Voltage (V) | 33.1 V |
| Maximum Power Current (A) | 4.19 A |
| Open Circuit Voltage (Voc) | 41.3 V |
| Short Circuit Current (Isc) | 4.56 A |

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

Mechanical Characteristics

| | |
|---------------|---|
| Solar Cell | Monocrystalline 125 × 125 mm (5 inches) |
| No. of Cells | 72 (6 × 12) |
| Dimensions | 1580 × 808 × 35mm (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 |
| | 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 |

Packing Configuration

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