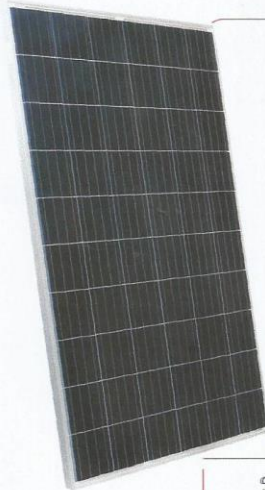


STP270 - 20/Wem
STP265 - 20/Wem
STP260 - 20/Wem

SUNTECH
 BE UNLIMITED

270 Watt POLYCRYSTALLINE SOLAR MODULE



Features



High module conversion efficiency
 Module efficiency up to 16.6% achieved through advanced cell technology and manufacturing capabilities



High PID resistant
 Advanced cell technology and qualified materials lead to high resistance to PID



Positive tolerance
 Positive tolerance of up to 5 W delivers higher output reliability



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



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



Withstanding harsh environment
 Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline

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



Trust Suntech to Deliver Reliable Performance Over Time

- World-class 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 ISO 17025:2005
- Regular independently checked production process from international accredited institute/company
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing testing: IEC 61701, IEC 62716, DIN EN 60068-2-68)***
- Long-term reliability tests
- 2 x 100% EL inspection ensuring defect-free modules

Industry-leading Warranty based on nominal power



- 97.5% in the first year, thereafter, for years two (2) through twenty-five (25), 0.7% maximum decrease from MODULE's nominal power output per year, ending with the 80.7% in the 25th year after the defined WARRANTY STARTING DATE*****
- 12-year product warranty
- 25-year linear performance warranty

Special 4 busbar design



The unique cell design leads tremendous reduction in electrodes resistance and raise in conversion efficiency. Less residual stress, less cell micro-cracks and hotspot risks.

IP68 Rated Junction Box



The Suntech IP68 rated junction box ensures an outstanding waterproof level, supports installations in all orientations and reduces stress on the cables. High reliable performance, low resistance connectors ensure maximum output for the highest energy production.

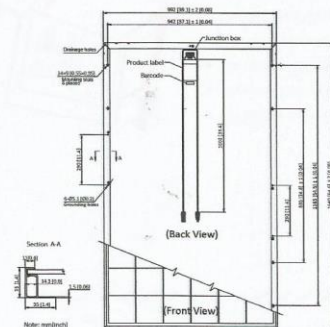
* Please refer to Suntech Standard Module Installation Manual for details. **PV Cycle only for EU market.
 *** Please refer to Suntech Product Near-coast Installation Manual for details. **** Please refer to Suntech Product Warranty for details.

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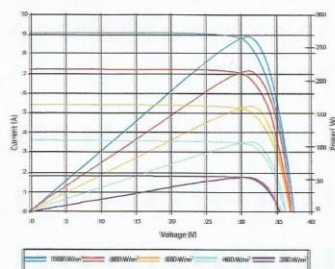
www.suntech-power.com

IEC-STP-Wem-NO1.01-Rev 2016

STP270-20/Wem
STP265-20/Wem
STP260-20/Wem

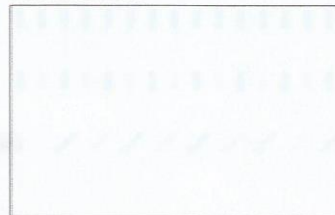


Current-Voltage & Power-Voltage Curve (270-20)



Excellent performance under weak light conditions: at an irradiation intensity of 200 W/m² (AM 1.5, 25 °C), **96.5%** or higher of the STC efficiency (1000 W/m²) is achieved.

Dealer information



Information on how to install and operate this product is available in the installation instructions. All values indicated in this data sheet are subject to change without prior announcement. The specification may vary slightly. All specifications are in accordance with standard EN 50580. Color differences of the modules relative to the figures as well as discolorations of the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.

E-mail: sales@suntech-power.com

www.suntech-power.com

IEC-STP-Wem-NO1.01-Rev.2016

Electrical Characteristics

STC	STP270-20/ Wem	STP265-20/ Wem	STP260-20/ Wem
Maximum Power at STC (Pmax)	270 W	265 W	260 W
Optimum Operating Voltage (Vmp)	31.1 V	31.0 V	30.9 V
Optimum Operating Current (Imp)	8.69 A	8.56 A	8.42 A
Open Circuit Voltage (Voc)	37.9 V	37.8 V	37.7 V
Short Circuit Current (Isc)	9.15 A	9.02 A	8.89 A
Module Efficiency	16.6%	16.3%	16.0%
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 W		

STC: Irradiance: 1000 W/m², module temperature: 25 °C, AM=1.5, Best-in-Class AWA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%.

NOCT	STP270-20/ Wem	STP265-20/ Wem	STP260-20/ Wem
Maximum Power at NOCT (Pmax)	198 W	194 W	191 W
Optimum Operating Voltage (Vmp)	28.4 V	28.3 V	28.2 V
Optimum Operating Current (Imp)	6.97 A	6.86 A	6.76 A
Open Circuit Voltage (Voc)	34.9 V	34.8 V	34.8 V
Short Circuit Current (Isc)	7.42 A	7.32 A	7.19 A

NOCT: Irradiance: 800 W/m², ambient temperature: 20 °C, AM=1.5, wind speed: 1 m/s, Best-in-Class AWA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%.

Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2 °C
Temperature Coefficient of Pmax	-0.41 %/°C
Temperature Coefficient of Voc	-0.33 %/°C
Temperature Coefficient of Isc	0.067 %/°C

Mechanical Characteristics

Solar Cell	Polycrystalline silicon 156 x 156 mm (6 inches)
No. of Cells	60 (6 x 10)
Dimensions	1640 x 992 x 35 mm (64.6 x 39.1 x 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	IP68 rated (3 bypass diodes)
Output Cables	TUV (2Pig1169:2007) 4.0 mm² (0.006 inches²), symmetrical lengths (-) 1000mm (39.4 inches) and (+) 1000 mm (39.4 inches)
Connectors	MC4 compatible

Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	30	30
Pallets per container	6	28
Pieces per container	180	840

11 Technical Data

DC Input

	STP 15000TL-10	STP 17000TL-10
Maximum DC power at $\cos \varphi = 1$	15,340 W	17,410 W
Maximum input voltage	1,000 V	1,000 V
MPP voltage range	360 V to 800 V	400 V to 800 V
Rated input voltage	600 V	600 V
Minimum input voltage	150 V	150 V
Initial input voltage	188 V	188 V
Maximum input current, input A	33 A	33 A
Maximum input current, input B	11 A	11 A
Maximum input current per string, input A*	40 A	40 A
Maximum input current per string, input B*	12.5 A	12.5 A
Maximum short-circuit current, input A**	50 A	50 A
Maximum short-circuit current, input B**	17 A	17 A
Maximum reverse current from the inverter in the system for max. 1 ms	0 A	0 A
Number of independent MPP inputs	2	2
Strings per MPP input, input A	5	5
Strings per MPP input, input B	1	1
Overvoltage category in accordance with IEC 60664-1	II	II

* To be observed in the event of a short circuit of the electronic string fuse.

** In accordance with IEC 62109-2: I_{SCPV}

AC Output

	STP 15000TL-10	STP 17000TL-10
Rated power at 230 V, 50 Hz	15,000 W	17,000 W
Maximum apparent AC power	15,000 VA	17,000 VA
Rated grid voltage	~3/N/PE, 230 V / 400 V	~3/N/PE, 230 V / 400 V
Nominal AC voltage	220 V, 230 V, 240 V	220 V, 230 V, 240 V
AC voltage range*	160 V to 280 V	160 V to 280 V
Nominal AC current at 230 V	21.7 A	24.6 A

	STP 15000TL-10	STP 17000TL-10
Maximum output current	24 A	24.6 A
Total harmonic distortion of the output current with total harmonic distortion of the AC voltage < 2%, and AC power > 50% of the rated power	≤3%	≤2.6%
Inrush current	< 20% of the nominal AC current for a maximum of 10 ms	< 20% of the nominal AC current for a maximum of 10 ms
Maximum output current under fault conditions	0.05 kA	0.05 kA
Rated power frequency	50 Hz	50 Hz
AC power frequency*	50 Hz / 60 Hz	50 Hz / 60 Hz
Operating range at AC power frequency 50 Hz	44 Hz to 55 Hz	44 Hz to 55 Hz
Operating range at AC power frequency 60 Hz	54 Hz to 65 Hz	54 Hz to 65 Hz
Power factor at rated power	1	1
Displacement power factor cos ϕ , adjustable	0 leading to 0 lagging	0 leading to 0 lagging
Feed-in phases	3	3
Connection phases	3	3
Overvoltage category in accordance with IEC 60664-1	III	III

* depending on the configured country data set

Protective Devices

DC reverse polarity protection	Short-circuit diode, electronic string fuse
Protection against reverse currents	Electronic string fuse
Input-side disconnection point	Electronic Solar Switch, SUNCLIX DC connector
DC overvoltage protection	Thermally monitored varistors or surge arresters type II (optional)
AC short-circuit current capability	Current control
Grid monitoring	SMA Grid Guard 4
Maximum permissible fuse protection	50 A
Ground-fault monitoring for STP 15000TL-10	Insulation monitoring: $R_{iso} > 366.3 \text{ k}\Omega$