



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.

### 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.

### SAFETY

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

### 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.

### GERMAN QUALITY

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

### PLUS-SORTING

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

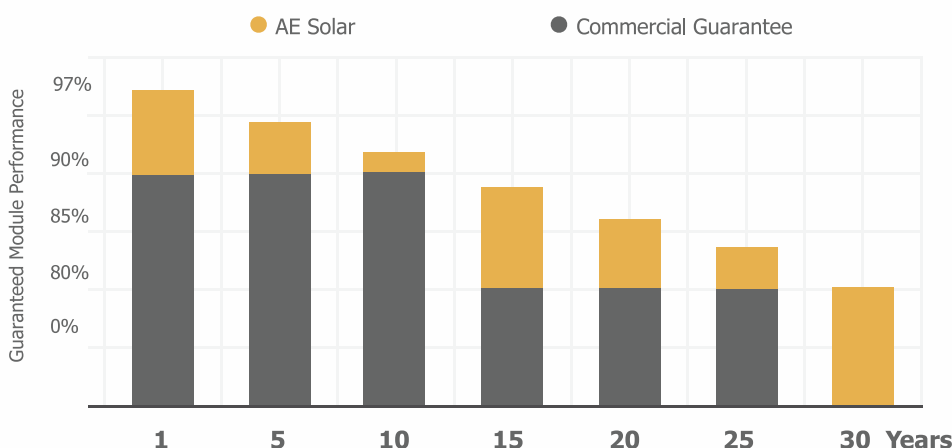
### PERFORMANCE GUARANTEE

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

### 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 <sub>max</sub> (Wp)	160	165	170	175
Maximum power voltage	V <sub>mp</sub> (V)	18.32	18.73	19.15	19.56
Maximum power current	I <sub>mp</sub> (A)	8.73	8.81	8.88	8.95
Open-circuit voltage	V <sub>oc</sub> (V)	22.90	23.10	23.31	23.52
Short-circuit current	I <sub>sc</sub> (A)	9.31	9.35	9.42	9.48
Module efficiency	(%)	16.14	16.64	17.14	17.65
Power tolerance	P <sub>max</sub> (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 <sub>max</sub>	(%/°C)	-0.40			
Temp. coefficients of V <sub>oc</sub>	(%/°C)	-0.31			
Temp. coefficients of I <sub>sc</sub>	(%/°C)	0.053			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

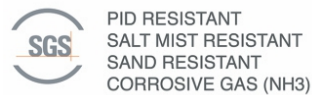
## MATERIAL CHARACTERISTICS

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 <sup>2</sup> , 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 <sup>2</sup>
Mechanical load	5400 Pa / 550 kg/m <sup>2</sup>

## 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

