STP245S - 20/Wdb
STP240S - 20/Wdb

SUNTECH

EN-STD-Wdb-NO1.01-Rev 2012

245 Watt
MONOCRYSTALLINE SOLAR MODULE

Features

15.1%
High module conversion efficiency
Module efficiency up to 15.1% achieved through advanced cell technology and manufacturing capabilities

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

0/+5%
Positive tolerance
Guaranteed positive tolerance of 5% delivers higher outputs reliably

Weak light
Excellent weak light performance
Excellent performance under low light conditions

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

2%
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

IEC CE PV CYCLE ** CSA C US MCS

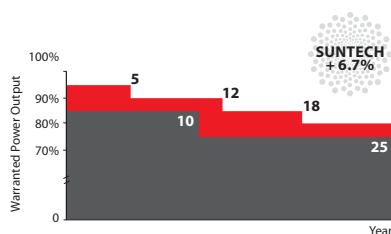### Trust Suntech to Deliver Reliable Performance Over Time
- World's No.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001: 2008, ISO 14001: 2004 and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

New, improved Frame Design
Suntech's new rigid and reliable hollow chamber frame provides additional grounding options for increased design flexibility and easier installation. Anti-counterfeit mark assures product authenticity.

Industry-leading Warranty based on Pnom

SUNTECH + 6.7%

- 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
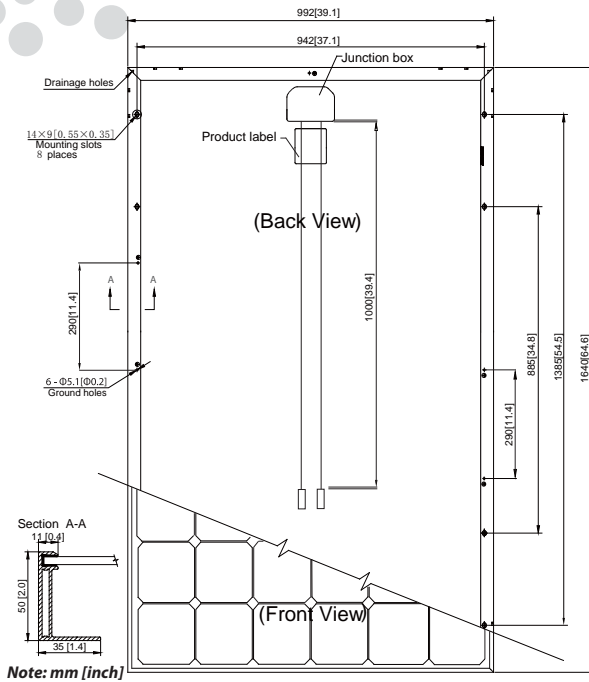
Most modern IP67 Rated Junction Box
Supports installations in multiple orientation. High performance, low resistance connectors ensure maximum ouptput for highest energy production.

* Please refer to Suntech Standard Module Installation Manual for details.   **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.
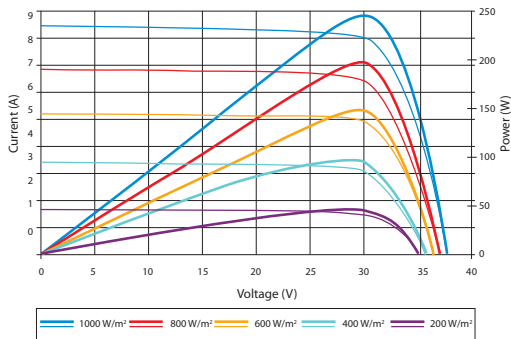
STP250S - 20/Wd
STP245S - 20/Wd

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992[39.1]
942[37.1]

Junction box

Drainage holes

14×9[0.55×0.35]
Mounting slots
8 places

Product label

(Back View)

1000[39.4]

A   A

290[11.4]

885[34.8]
1385[54.5]
1640[64.6]

290[11.4]

6 - Φ5.1[Φ0.2]
Ground holes

Section A-A
11[0.4]

50 [2.0]

(Front View)

35 [1.4]

Note: mm [inch]

Electrical Characteristics

STC	STP245S-20/Wdb	STP240S-20/Wdb
Optimum Operating Voltage (Vmp)	30.5 V	30.2 V
Optimum Operating Current (Imp)	8.04 A	7.95 A
Open Circuit Voltage (Voc)	37.3 V	37.2 V
Short Circuit Current (Isc)	8.52 A	8.43 A
Maximum Power at STC (Pmax)	245 W	240 W
Module Efficiency	15.1%	14.8%
Operating Module Temperature	-40 °C to +85 °C	
Maximum System Voltage	1000 V DC (IEC)	
Maximum Series Fuse Rating	20 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	STP245S-20/Wdb	STP240S-20/Wdb
Maximum Power at NOCT (Pmax)	181 W	178 W
Optimum Operating Voltage (Vmp)	28.0 V	27.8 V
Optimum Operating Current (Imp)	6.47 A	6.40 A
Open Circuit Voltage (Voc)	34.6 V	34.5 V
Short Circuit Current (Isc)	6.88 A	6.80 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 (245S-20)

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

Excellent 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

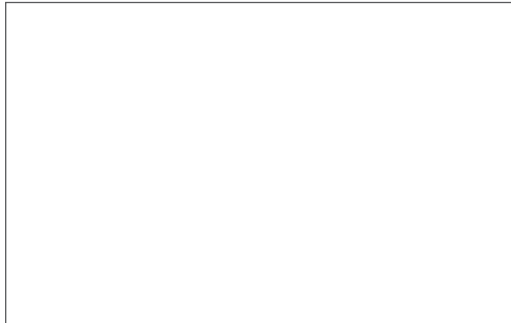## Temperature Characteristics

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 × 50mm (64.6 × 39.1 × 2.0 inches)
Weight	19.1 kgs (42.1 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 mm² (0.006 inches²), symmetrical lengths (-) 1000mm (39.4 inches) and (+) 1000 mm (39.4 inches)
Connectors	MC4 connectors

Dealer information

Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	21	21
Pallets per container	6	28
Pieces per container	126	588