

Inspiring green-energy since 2003

AE HALF CELL LARGE IEC 1500VDC  
MONOCRYSTALLINE PV MODULES  
AE HM6L-72 Series 525W-550W


tested by  **Fraunhofer**  
CSP

**144**  
CELLS

  
**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.

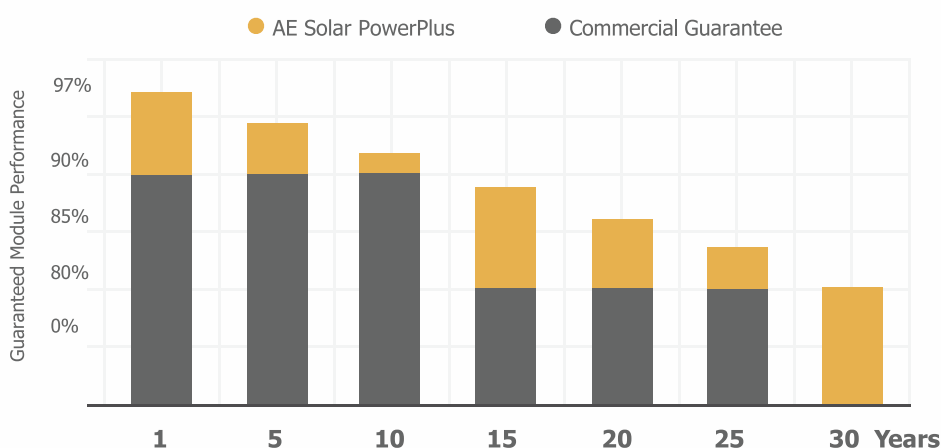
 **PLUS-SORTING**

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 HM6L-72 Series 525W-545W

## SPECIFICATIONS

AE525HM6L-72 AE530HM6L-72 AE535HM6L-72 AE540HM6L-72 AE545HM6L-72 AE550HM6L-72

Nominal Max. Power	Pmax (Wp)	525	530	535	540	545	550
Maximum power voltage	Vmp(V)	41.47	41.70	41.70	41.93	42.16	42.57
Maximum power current	Imp (A)	12.66	12.71	12.76	12.81	12.86	12.92
Open-circuit voltage	Voc(V)	49.50	49.65	49.78	49.90	50.01	51.44
Short-circuit current	Isc (A)	13.42	13.47	13.47	13.52	13.57	13.62
Module efficiency	(%)	20.3	20.5	20.7	20.9	21.1	21.3
Operating temperature	(°C)	-40 to +85					
Maximum system voltage DC	V (IEC)	1500					
Maximum series fuse rating	(A)	25					
Power tolerance	(%)	0/+4.99					
Temp. coefficients of Pmax	(%/°C)	-0.350					
Temp. coefficients of Voc	(%/°C)	-0.275					
Temp. coefficients of Isc	(%/°C)	0.045					
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.

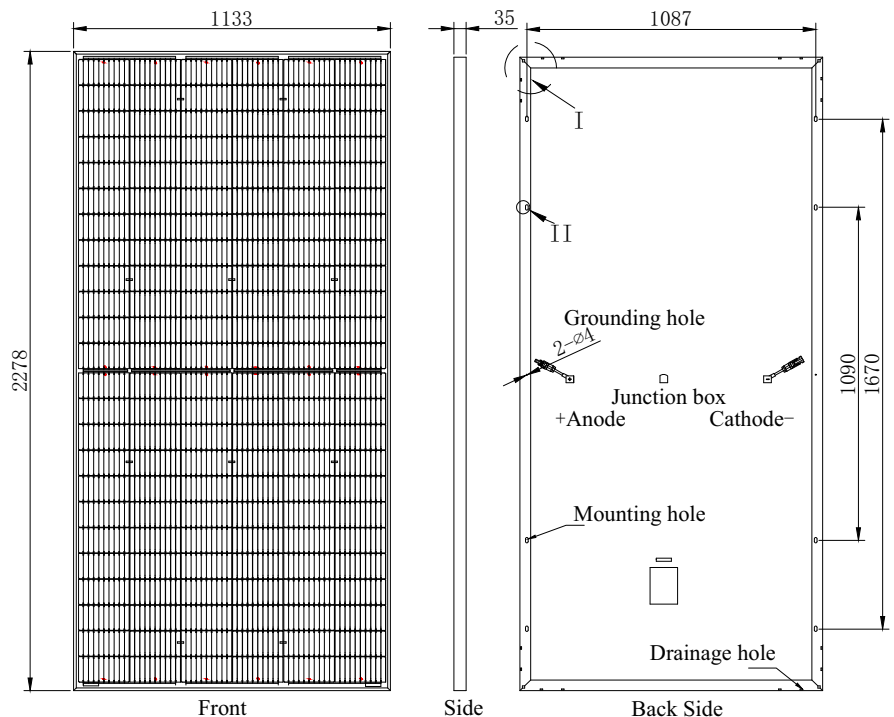
## MATERIAL CHARACTERISTICS

Cell type	Mono-crystalline 182 X 91 mm
No. of cells	144 Cells (72 Full Cells)
Dimensions	2278 X 1133 X 35
Weight	27KG
Junction box	IP 68 rated (3 bypass diodes)
Output cable	1 x 4.0mm <sup>2</sup> , 350 mm length or customised
Connector type	PV Connector
Hail resistance	Max. Ø 25 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	54pcs / double pallet
Loading Capacity	540 pcs / 40HQ
Size / pallet (mm)	2310x1135x2490
Weight	1640kg /double pallet

## DIMENSIONS



## CERTIFICATES



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