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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Simax (Suzhou) Green New Energy Co., Ltd.**

**SM596 Black 245-270**

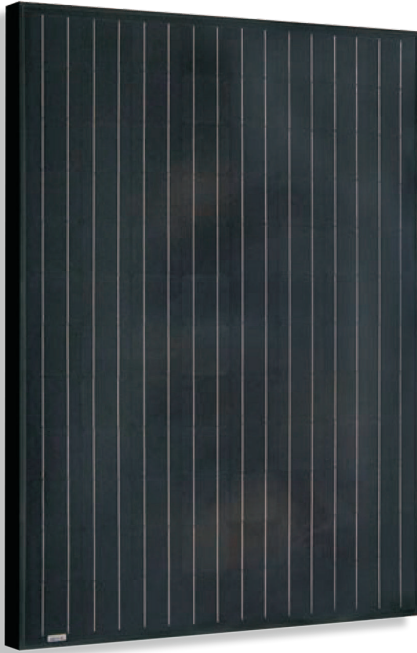
**OSM596-255**

Also available on the web at

[EnergyPal.com/simax-suzhou-green-new-energy-co-ltd-solar-panels/0sm596-255](http://EnergyPal.com/simax-suzhou-green-new-energy-co-ltd-solar-panels/0sm596-255)



## Product Features



**Positive tolerance**  
Guaranteed tolerance +3%  
Reliable power output



**High module efficiency**  
Module efficiency up to 16.1%  
Cells efficiency up to 18.7%



**Strong compressive strength**  
Certified to withstand high wind of 2400Pa  
and snow loads of 5400Pa



**High manufacture standards**  
certified to high standards by the  
most reputable labs According to  
IEC:61215: IEC:61730-1/2



**International Management System**  
Manufactured and certified according  
to ISO9001, Quality management system



**Fire test approved**  
Application class A, Safety Class II, Fire Rating C



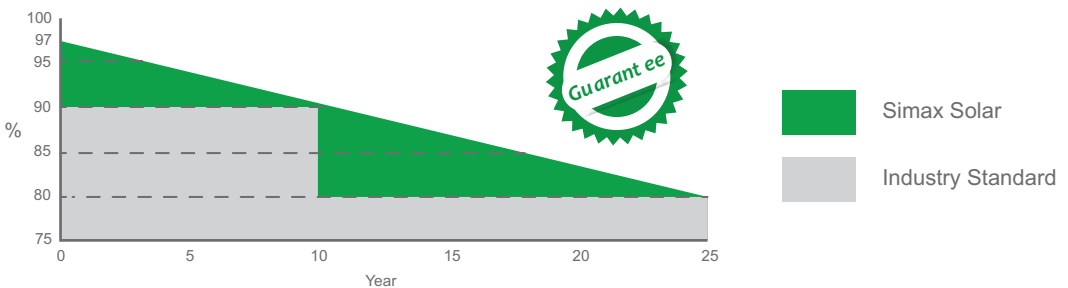
**Excellent performance under extreme condition**  
High salt mist and ammonia resistance



**Reliable quality forever**  
Without potential induced  
degradation(PID-free)

## Leading Warranty in PV Industry

- 25 year transferrable power output warranty: 10 years / 90%, 25 years / 80%
- Linear performance warranty from SIMAX Power
- 12 year material and workmanship warranty



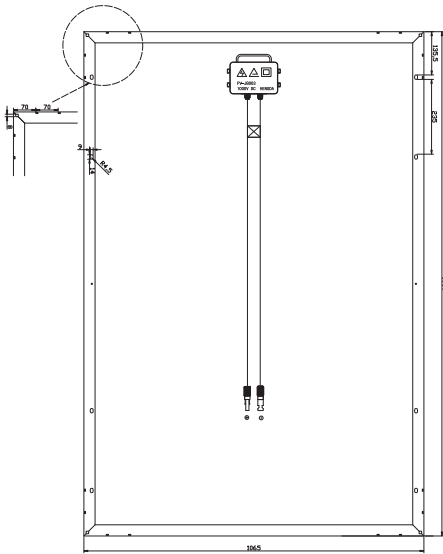
\* Please refer to Simax Solar Product Warranty for details.



## Electrical Characteristics

Parameters	SM596-245	SM596-250	SM596-255	SM596-260	SM596-265	SM596-270
Peak power [Wp] $P_{mpp}$	245W	250W	255W	260W	265W	270W
Power Tolerance	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%
Module Efficiency (%)	14.7%	15.0%	15.3%	15.5%	15.7%	16.1%
Open circuit voltage [V] $V_{oc}$	59.2	59.8	59.8	60.1	60.5	60.7
Maximum Power Voltage [V] ( $V_{mpp}$ )	48.5	49.0	49.0	49.1	49.1	49.3
Maximum Power Current [A] ( $I_{mpp}$ )	5.05	5.10	5.20	5.30	5.39	5.47
Short circuit Current [A] ( $I_{sc}$ )	5.45	5.51	5.62	5.72	5.85	5.91

STC: Irradiance : 1000 W/m<sup>2</sup>; Spectrum AM 1,5; Cell temperature: 25°C; Wind 0 m/s



## Mechanical Characteristics

Solar Cell	Monocrystalline silicon 125 x 125 (mm)
No. of Cells	96 ( 8 x 12 )
Dimensions	1580 x 1065 x 50 mm (Option 35 / 40 mm)
Weight	20.2 kg
Front Glass	3.2mm (0.13 inches) tempered glass
Frame	Anodized aluminum alloy

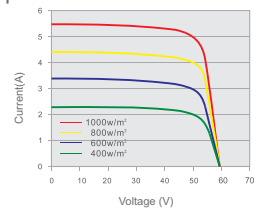
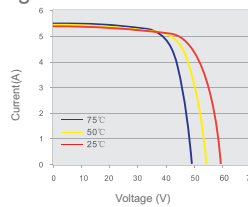
## Output

Cable Type	Ø = 4 mm <sup>2</sup>
Lengths	L = 1400 mm
Junction Box	PV - JB003 MC4

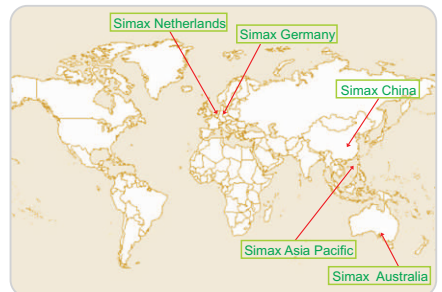
## Temperature Coefficients

Nominal Operating Cell Temperature (NOCT)	45 ± 2°C
Temperature Coefficient of ( $P_{max}$ )	-0.39% / °C
Temperature Coefficient of ( $V_{oc}$ )	-0.34% / °C
Temperature Coefficient of ( $I_{sc}$ )	0.052% / °C

- Provide the best solutions for photovoltaic power generation and technical support
- Provide Cost-effective products
- Provide 12 Years Quality Warranty
- Power out ≥ 90% in 10 years
- Power out ≥ 80% in 25 years



Global standby to ensure response within 24 hours  
Australia and Europe office were established to give better services to customers



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