

## 255 Watt MONOCRYSTALLINE SOLAR MODULE



### Features



#### High module conversion efficiency

Module efficiency up to 15.7% achieved through advanced cell technology and manufacturing capabilities



#### Self-cleaning & anti-reflective

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



#### Positive tolerance

Guaranteed positive tolerance of up to 5% delivers higher outputs



#### Excellent weak light performance

Excellent performance under low light conditions



#### Extended wind and snow load tests

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



#### Suntech current sorting process

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

Certifications and standards:  
UL1703, IEC 61215, IEC 61730, conformity to CE



### Trust Suntech to Deliver Reliable Performance Over Time

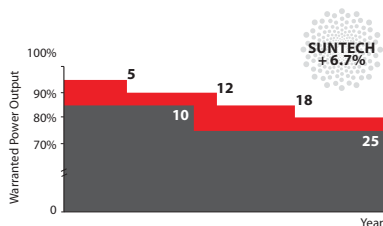
- World's no.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivalled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005
- Tested for harsh environments (salt mist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



### Compact and Durable Frame Design

Suntech's new compact frame design is light-weight (3.5 lbs lighter) and easier to handle during installation. The rigid and durable hollow chamber guarantees the same long-term and reliable performance.

### Industry-leading Warranty Based on Nominal Power



- Based on nominal power (P<sub>nom</sub>)
- 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

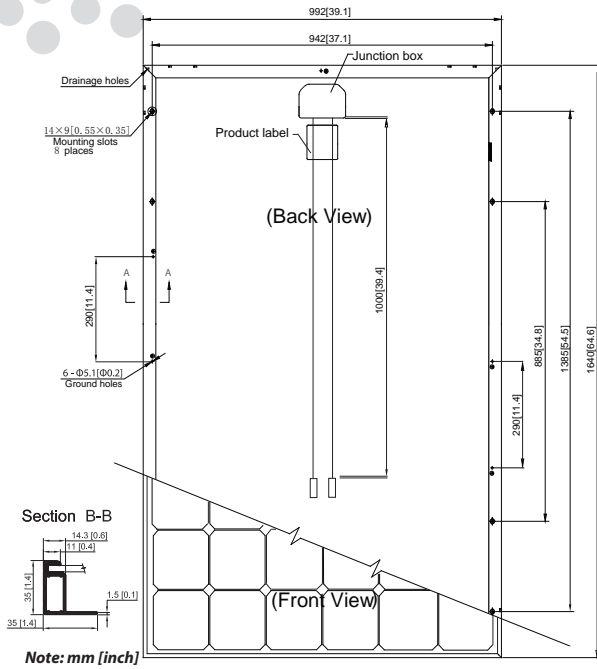


### Reliable IP67 Rated Junction Box

Supports installations in multiple orientations. High performance, low resistance connectors ensure maximum output for the highest energy production.

\* Please refer to Suntech Standard Module Installation Manual for details. \*\*PV Cycle only for EU market.

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



## Electrical Characteristics

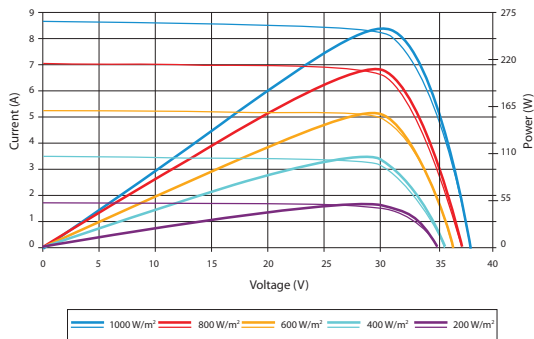
STC	STP255S-20/Wdb
Optimum Operating Voltage (Vmp)	30.8 V
Optimum Operating Current (Imp)	8.28 A
Open Circuit Voltage (Voc)	37.6 V
Short Circuit Current (Isc)	8.76 A
Maximum Power at STC (Pmax)	255 W
Module Efficiency	15.7%
Operating Module Temperature	-40 °C to +85 °C
Maximum System Voltage	1000 V DC (IEC) / 600V DC (UL)
Maximum Series Fuse Rating	20 A
Power Tolerance	0/+5 %

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	STP255S-20/Wdb
Maximum Power at NOCT (Pmax)	187 W
Optimum Operating Voltage (Vmp)	28.2 V
Optimum Operating Current (Imp)	6.64 A
Open Circuit Voltage (Voc)	34.8 V
Short Circuit Current (Isc)	7.05 A

NOCT: Irradiance 800 W/m<sup>2</sup>, 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 (255S-20)



Excellent performance under weak light conditions: at an irradiance intensity of 200 W/m<sup>2</sup> (AM 1.5, 25 °C), 95.5% or higher of the STC efficiency (1000 W/m<sup>2</sup>) is achieved

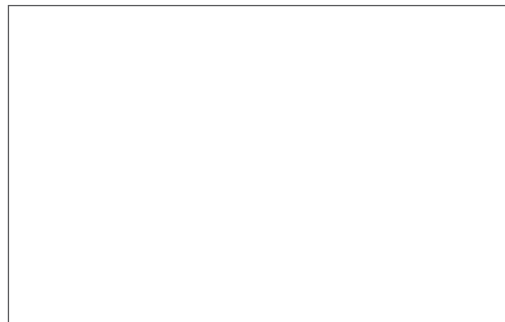
## Temperature Characteristics

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

## Mechanical Characteristics

Solar Cell	Monocrystalline silicon 156 × 156 mm (6 inches)
No. of Cells	60 (6 × 10)
Dimensions	1640 × 992 × 35mm (64.6 × 39.1 × 1.4 inches)
Weight	18.2 kgs (40.1 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, UL44 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

## Dealer information



Specifications are subject to change without further notification

## Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	28	28
Pallets per container	6	28
Pieces per container	168	784