

For a Free Quote:

Web: EnergyPal.com/solar

Call: 1-800-990-3725

Email: contact@energypal.com

EnergyPal

Solar Panel Guide Specification Data Sheet

AE Solar

AE SMP6-60_265-280W

AE SMP6-60 265W

Also available on the web at
EnergyPal.com/ae-solar-solar-panels/ae-smp6-60-265w



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 |
|--------------------|--------------------------|---------------------------|----------------------|---------------------------------|-----------------------|--------------------------|--------------------------------|

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.

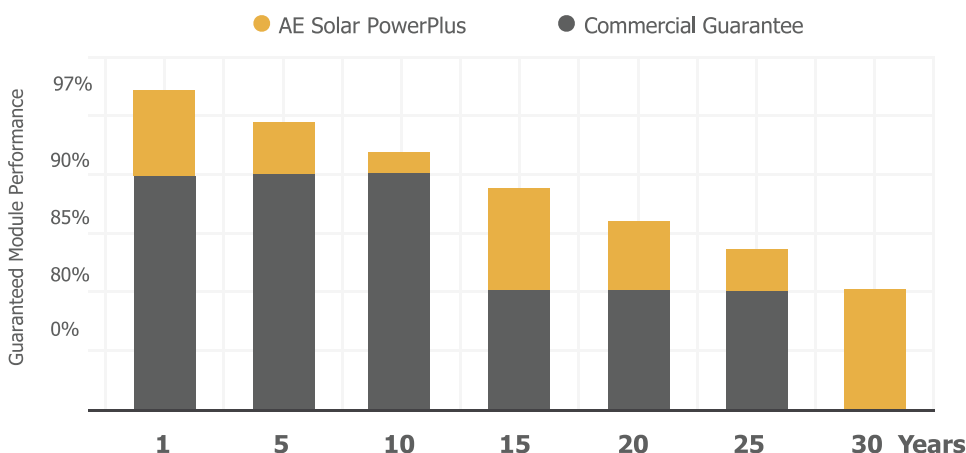
PLUS-SORTING

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 | Pmax (Wp) | 270 | 275 | 280 | 285 |
|---------------------------------|-----------|------------|-------|-------|-------|
| Maximum power voltage | Vmp(V) | 30.82 | 31.24 | 31.65 | 32.07 |
| Maximum power current | Imp (A) | 8.76 | 8.80 | 8.85 | 8.89 |
| Open-circuit voltage | Voc(V) | 38.31 | 38.52 | 38.72 | 38.93 |
| Short-circuit current | Isc (A) | 9.31 | 9.35 | 9.38 | 9.44 |
| Module efficiency | (%) | 16.26 | 16.56 | 16.86 | 17.16 |
| Power tolerance | Pmax (Wp) | 0 / + 5 | | | |
| Maximum system voltage DC | (V) | 1000 | | | |
| Maximum series fuse rating | (A) | 15 | | | |
| Operating temperature | (°C) | -40 to +85 | | | |
| Temp. coefficients of Pmax | (%/°C) | -0.40 | | | |
| Temp. coefficients of Voc | (%/°C) | -0.313 | | | |
| Temp. coefficients of Isc | (%/°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 x 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 |

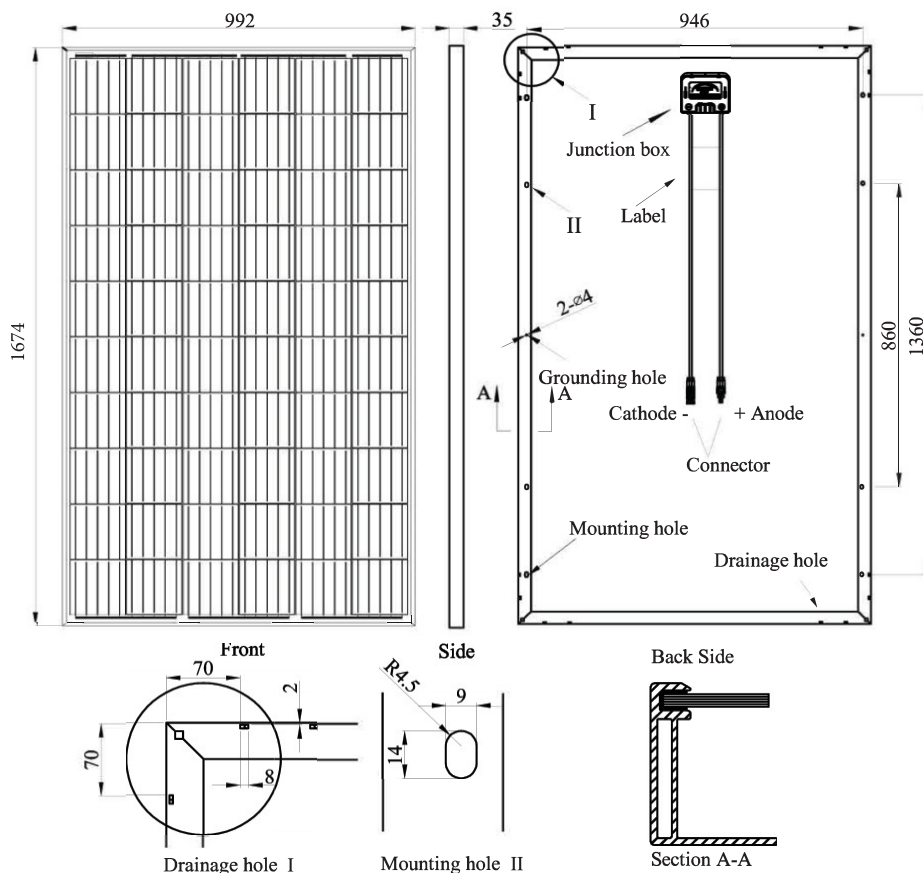
CERTIFICATES



FOR INNOVATIVE
SHADING RESISTANT
MODULES DEVELOPMENT

AES-DSH2019 V.002
All rights reserved. Specifications included in this data sheet are subject to change without notice.

DIMENSIONS



AE Solar GmbH

Messerschmittring 54
86343 Königsbrunn
Germany

Tel.: +49 8231 92 92 52 2
Fax: +49 8231 97 82 68 9
Email: sales@ae-solar.com
Web: www.ae-solar.com