



Inspiring green-energy since 2003

AE SMART HOT-SPOT FREE POLYCRYSTALLINE PV MODULES AE P6-36 Series 160W-175W

tested by  **Fraunhofer**
CSP

36

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.

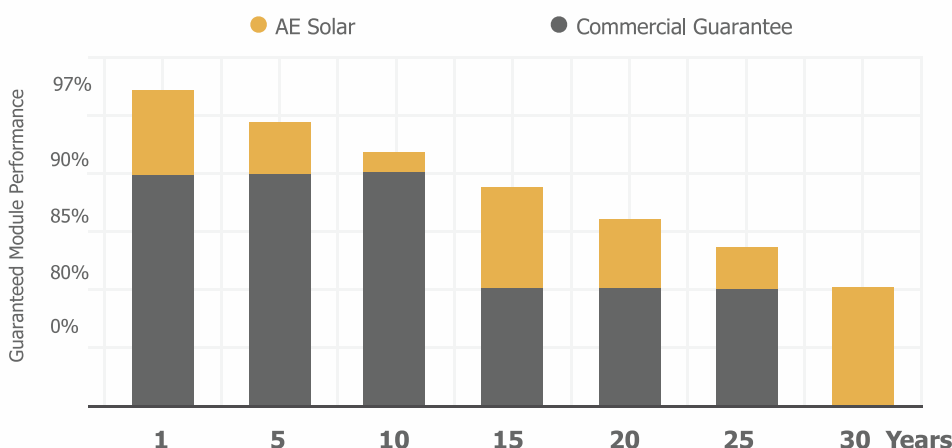
PLUS-SORTING

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 P6-36 Series 160W-175W

SPECIFICATIONS

		AE160P6-36	AE165P6-36	AE170P6-36	AE175P6-36
Nominal Max. Power	P _{max} (Wp)	160	165	170	175
Maximum power voltage	V _{mp} (V)	18.32	18.73	19.15	19.56
Maximum power current	I _{mp} (A)	8.73	8.81	8.88	8.95
Open-circuit voltage	V _{oc} (V)	22.90	23.10	23.31	23.52
Short-circuit current	I _{sc} (A)	9.31	9.35	9.42	9.48
Module efficiency	(%)	16.14	16.64	17.14	17.65
Power tolerance	P _{max} (Wp)	0 / + 4.99			
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)	-0.31			
Temp. coefficients of I _{sc}	(%/°C)	0.053			
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.

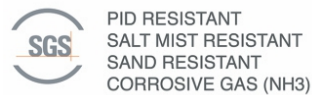
MATERIAL CHARACTERISTICS

Cell type	Poly-crystalline 156.75mm × 156.75mm
No. of cells	36 (4 × 9)
Dimensions	1512 × 670 × 35 mm
Weight	11.5 kg
Junction box	IP 67 rated
Output cable	1 × 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
Mechanical load	5400 Pa / 550 kg/m ²

PACKAGING INFORMATION

Packing configuration	90 pcs / double pallet
Loading Capacity	1350 pcs / 40HQ
Size / pallet (mm)	1540 × 1135 × 2370
Weight	1170 kg / double pallet

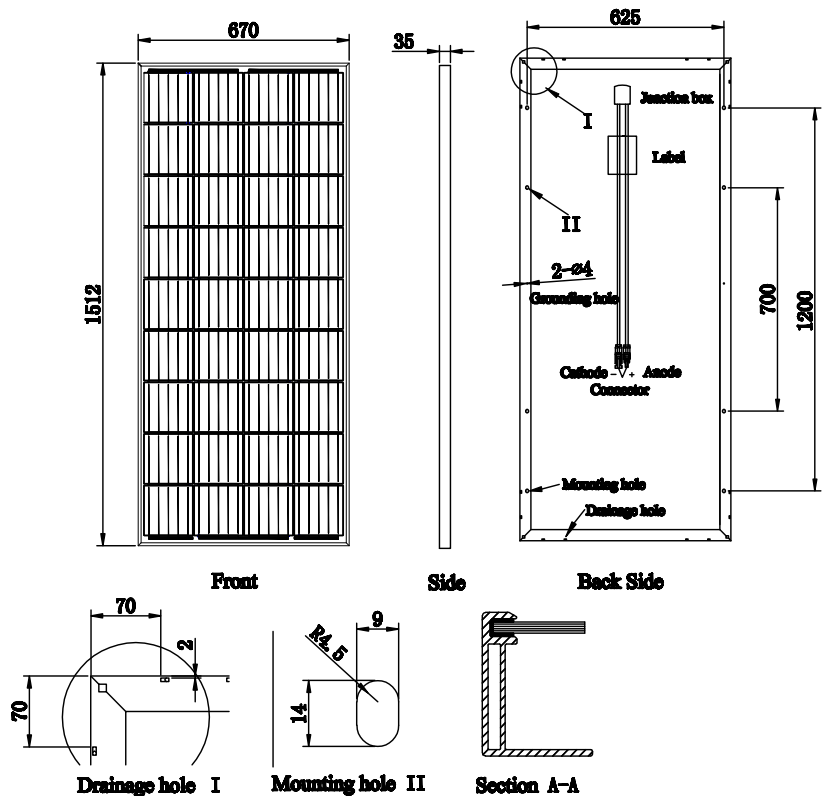
CERTIFICATES



FOR INNOVATIVE
SHADING RESISTANT
MODULES DEVELOPMENT

AES-DSH2019 V.002
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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