

## *Your solar proposal*



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Contractors Lic # 76240

Electrical Lic # 104930

A/C Lic # L046331

CEC Lic # A1518436

# ABOUT US

## Bundaberg Solar is powered by AC Electrical & Air

- We are locally owned and have been operating since 2009
- We employ local trade's people
- We offer 1 Year Warranty on all workmanship
- We use and recommend quality products & materials



Together, Bundaberg Solar and AC Electrical & Air are able to provide an all-inclusive approach to your home energy needs through grid connect solar, electrical and lighting supply.



*Bundaberg's leading electrical & air conditioning specialists*

- ☐ GENERAL ELECTRICAL
- ☐ DOMESTIC, COMMERCIAL & INDUSTRIAL
- ☐ AIR CON SUPPLY & INSTALL
- ☐ AIR CON REPAIRS MAINTAINENCE
- ☐ LIGHTING
- ☐ HOT WATER
- ☐ SOLAR POWER SYSTEMS
- ☐ UNDERGROUNDS & EXCAVATION
- ☐ PRE WIRES & FIT OFFS
- ☐ KANGA LOADER HIRE

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### LIGHTING SHOWROOM

**NOW OPEN**

**121 GEORGE ST, BUNDABERG**



- ☒ PENDANTS
- ☒ LED LIGHTING
- ☒ FEATURE LIGHTS
- ☒ OUTDOOR LIGHTING DESIGN
- ☒ FLOOD / SECURITY LIGHTING
- ☒ FANS
- ☒ GLOBES
- ☒ ENERGY SAVING
- ☒ DOWNLIGHTS
- ☒ BATHROOM HEATERS



**(07) 4153 2777 or 0419 656 526**

[acelectricalbundaberg.com.au](http://acelectricalbundaberg.com.au)

# GRID CONNECT SOLAR SYSTEM

## INVERTER *SMA SUNNY BOY*

The grid connect inverter converts the DC electricity produced by the solar panels into 240V AC electricity, which can then be used by the property/household. If a grid connect system is producing more power than is being consumed, the surplus is fed into the mains power grid.



SUNNY BOY 3000TL / 3600TL / 4000TL / 5000TL



SB 3000TL-21 / SB 3600TL-21 / SB 4000TL-21 / SB 5000TL-21

<b>Economical</b> <ul style="list-style-type: none"><li>• Maximum efficiency of 97 %</li><li>• Multi-string technology in all power classes</li><li>• Cost saving due to fewer parallel strings</li><li>• Shade management with OptiTrac Global Peak</li></ul>	<b>Flexible</b> <ul style="list-style-type: none"><li>• Maximum DC input voltage of 750 V</li><li>• Integrated grid management functions and reactive power provision</li></ul>	<b>Simple</b> <ul style="list-style-type: none"><li>• Without fan</li><li>• Easier wall mounting</li><li>• SUNCLIX DC plug-in system</li><li>• Fast connection, no tools required</li></ul>	<b>Communicative</b> <ul style="list-style-type: none"><li>• Simple country configuration</li><li>• Bluetooth® technology as standard</li></ul>
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### SUNNY BOY 3000TL / 3600TL / 4000TL / 5000TL *With Reactive Power Control*

The same. Only better. The universally usable Sunny Boy.

It all remains the best: The new transformer-less Sunny Boy is the ideal solution, especially for demanding PV arrays and partly shaded plants. Version 21 of the successful Sunny Boy offers a further array of advantages. It's more flexible in its range of applications, provides even more efficient yields, and it's easier to use. The high DC voltage of 750V proves to be a cost advantage, since fewer parallel strings are required. In addition, the integrated grid

management functions make the devices suitable for universal applications and allow them to actively support the grid.

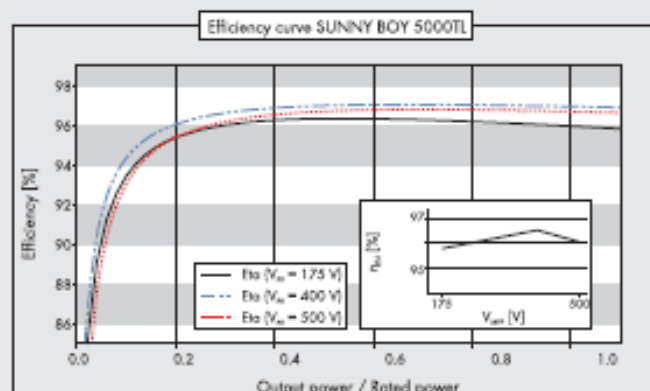
In our opinion the best money can buy!

- Class leading performance
- German built quality
- Rated Maximum Efficiency 98.2%
- Safe (Triple Protection, Self-learning detection)
- Equipped with Bluetooth Communication
- 5 Year Warranty

## TECHNICAL DATA

Technical data	Sunny Boy 3000TL	Sunny Boy 3600TL
<b>Input (DC)</b>		
Max. DC power (@ cos φ = 1)	3200 W	3880 W
Max. input voltage	750 V	750 V
MPP voltage range / rated input voltage	175 V ... 500 V / 400 V	175 V ... 500 V / 400 V
Min. input voltage / initial input voltage	125 V / 150 V	125 V / 150 V
Max. input current input A / input B	15 A / 15 A	15 A / 15 A
Max. input current per string input A / input B	15 A / 15 A	15 A / 15 A
Number of independent MPP inputs / strings per MPP input	2 / A:2; B:2	2 / A:2; B:2
<b>Output (AC)</b>		
Rated power (@ 230 V, 50 Hz)	3000 W	3680 W
Max. apparent AC power	3000 VA	3680 VA
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V – 280 V	220 V, 230 V, 240 V / 180 V – 280 V
AC power frequency / range	50 Hz, 60 Hz / -5 Hz ... +5 Hz	50 Hz, 60 Hz / -5 Hz ... +5 Hz
Rated power frequency / rated grid voltage	50 Hz / 230 V	50 Hz / 230 V
Max. output current	16 A	16 A
Power factor at rated power	1	1
Displacement power factor, adjustable	0.8 overexcited ... 0.8 underexcited	0.8 overexcited ... 0.8 underexcited
Feed-in phases / connection phases	1 / 1	1 / 1
<b>Efficiency</b>		
Max. efficiency / European weighted efficiency	97 % / 96 %	97 % / 96.3 %
<b>Protective devices</b>		
DC disconnect device	●	●
Ground fault monitoring / grid monitoring	● / ●	● / ●
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / –	● / ● / –
All-pole-sensitive residual-current monitoring unit	●	●
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)	I / III	I / III
<b>General data</b>		
Dimensions (W / H / D)	490 / 519 / 185 mm (19.3 / 20.4 / 7.3 inches)	490 / 519 / 185 mm (19.3 / 20.4 / 7.3 inches)
Weight	26 kg (57.3 lb)	26 kg (57.3 lb)
Operating temperature range	-25°C ... +60°C (-13°F ... +140°F)	-25°C ... +60°C (-13°F ... +140°F)
Noise emission (typical)	25 dB(A)	25 dB(A)
Self-consumption (night)	1 W	1 W
Topology	Transformerless	Transformerless
Cooling concept	Convection	Convection
Degree of protection (according to IEC 60529)	IP65	IP65
Climatic category (according to IEC 60721-3-4)	4K4H	4K4H
Maximum permissible value for relative humidity (non-condensing)	100 %	100 %
<b>Features</b>		
DC connection / AC connection	SUNCLIX / Spring clamp terminal	SUNCLIX / Spring clamp terminal
Display	Graphic	Graphic
Interface: RS485 / Bluetooth / Speedwire / Webconnect	○ / ● / ○ / ○	○ / ● / ○ / ○
Multi-function relay / Power Control Module	○ / ○	○ / ○
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	
Certificates and approvals (additional on request)	AS 4777, C10/11, CE, CEI 0-21, EN 50438 <sup>1</sup> , G59/2, G83/1-1, IEC 61727, NRS 097-2-1, PEA, PPC, PPDS, RD1699, RD 661, UTE C15-712, VDE-AR-N 4105, VDE0126-1-1	
Version: March 2013		
● Standard features ○ Optional features – Not available, Data at nominal conditions		
Type designation	SB 3000TL:21	SB 3600TL:21





## Accessories



RS485 interface  
DM-485CB-10



Speedwire/Webconnect  
interface SWDM-10



Multi-function relay  
MFR01-10



Additional fan kit  
FAHKIT01-10



Power Control Module  
PWCMOD-10

<sup>1</sup> Does not apply to all national appendices of EN 50438

<sup>2</sup> 4600 VA with VDE-AR-N 4105

<sup>3</sup> 4825 W with VDE-AR-N 4105

## Technical data

### Input (DC)

Max. DC power (@ cos  $\varphi = 1$ )

Max. input voltage

MPP voltage range / rated input voltage

Min. input voltage / initial input voltage

Max. input current input A / input B

Max. input current per string input A / input B

Number of independent MPP inputs / strings per MPP input

### Output (AC)

Rated power (@ 230 V, 50 Hz)

Max. apparent AC power

Nominal AC voltage / range

AC power frequency / range

Rated power frequency / rated grid voltage

Max. output current

Power factor at rated power

Displacement power factor, adjustable

Feed-in phases / connection phases

### Efficiency

Max. efficiency / European weighted efficiency

### Protective devices

DC disconnect device

Ground fault monitoring / grid monitoring

DC reverse polarity protection / AC short-circuit current capability / galvanically isolated

All-pole-sensitive residual-current monitoring unit

Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)

### General data

Dimensions (W / H / D)

Weight

Operating temperature range

Noise emission (typical)

Self-consumption (night)

Topology

Cooling concept

Degree of protection (according to IEC 60529)

Climatic category (according to IEC 60721-3-4)

Maximum permissible value for relative humidity (non-condensing)

### Features

DC connection / AC connection

Display

Interface: RS485 / Bluetooth / Speedwire / Webconnect

Multi-function relay / Power Control Module

Warranty: 5 / 10 / 15 / 20 / 25 years

Certificates and approvals (additional on request)

● Standard features ○ Optional features — Not available, Data at nominal conditions

Type designation

## Sunny Boy 4000TL

## Sunny Boy 5000TL

4200 W

750 V

175 V ... 500 V / 400 V

125 V / 150 V

15 A / 15 A

15 A / 15 A

2 / A2; B:2

4000 W

4000 VA

220 V, 230 V,  
240 V / 180 V – 280 V

50 Hz, 60 Hz / –5 Hz ... +5 Hz

50 Hz / 230 V

22 A

1

0.8 overexcited ... 0.8 underexcited

1 / 1

97 % / 96.4 %

●

● / ●

● / ● / –

●

I / III

490 / 519 / 185 mm (19.3 / 20.4 / 7.3 inches)

26 kg (57.3 lb)

–25°C ... +60°C (–13°F ... +140°F)

25 dB(A)

1 W

Transformerless

Convection

IP65

4K4H

100 %

SUNCLIX / Spring clamp terminal

Graphic

○ / ● / ○ / ○

○ / ○

● / ○ / ○ / ○ / ○

AS 4777, C10/11, CE, CEI 0-21, EN 50438<sup>1</sup>, G59/2,  
G83/1-1, IEC 61727, NRS 097-2-1, PEA, PPC, PPDS, RD1699,  
RD 661, UTE C15-712, VDE-AR-N 4105, VDE0126-1-1

SUNCLIX / Spring clamp terminal

Graphic

○ / ● / ○ / ○

○ / ○

SB 5000TL-21

## SMA FACTORY WARRANTY

Applies solely to the following products: Sunny Boy, Windy Boy, Windy Boy Protection Box, Sunny Mini Central, Sunny Tripower, Sunny Boy Control (Plus), Sunny Beam, Sunny WebBox, Sunny Matrix, Sunny Sensor Box, Power Reducer Box, PV Offset Box. The legal guaranty obligation of the seller of your device is not affected by this warranty and remains fully valid for 24 months from the date of delivery.

For the above named products, you receive an SMA factory warranty valid for 5 years from the date of purchase. The SMA factory warranty covers any costs which you incur for repair or replacement parts during the agreed period beginning at the date of purchase of the device, subject to the conditions listed below. This is not associated with a durability warranty.

You have the possibility of purchasing an extension of this SMA factory warranty within the 5 year term of the SMA factory warranty; this does not apply for the Sunny Beam and the PV Offset Box. The prices are based on the respective SMA Price list valid at the time the warranty extension was signed.

## WARRANTY CONDITIONS

If a device becomes defective during the agreed SMA factory warranty period and provided that it will not be impossible or unreasonable, the device will be, as selected by SMA,

- repaired by SMA, or
- repaired on-site, or
- exchanged for a replacement device of equivalent value according to model and age.

In the latter case, the remainder of the warranty entitlement will be transferred to the replacement device and your entitlement will be documented at SMA.

Excessiveness in the meaning above exists in particular if the cost of the measures for SMA would be unreasonable

- in view of the value that the device would have without the defect,
- taking into account the significance of the defect, and
- after consideration of alternative workaround possibilities that SMA customers could revert to without significant inconvenience.

The factory warranty includes the costs of SMA for work and material for the restoration of faultless functioning in SMA's factory or for on-site repair work by SMA personnel. All other costs, particularly shipping costs, travel, and accommodation costs of SMA personnel for on-site repairs as well as costs of the customer's own employees are not included in the factory warranty.

When devices for private use are installed by natural persons in the EU region, Australia, China, India, Korea, Croatia, New Zealand, Norway, Switzerland, the US and the United Arab Emirates, the factory warranty also includes shipping costs or travel and accommodation costs of SMA service personnel for on-site repairs. This does not apply to islands and overseas territories of the indicated states.

To determine the warranty entitlement, please submit a copy of the purchasing invoice or a copy of the warranty certificate, if necessary including the receipt of the warranty extension. The type plate on the device must be completely legible. Otherwise, SMA is entitled to refuse to provide warranty services.

Please report defective devices with a brief error description to our SMA Service line. If we agree to a replacement, we generally send an equivalent replacement device, packaged appropriately for transport, within 2 working days. The defective device is to be packed in this transport packaging for return transport to SMA. All warranty services are free of charge only if the course of action was agreed with SMA in advance.

**SMA Solar Technology AG** | Sonnenallee 1 | 34266 Niestetal | Germany

Phone: +49 561 9522-0 | Fax: +49 561 9522-100 | Internet: [www.SMA.de](http://www.SMA.de) | E-mail: [info@SMA.de](mailto:info@SMA.de)

Register court: Amtsgericht Kassel HRB 3972

Chairman of the Supervisory Board: Dr. Erik Ehrentraut

Managing Board: Günther Cramer, Peter Drews, Jürgen Dolle, Roland Grebe, Uwe Hertel, Pierre-Pascal Urbon, Marko Werner

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## SCOPE OF THE FACTORY WARRANTY

The factory warranty does not cover damages that occur due to the following reasons:

- Transport damage
- Incorrect installation or commissioning
- Failure to observe the user manual, the installation guide, and the maintenance regulations
- Modifications, changes, or attempted repairs
- Incorrect use or inappropriate operation
- Insufficient ventilation of the device
- Failure to observe the applicable safety regulations (VDE standards, etc.)
- Force majeure (e.g., lightning, overvoltage, storm, fire)

Neither does it cover cosmetic defects which do not influence the energy production.

Claims that go beyond the rights cited in the warranty conditions, in particular claims for compensation for direct or indirect damages arising from the defective device, for compensation for costs arising from disassembly and installation, or loss of profits are not covered by the factory warranty, insofar SMA is not subject to statutory liability. In such cases, please contact the company that sold you the device. Possible claims in accordance with the law on product liability remain unaffected.

All claims arising from or in connection with this warranty are subject to German law. Kassel, Germany is the exclusive place of jurisdiction for all disputes arising from or in connection with this warranty.

**SMA Solar Technology AG**

Sonnenallee 1

34266 Niestetal, Germany

## SMA SERVICELINE

**SMA Service Australia SMA Service  
Australia**

**SMA Technology Australia PTY Ltd.**

[www.SMA-Australia.com.au](http://www.SMA-Australia.com.au)

Tel +61 2 9669 2889

Fax +61 2 9669 2887

[Service@SMA-Australia.com.au](mailto:Service@SMA-Australia.com.au)

# SOLAR PANELS

## SUNTECH - STP250-20Wd

### Polycrystalline Module

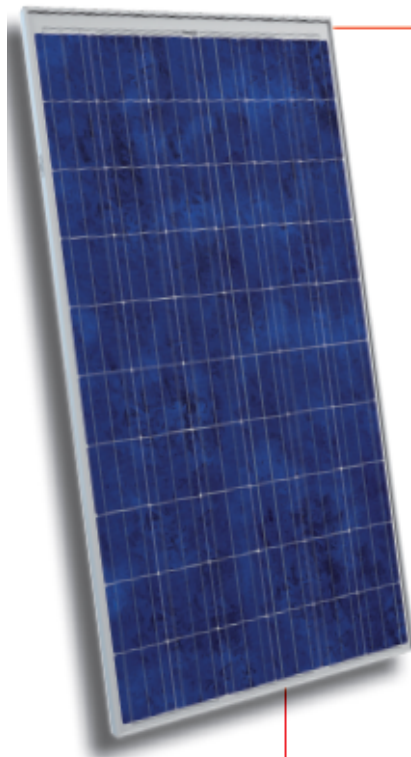
Solar panels are devices that convert light into electricity. They are called "solar" panels because most of the time, the most powerful source of light available is the sun.

A solar panel is a collection of solar cells. Lots of small solar cells spread over a large area can work together to provide enough power to be useful. The more light that hits a cell, the more electricity it produces.



## 250 Watt

### POLYCRYSTALLINE SOLAR MODULE



#### Features



##### High module conversion efficiency

Module efficiency up to 15.4% achieved through advanced cell technology and manufacturing capabilities



##### Excellent weak light performance

Excellent performance under low light conditions



##### Positive tolerance

Positive tolerance of up to 5% delivers higher outputs 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

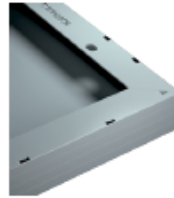
Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline

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



### Trust Suntech to Deliver Reliable Performance Over Time

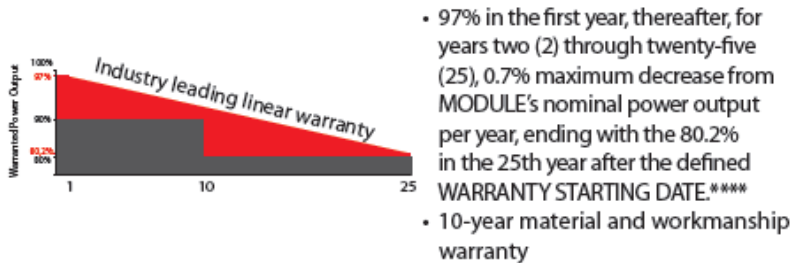
- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivalled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005
- Regular independently checked production process from international accredited institute/company
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing testing: IEC 61701, DIN 50916:1985 T2, DIN EN 60068-2-68)\*\*\*



### Compact and Durable Frame Design

Suntech's new compact frame design is light-weight 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



IP67

### IP67 Rated Junction Box

Supports installations in multiple orientations. 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.

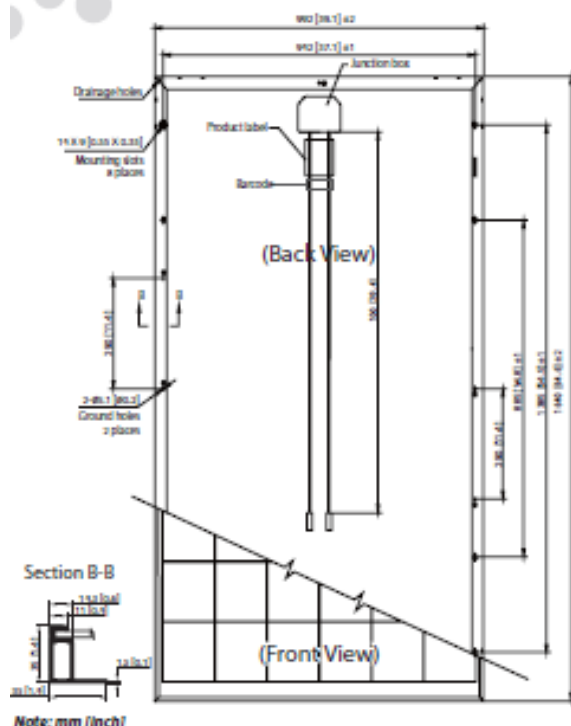
## WHY WE CHOOSE SUNTECH

- Performance & price leaders
- World's largest manufacturer of solar panels
- Excellent weak light performance
- Tested for harsh environments (salt mist & sand)
- 25 Year Efficiency Performance Warranty
- 10 Year Material & Workmanship Warranty
- Tested for wind extremes
- High conversion efficiency
- Independently tested and accredited

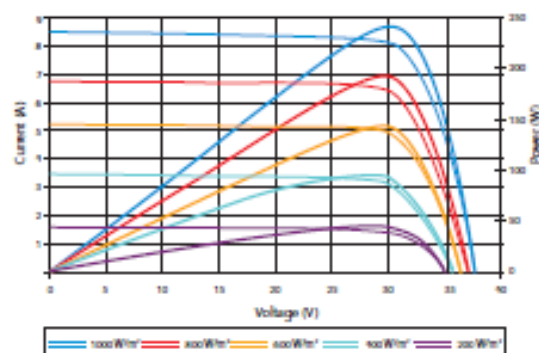




**STP250-20/Wd**  
**STP245-20/Wd**  
**STP240-20/Wd**



**Current-Voltage & Power-Voltage Curve(245-20)**



Excellent performance under weak light conditions: at an irradiance intensity of 200 W/m² (AM 1.5, 25 °C), 95.5% 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 Instruction. All values indicated in this data sheet are subject to change without prior announcement. The specifications may vary slightly. All specifications are in accordance with standard EN 50380. Color differences of the modules relative to the figures as well as discolorations of/in the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.

**Electrical Characteristics**

STC	STP250-20/Wd	STP245-20/Wd	STP240-20/Wd
Maximum Power at STC (Pmax)	250 W	245 W	240 W
Optimum Operating Voltage (Vmp)	30.7 V	30.5 V	30.2 V
Optimum Operating Current (Imp)	8.15 A	8.04 A	7.95 A
Open Circuit Voltage (Voc)	37.4 V	37.3 V	37.2 V
Short Circuit Current (Isc)	8.63 A	8.52 A	8.43 A
Module Efficiency	15.4%	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 +/- 2%

NOCT	STP250-20/Wd	STP245-20/Wd	STP240-20/Wd
Maximum Power at NOCT (Pmax)	185 W	181 W	178 W
Optimum Operating Voltage (Vmp)	28.0 V	27.8 V	27.6 V
Optimum Operating Current (Imp)	6.59 A	6.51 A	6.44 A
Open Circuit Voltage (Voc)	34.5 V	34.3 V	34.1 V
Short Circuit Current (Isc)	7.01 A	6.94 A	6.86 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 +/- 2%

**Temperature Characteristics**

Nominal Operating Cell Temperature (NOCT)	45±2 °C
Temperature Coefficient of Pmax	-0.43 %/°C
Temperature Coefficient of Voc	-0.33 %/°C
Temperature Coefficient of Isc	0.067 %/°C

**Mechanical Characteristics**

Solar Cell	Polycrystalline 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 (2Pfg 1169:2007) 4.0 mm² (0.006 inches²), symmetrical lengths (-) 1000mm (39.4 inches) and (+) 1000 mm (39.4 inches)
Connectors	MC4 connectors

**Packing Configuration**

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

## **"Best in Class" - Suntech's Modules Receive Top Quality Ranking by VDE Institute**

WUXI, China, June 2, 2014

Wuxi Suntech today announced its Wd and Ve photovoltaic modules have received the VDE Quality-Tested certification, attesting that the quality of Suntech modules exceed existing industry standards. Suntech is only the third brand globally to receive this quality ranking.

"We are honoured to have our modules recognised by the highest certification level of the VDE Institute, one of the world's leading testing and certification institutes," said Suntech CEO Eric Luo. "This recognition further validates our commitment to provide customers with solar modules of the highest quality and reliability in design and mass production."

The VDE created its VDE Quality-Tested seal of approval to recognise a level of quality control that goes beyond existing standards in the PV industry. High levels of reliability with low rates of lifetime degradation and high safety standards are essential aspects of attaining VDE Quality-Tested certification.

Compared to the standard industry certifications IEC61215 and IEC61730-2, the VDE Quality-Tested seal requires a more rigorous examination of module long term performance capabilities combined with increased production line testing and regular factory audits. The number of test samples is doubled, the length of each test is increased, additional tests are required, and the maximum allowable power loss at the completion of the enhanced test sequence is reduced. Combined with the additional production line tests and independent factory inspections, these demanding requirements dramatically increase the confidence that a Suntech's PV modules will fulfil their performance requirements and produce greater energy over the 25 year lifetime of the PV module.

Cont.

"The VDE Institute takes pride in providing our seal of approval to top-tier, quality products that show constant product reliability," said Burkhard Holder, Head of VDE's Energy and Smart Technologies Division. "We congratulate Suntech on its accreditation which singles out the company's products as best in class. VDE's Quality Tested certificate highlights products that go beyond normative standards, consistently ensuring reliable and bankable PV modules. The results of our comprehensive tests have shown that Suntech's PV modules have achieved a premium level of quality and safety, from design to manufacturing."

#### About Wuxi Suntech Power Co., Ltd

Wuxi Suntech Power Co., Ltd., a company incorporated in the PRC in January 2001, produces industry-leading solar products for residential, commercial, industrial, and utility applications. Suntech has delivered more than 30 million photovoltaic panels or 8 GWs of installed capacity to more than 1 thousand customers in more than 80 countries. Suntech's pioneering R&D creates customer-centric innovations that are driving solar to grid parity against fossil fuels. Suntech's mission is to provide reliable access to nature's cleanest and most abundant energy source.

#### About VDE

Based in Germany, VDE is the Association for Electric, Electronic & Information Technologies, and is one of the largest technical and scientific associations in Europe with more than 34,000 members. The VDE Institute is a nationally and internationally accredited institution, which tests electrotechnical equipment, appliances, components and systems to protect the consumer and the general public against unsafe products and to support manufacturers and retailers in improving standards in the market with safe and high quality products.

# SUNTECH POWER LIMITED - WARRANTY FOR PV MODULES

Effective from January 1, 2012

**You have made the right choice by purchasing SUNTECH products with a long life time. Suntech photovoltaic modules are covered by warranty as described in detail below.-**

Suntech Standard PV Module Products covered under this warranty are:

STPXXX(S)-YY/Zd(b)(+) (XXX = 170-320 / YY = 18, 20, 24, / Z = A, U, V, W)

PlutoXXX-Zd(a, e, m, x) (XXX = 170-320 / Z=A, U, V, W)

MSZXXX-J-C (XXX = 170-200)

MSZXXX-J-D (XXX = 170-200)

XXX is a module power rating. S/Z/d/+/b/e/m/x/J/C/D defines module variants as described in corresponding product data sheet.

For the standard solar module types listed above, Wuxi Suntech Power Co., Ltd. (SUNTECH POWER) shall WARRANT its Photovoltaic Solar Modules' (MODULES) performance (i) starting from the date of sale (SALES DATE) to the first customer installing (for their own use) the MODULES (CUSTOMER) or (ii) starting at the latest 12 months after MODULES dispatch from the SUNTECH POWER factory, whichever occurs earlier (the WARRANTY START DATE).

## 1. Limited Product Warranty – Ten Years Repair, Replacement or Refund Remedy

SUNTECH POWER warrants its MODULES, including factory-assembled DC connectors and cables, if any, to be free from defect in materials and workmanship under normal application, installation, use and service conditions. If MODULES fail to conform to this warranty, during the period of One Hundred Twenty (120) months from the WARRANTY START DATE, SUNTECH POWER will, at its option, either repair or replace the product, or refund the current list price of comparable SUNTECH POWER MODULES. The repair or replacement or refund remedy shall be the sole and exclusive remedy provided under the "Limited Product Warranty" and shall not extend beyond the period set forth herein. This "Limited Product Warranty" does not warrant a specific power output, which shall be exclusively covered under clause 2 hereinafter ("Limited Peak Power Warranty").

## 2. Limited Peak Power Warranty - Limited Remedy

Warranted Percentages of Nominal Power Output

5 Year Limited Warranty of 95% of the Nominal Power Output

12 Year Limited Warranty of 90% of the Nominal Power Output

18 Year Limited Warranty of 85% of the Nominal Power Output

25 Year Limited Warranty of 80% of the Nominal Power Output

SUNTECH POWER warrants each Module against defects in materials and workmanship that result in the failure of the MODULES to produce the warranted percentage specified above of the nominal power output for the Module set forth in SUNTECH POWER's product datasheet. If SUNTECH POWER determines in its discretion that any Module is not providing the warranted percentage of the nominal power output because of defects in materials and workmanship, SUNTECH POWER will at its option either (1) replace such loss in power by either, (a) providing additional MODULES to the CONSUMER to make up for such loss in power or (b) replacing the defective Module(s) or part by a functional equivalent or (2) refund the percentage of the cost of the Module(s) representing the percentage of the power that is less than the warranted percentage of the nominal power.

The remedies set forth in this clause 2 shall be the sole and exclusive remedies provided under the "Limited Peak Power Warranty".

Nominal Power Output in product datasheet is the power in Watt peak that a Photovoltaic Solar Modules generates in its Maximum Power Point under Standard Testing Conditions (STC). STC are as follows:

(a) light spectrum of AM 1.5, (b) an irradiation of 1000 W per and (c) a cell temperature of 25 degrees centigrade at right angle irradiation. The measurements are carried out in accordance with IEC 61215 as tested at the connectors or junction box terminals – as applicable – per calibration and testing standards of SUNTECH POWER valid at the date of manufacture of the PV-modules.

## 3. Exclusions and Limitations

To the extent permitted by law:

(1) In any event, all warranty claims must be received within the applicable warranty period for this warranty to be effective.

(2) The "Limited Product Warranty" and the "Limited Peak Power Warranty" do not apply to any MODULES which have been subjected to:

Misuse, abuse, neglect or accident;



Alteration, improper installation or application;

Non-observance of SUNTECH POWER's installation manual or maintenance instructions;

Repair or modifications by someone other than an approved service technician of SUNTECH POWER;

Power failure surges, lightning, flood, fire, accidental breakage or other events outside SUNTECH POWER's control.

(3) Both "Limited Product Warranty" and "Limited Peak Power Warranty" do not cover any costs associated with installation, removal or re-installation of the MODULES (subject to last sentence of Clause 5) and customs clearance or any other costs for return of the MODULES.

(4) Warranty claims will not be honoured if the type or serial number of the MODULES have been altered, removed or made illegible.

(5) Both "Limited Product Warranty" and "Limited Peak Power Warranty" does not apply to MODULES marked as "Grade A-1" or "Grade B". SUNTECH POWER explicitly refers to their "Limited Warranty for PV Modules marked Grade A-1", their "Special Limited Warranty for PV Modules marked Grade B" reflecting these categorized modules.

#### **4. Limitation of Warranty Scope**

THIS "LIMITED WARRANTY FOR PV MODULES" AS SET FORTH HEREIN IS EXPRESSLY IN LIEU OF AND EXCLUDE ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR PARTICULAR PURPOSE, USE, OR APPLICATION, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF SUNTECH POWER, UNLESS SUCH OTHER OBLIGATIONS OR LIABILITIES ARE EXPRESSLY AGREED TO IN WRITING SIGNED AND APPROVED BY SUNTECH POWER. SUNTECH POWER SHALL HAVE NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR DAMAGE OR INJURY TO PERSONS OR PROPERTY, OR FOR OTHER LOSS OR INJURY RESULTING FROM ANY CAUSE WHATSOEVER ARISING OUT OF OR RELATED TO THE MODULES, INCLUDING, WITHOUT LIMITATION, ANY DEFECTS IN THE MODULES, OR FROM USE OR INSTALLATION. UNDER NO CIRCUMSTANCES SHALL SUNTECH POWER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, HOWSOEVER CAUSED. LOSS OF USE, LOSS OF PROFITS, LOSS OF PRODUCTION, AND LOSS OF REVENUES ARE SPECIFICALLY AND WITHOUT LIMITATION EXCLUDED. SUNTECH POWER'S AGGREGATE LIABILITY, IF ANY, IN DAMAGES OR OTHERWISE, SHALL NOT EXCEED THE INVOICE VALUE AS PAID BY THE CONSUMER, FOR THE SINGLE UNIT OF MODULE.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. THIS LIMITED WARRANTY DOES NOT AFFECT ANY ADDITIONAL RIGHTS YOU HAVE UNDER LAWS IN YOUR JURISDICTION GOVERNING THE SALE OF CONSUMER GOODS, INCLUDING, WITHOUT LIMITATION, NATIONAL LAWS IMPLEMENTING EC DIRECTIVE 99/44. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE LIMITATIONS OR EXCLUSIONS IN THIS LIMITED WARRANTY STATEMENT MAY NOT APPLY TO YOU.

#### **5. Obtaining Warranty Performance/Claim Procedure**

If the CUSTOMER wishes to bring a claim under this "Limited Warranty for PV Modules", an immediate notification shall be filed by the CUSTOMER directly to either:

(a) The installer company; or

(b) SUNTECH POWER's authorized distribution partner, who supplied affected modules; or

(c) SUNTECHPOWER office in your region. Regional contact details of SUNTECH POWER offices are listed under clause 12.

by letter, facsimile or email, and the notification should specify name and address of CUSTOMER, name and address of installer and authorized SUNTECH POWER distribution partner, the evidence of the claim with the affected Module type, affected quantity and corresponding serial numbers together with the date on which the MODULES have been *EN-REV-AUS1.1-2012 2/2* [www.suntech-power.com](http://www.suntech-power.com) purchased. The notification shall enclose copy of a related invoice document with stamp or signature of SUNTECH POWER or its authorized distributor as part of the evidence.

The CUSTOMER shall bring a claim under this limited warranty immediately after discovery of breach of warranty and within the warranty period.

The return of any MODULES will not be accepted unless prior written authorization has been given by SUNTECH POWER. –

To the extent permitted by law and subject to the last sentence in this clause, SUNTECH POWER will, in its sole discretion, either refund CUSTOMER (based on purchase price and taking into account of depreciation) for the defective MODULES, or repair or replace the defective MODULES. In connection with both the "Limited Product Warranty" and "Limited Peak Power Warranty", SUNTECH POWER shall reimburse CUSTOMER for reasonable, customary and documented transportation charges by sea freight for both authorised return of defective MODULES and reshipment of any repaired or replaced MODULES, only if this cost is authorized by SUNTECH POWER.

THE FOLLOWING STATEMENT APPLIES TO CUSTOMERS THAT ARE 'CONSUMERS' WITHIN THE MEANING OF THE AUSTRALIAN CONSUMER LAW: *The benefits given to the consumers in this warranty are in addition to other rights and remedies of the consumer under a law in relation to the goods or services to which the warranty relates. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You*

*are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.*

## **6. Severability**

If a part, provision or clause of this "Limited Warranty for PV Modules", or the application thereof to any person or circumstance, is held invalid, void or unenforceable, such holding shall not affect and shall leave all other parts, provisions, clauses or applications of this "Limited Warranty for PV Modules", and to this end such other parts, provisions, clauses or applications of this "Limited Warranty for PV Modules" shall be treated as severable.

## **7. Disputes**

In case of any discrepancy in a warranty-claim, a first-class international test-institute such as Fraunhofer ISE in Freiburg/ Germany, TÜV Rheinland in Cologne/ Germany or ASU Arizona State University shall be involved to judge the claim finally. All fees and expenses shall be borne by the losing party, unless otherwise awarded.

## **8. Various**

The repair or replacement of the MODULES or the supply of additional MODULES, does not cause the beginning of new warranty terms, nor shall the original terms of this "Limited Warranty for PV Modules" be extended. Any replaced MODULES shall become the property of SUNTECH POWER made for their disposal. SUNTECH POWER has the right to deliver another type (different in size, colour, shape and/or power) in case SUNTECH POWER has discontinued producing the replaced MODULES at the time of the claim.

## **9. Warranty Transfer**

This "Limited Warranty for PV Modules" is transferable when the product remains installed in its original installation location.

## **10. Force Majeure**

SUNTECH POWER shall not be responsible or liable in any way to the consumer or any third-party arising from any non-performance or delay in performance of any terms and conditions of sale, including this "Limited Warranty for PV Modules", due to acts God, war, riots, strikes, warlike conditions, plague or other epidemics, fire, flood, or any other similar cause or circumstance beyond the reasonable control of SUNTECHPOWER. In such cases, performance by SUNTECHPOWER of this Limited Warranty shall be suspended without liability for the period of delay reasonably attributable to such causes.

## **11. Validity**

This "Limited Warranty for PV Modules" is valid for all MODULES dispatched from SUNTECH POWER's factories between 1st January 2012 and 31st December 2012.

THIS "LIMITED WARRANTY FOR PV MODULES" WILL BECOME NULL AND VOID IF THE MODULE IS TRANSFERRED FROM THE ORIGINAL CONTINENT OF DESTINATION (E.G. NORTH AMERICA, EUROPE, ASIA, AUSTRALIA, AFRICA OR SOUTH AMERICA) WITHOUT WRITTEN PERMISSION FROM SUNTECH POWER. ALL CUSTOMERS, DIRECT AND INDIRECT, ARE HEREBY NOTIFIED OF SUCH POTENTIALNULLIFICATION.

## **12. Contact**

In case of questions regarding our products, quality and performance contact the regional headquarters or your nearest SUNTECH POWER office which can be found at [www.suntech-power.com](http://www.suntech-power.com)

### **Suntech Power Australia Pty Ltd**

Add: Suite 1101, level 11, 201 Miller Street, North Sydney NSW 2060, Australia

Tel:+61 81882450

Fax:+61 81882440

Email: [services@suntech-power.com.au](mailto:services@suntech-power.com.au)





## WE WILL MATCH ANY COMPETITORS GENUINE WRITTEN QUOTE ON AN IDENTICAL SYSTEM.\*

\*Conditions Apply

- System must be using identical components
- System must be identical in design and installation plan



## OUR CUSTOMERS ARE SO SATISFIED WITH OUR PRODUCTS & WORKMANSHIP THEY'RE WILLING TO TELL YOU ABOUT IT

"Ash and the guys at Bundaberg Solar are professional but so down to earth. It was like having a mate come and do the job"

**Col Templeton, Bundaberg**

"We've told everyone about them. We had a heap of energy saving lights installed free of charge when they came and did the install so we could really take advantage of the cost savings" - **Daryl & Loraine Swift, Bundaberg**

"I'm a single mum and finances are tight so I put my solar system on Certegy finance. I can now put the money I normally spend on my bill, straight towards paying off my solar" – **Donna Farrell, Urangan**

"Bundaberg Solar install for the other mobs so why deal with a sales man. I went straight to the installer who knew how to answer my questions, how the stuff works and how to fix it.....and he's just down the road" **Kev Thomas, Moore Park**

"I've been dealing with Ash for years. He's done work for me as far away as Blackwater and as local as Bundaberg. Nothings ever too much to ask and I'll be dealing with him for years to come yet" **Barry Hurst, Barga**



## CLIENT REFERRAL REWARDS

Tell a friend or family member about Bundaberg Solar and if we successfully install a system for them, you'll receive a \$200 Coles Myer Gift Card. Don't forget to tell us if one of our clients referred you also.



# WHAT HAPPENS NEXT?

## **SIGN QUOTE, COMPLETE IES FORM & CERTEGY PAPERWORK** (If financing)

(You will need your latest Electricity Bill and Rates Notice for this)

Please don't forget to put AC Electrical & Air as your installer. We fax this form to Ergon immediately for approval. Certegy approval is instant.



## **ERGON APPROVAL**

Approval can take between 1-2 weeks. We call Ergon to confirm approval and/or adjustments. You will receive written notice that your system is ready for connection.



## **CONFIRM INSTALL DATE**

Once we have verbal approval of your solar we will contact you to book your install date. If you require any extras such as lighting or other electrical work, please confirm this at this time.



## **SOLAR INSTALL**

Solar installs are normally done in one day. We will show you how to read your solar and identify any issues. Customer to sign completion paperwork. After your system is installed we submit a Form A to Ergon.



## **ERGON INSTALL NEW METER**

Upon us submitting your Form A, Ergon will call you to arrange a time to install a new meter for your solar. This can take between 1-3 weeks.