

Inspiring green-energy since 2003

AE LARGE CELL MONOCRYSTALLINE PV MODULES AE HM6-96 Series 500W-520W tested by Fraunhofer



CELLS



RESISTANT





SAND

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.



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.

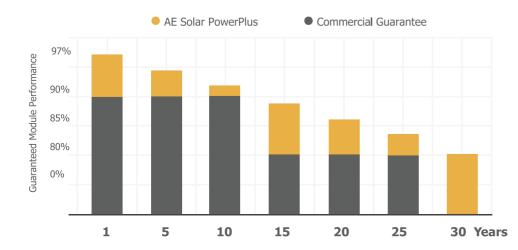
PLUS-SORTING

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











TECHNICAL DATA

AE HM6 Series 500W-520W

SPECIFICATIONS		AE500HM6-96	AE505HM6-96	AE510HM6-96	AE515HM6-96	AE520HM6-96
Nominal Max. Power	Pmax (Wp)	500	505	510	515	520
Maximum power voltage	Vmp(V)	52.30	52.71	53.18	53.65	54.05
Maximum power current	Imp (A)	9.56	9.58	9.59	9.60	9.62
Open-circuit voltage	Voc(V)	63.59	64.17	64.74	65.31	65.81
Short-circuit current	Isc (A)	10.08	10.09	10.10	10.11	10.13
Module efficiency	(%)	19.05	19.24	19.43	19.63	19.82
Operating temperature	(°C)			-40 to +85		
Maximum system voltage DC	V (IEC)			1000		
Maximum series fuse rating	(A)			15		
Power tolerance	(%)			0/+4.99		
Temp. coefficients of Pmax	(%/°C)			-0.37		
Temp. coefficients of Voc	(%/°C)			-0.28		
Temp. coefficients of Isc	(%/°C)			0.048		
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 Mono-crystalline 158.75*158.75 mm

No. of cells 96 Full Cells **Dimensions** 1979*1326*40

Weight 30KG

Junction box IP 67 rated (4 bypass diodes)

Output cable 1 x 4.0mm², 1200mm length or customised

MC 4 / MC 4 compatible Connector type Hail resistance Max. Ø 25 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² 5400 Pa / 550 kg/m² Mechanical load

CERTIFICATES

PID RESISTANT

SAND RESISTANT

CORROSIVE GAS (NH3)







SGS





IEC 61215

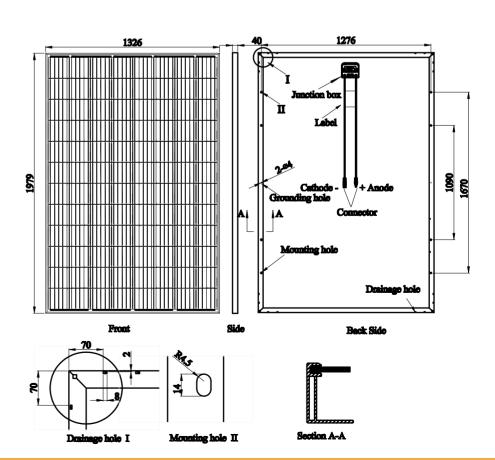
IEC 61730

PERIODICAL

PACKAGING INFORMATION

Packing configuration 42 pcs / double pallet Loading Capacity 462 pcs / 40HQ Size / pallet (mm) 2010x1120x2170 Weight 1330kg / pallet

DIMENSIONS



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