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EnergyPal

Solar Panel Guide Specification Data Sheet

AE Solar

AE SMP6-60_265-280W

AE SMP6-60 280W

Also available on the web at
EnergyPal.com/ae-solar-solar-panels/ae-smp6-60-280w



Inspiring green-energy since 2003

AE SMART HOT-SPOT FREE POLYCRYSTALLINE PV MODULES

AE SMP6-60 Series 270W-290W

tested by **Fraunhofer**
CSP

60 CELLS	SHADING RESISTANT	HOT SPOT RESISTANT	PID RESISTANT	SALT CORROSION RESISTANT	SAND RESISTANT	AMMONIA RESISTANT	HIGHLY STABLE AND TOUGH
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TEMPERATURE

Hot spot temperature lower than 85°C
The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.

SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

HIGH RETURNS

This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.

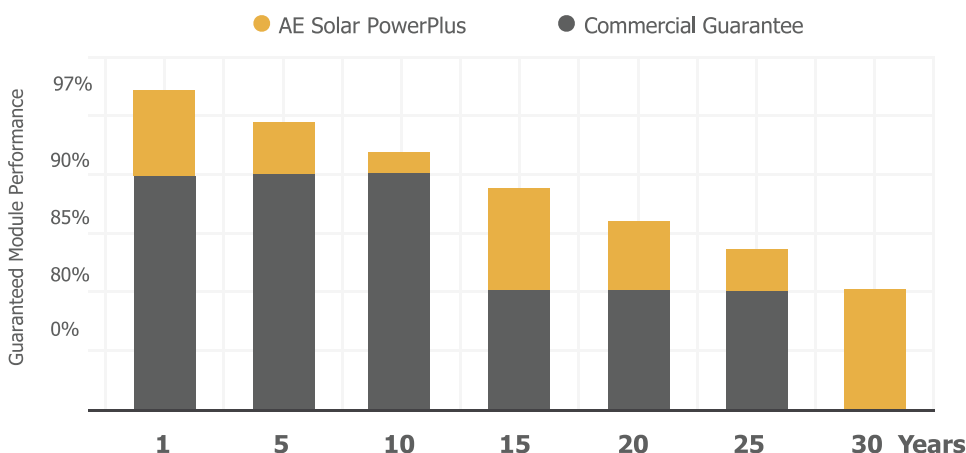
PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

OUR PERFORMANCE GUARANTEE



30
years
Performance Guarantee

12
years
Product Warranty



Deutsche
Qualität
Garantiert

TECHNICAL DATA

AE SMP6-60 Series 270W-290W

SPECIFICATIONS

		AE270SMP6-60	AE275SMP6-60	AE280SMP6-60	AE285SMP6-60	AE290SMP6-60
Nominal Max. Power	P _{max} (Wp)	270	275	280	285	290
Maximum power voltage	V _{mp} (V)	30.82	31.24	31.65	32.07	32.48
Maximum power current	I _{mp} (A)	8.76	8.80	8.85	8.89	8.93
Open-circuit voltage	V _{oc} (V)	38.31	38.52	38.72	38.93	39.14
Short-circuit current	I _{sc} (A)	9.31	9.35	9.38	9.44	9.47
Module efficiency	(%)	16.26	16.56	16.86	17.16	17.46
Power tolerance	P _{max} (Wp)	0 / + 5				
Maximum system voltage DC	(V)	1000				
Maximum series fuse rating	(A)	15				
Operating temperature	(°C)	-40 to +85				
Temp. coefficients of P _{max}	(%/°C)	-0.40				
Temp. coefficients of V _{oc}	(%/°C)	-0.313				
Temp. coefficients of I _{sc}	(%/°C)	0.05				
Nom. Operating cell temp.(NOCT)	(°C)	45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	60 (6 × 10)
Dimensions	1674 x 992 x 35mm
Weight	18 kg
Junction box	IP 67 rated
Output cable	1 x 4.0mm ² , 900mm length or customised
Connector type	MC 4 / MC 4 compatible
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400 Pa / 244 kg/m ²
Mechanic	5400 Pa / 550 kg/m ²

PACKAGING INFORMATION

Packing configuration	64 pcs / double pallet
Loading Capacity	896 pcs / 40HQ
Size / pallet (mm)	1710 x 1135 x 2325
Weight	1210 kg / pallet

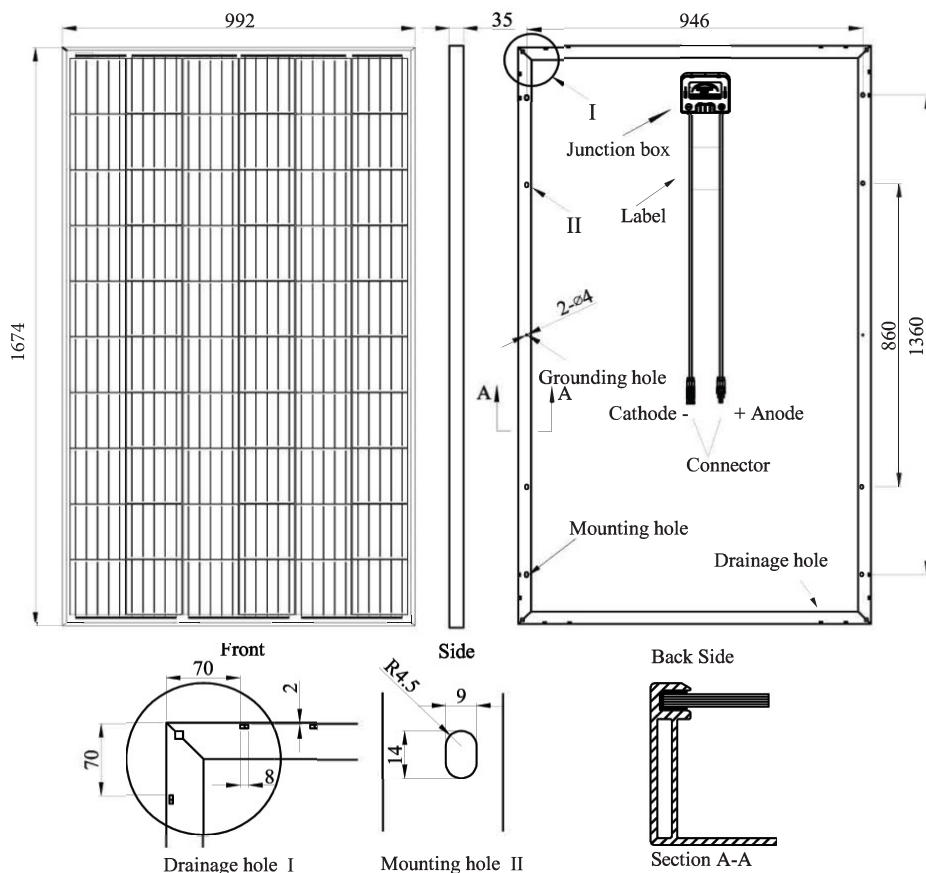
CERTIFICATES



FOR INNOVATIVE
SHADING RESISTANT
MODULES DEVELOPMENT

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DIMENSIONS



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