STP190S - 24/Adb+

SUNTECH

Solar powering a green future™

190 Watt
MONOCRYSTALLINE SOLAR MODULE

Features

14.9%

High module conversion efficiency
(up to 14.9%), through superior cell technology and leading manufacturing capability

0/+5%

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

3800Pa 5400Pa

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

Self-clean

Self clean effect
Anti-reflective, hydrophobic layer improves light absorption and reduces surface dust
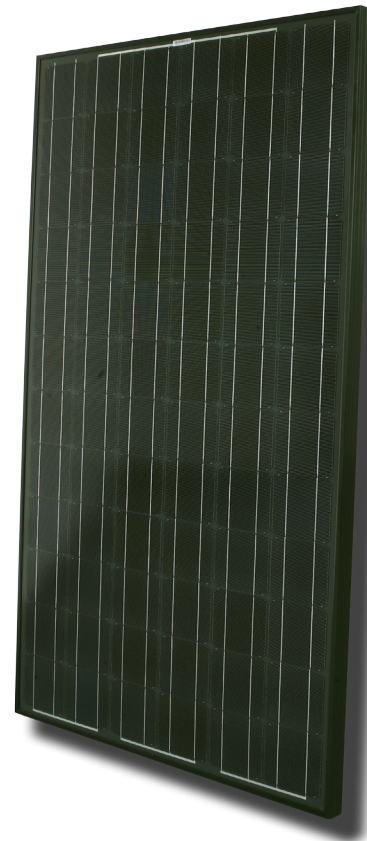
Weak light

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

2%

Suntech current sorting process
All Suntech modules sorted and packaged by amperage, maximizing system output by reducing mismatch losses by up to 2%
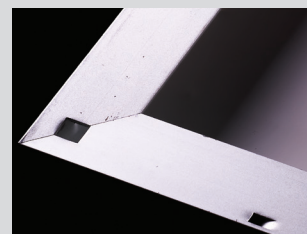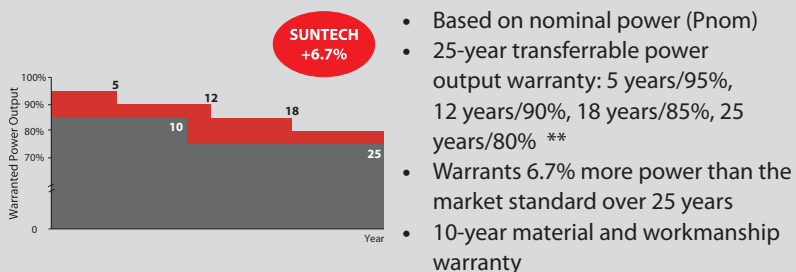
Certifications and standards:
UL1703, IEC 61215, IEC 61730, conformity to CE

C CSA US   IEC   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

SUNTECH +6.7%

Warranted Power Output: 100%, 90%, 80%, 70%, 0 — Year

5   12   18   10   25

- 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

Superior Frame Design
Specially designed drainage holes and rigid construction prevent frames from deforming. Screw less frame design for a long term durability.
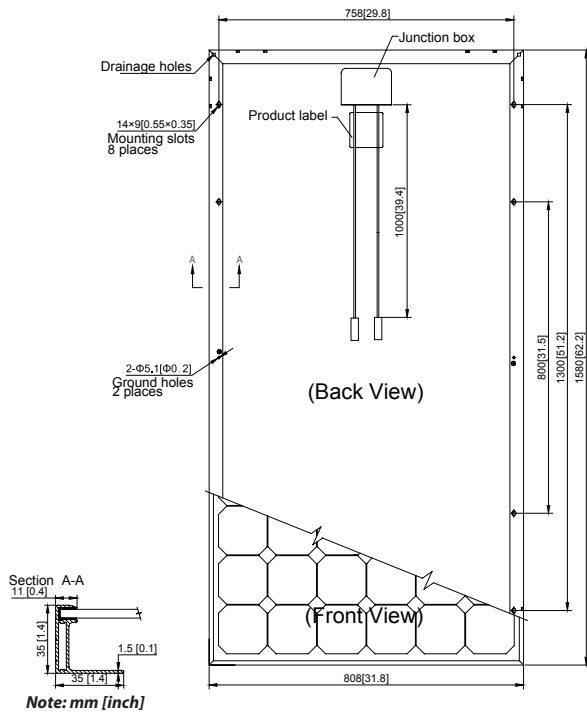
Most Modern IP67 Rated Junction Box
Supports any orientation installation. High performance low resistance connectors ensure maximum module power output for highest energy production.
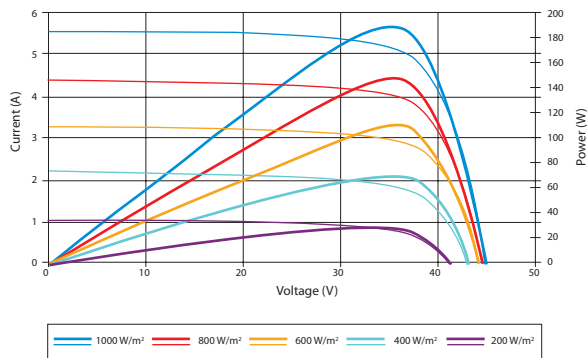
* Please refer to Suntech Standard Module Installation Manual for details.
** Please refer to Suntech Product Warranty for details.

STP190S - 24/Adb+

758[29.8]

Drainage holes
Junction box
Product label
14×9[0.55×0.35]
Mounting slots
8 places
1000[39.4]
2-Φ5.1[Φ0.2]
Ground holes
2 places
(Back View)
800[31.5]
1300[51.2]
1580[62.2]

Section A-A
11 [0.4]
35 [1.4]
1.5 [0.1]
35 [1.4]
(Front View)
808[31.8]

Note: mm [inch]

Electrical Characteristics

STC	STP190S-24/Adb+
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)	5.62A
Maximum Power at STC (Pmax)	190 W
Module Efficiency	14.9%
Operating Module Temperature	-40 °C to +85 °C
Maximum System Voltage	600 V DC (UL)/ 1000 V DC (IEC)
Maximum Series Fuse Rating	15 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	STP190S-24/Adb+
Maximum Power (W)	140 W
Maximum Power Voltage (V)	33.5 V
Maximum Power Current (A)	4.18 A
Open Circuit Voltage (Voc)	41.7 V
Short Circuit Current (Isc)	4.51 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%

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

| 1000 W/m² | 800 W/m² | 600 W/m² | 400 W/m² | 200 W/m² |

Exellent performance under weak light conditions: at an irradiation intensity of 200 W/m² (AM 1.5, 25 °C), 95.5% or higher of the STC efficiency (1000 W/m²) is achieved

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
Output Cables	UL 4703, TUV (2Pfg1169:2007)
	4.0 mm² (0.006 inches²), symmetrical lengths (-) 1000 mm (39.4 inches) and (+) 1000 mm (39.4 inches)
Connectors	H4 connectors (MC4 compatible)

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

Packing Configuration

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

Dealer information

Specifications are subject to change without further notification