

# STP195S - 24/Ad+ STP190S - 24/Ad+

# **195 Watt MONOCRYSTALLINE SOLAR MODULE**





**High module conversion** efficiency Module efficiency up to

15.3% achieved through advanced cell technology and manufacturing capabilities



**Positive tolerance** Guaranteed positive tolerance of 5% delivers higher outputs reliably



**Extended wind and snow** load tests Module certified to

withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal) \*

Certifications and standards: IEC, CE, PV Cycle, PCII, MCS



### Self-cleaning & anti-reflective

Higher module efficiency from anti-reflective, hydrophobic layer with higher light absorption and minimal surface dust



#### **Excellent** weak light performance

Excellent performance under low light conditions



## Suntech current sorting process

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage



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

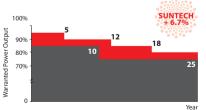
- World's No.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005
- Tested for harsh environments (salt mist and ammonia corrosion testing: IEC 61701, DIN 50916:1985 T2)\*



# **Superior Frame Design**

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

### **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 than the market standard over 25 years
- 10-year material and workmanship warranty



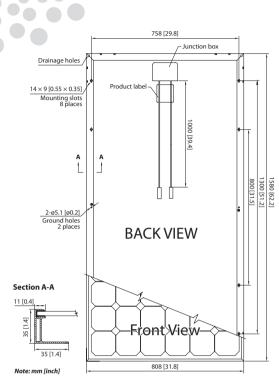
#### Most modern IP67 Rated Junction Box

Supports installations in multiple orientation. High performance, low resistance connectors ensure maximum ouptput for highest energy production.

\* Please refer to Suntech Standard Module Installation Manual for details. \*\* Please refer to Suntech Product Near-coast Installation Maunal for details. \*\*\* Please refer to Suntech Product Warranty for details.

# STP1955 - 24/Ad+ STP1905 - 24/Ad+

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# **Electrical Characteristics**

STC	STP195S-24/Ad+	STP190S-24/Ad+
Maximum Power at STC (Pmax)	195 W	190 W
Optimum Operating Voltage (Vmp)	36.6 V	36.6 V
Optimum Operating Current (Imp)	5.33 A	5.20 A
Open Circuit Voltage (Voc)	45.4 V	45.2 V
Short Circuit Current (lsc)	5.69 A	5.62 A
Module Efficiency	15.3%	14.9%
Operating Module Temperature	-40 °C to +85 °C	
Maximum System Voltage	1000 V DC (IEC)	
Maximum Series Fuse Rating	15 A	
Power Tolerance	0/+5 %	

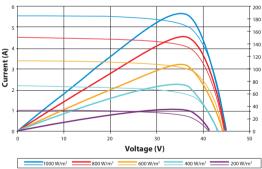
**SUNTECH** 

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	STP195S-24/Ad+	STP190S-24/Ad+
Maximum Power at NOCT (Pmax)	142 W	139 W
Optimum Operating Voltage (Vmp)	33.2 V	33.1 V
Optimum Operating Current (Imp)	4.27 A	4.19 A
Open Circuit Voltage (Voc)	41.8 V	41.3 V
Short Circuit Current (Isc)	4.61 A	4.56 A

. NOCT: Irradiance 800 W/m², ambient temperature 20 ℃, 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 (195S-24)



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cellent performance under weak light conditions: at an irradiation intensity of 200 W/m <sup>2</sup> M 1.5, 25 °C), 95.5% or higher of the STC efficiency (1000 W/m <sup>2</sup> ) is achieved	
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Temperature Coefficient of Voc Temperature Coefficient of Isc

#### **Mechanical Characteristics**

**Temperature Characteristics** 

Temperature Coefficient of Pmax

Nominal Operating Cell Temperature (NOCT)

Solar Cell	Monocrystalline silicon 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 (3 bypass diodes)	
Output Cables	TUV (2Pfg1169:2007), UL 4703	
	4.0 mm <sup>2</sup> (0.006 inches <sup>2</sup> ), symmetrical lengths (-) 1000mm (39.4 inches) and (+) 1000 mm (39.4 inches)	
Connectors	MC4 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

45±2°C

-0.45 %/°C

-0.34 %/°C

0.050 %/°C