

AE BIFACIAL MONOCRYSTALLINE PV MODULES WITH TRANSPARENT BACKSH

AE MD - 144 Series 535W - 550V

144 **CELLS**











AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH



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



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



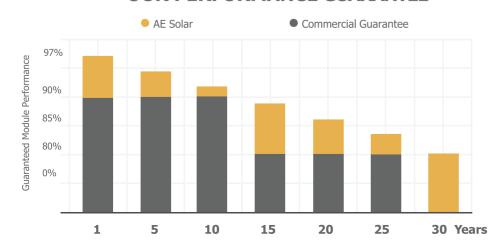
PLUS-SORTING

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 BIFACIAL SINGLE GLASS Series 535W - 550W						
SPECIFICATIONS		AE535MD-144	AE540MD-144	AE545MD-144	AE550MD-144	
Nominal Max. Power	Pmax (Wp)	535	540	545	550	
Maximum power voltage	$V_{MPP}(V)$	41.93	42.15	42.38	42.57	
Maximum power current	I _{MPP} (A)	12.76	12.81	12.86	12.92	
Open-circuit voltage	V _{oc} (V)	49.78	49.90	50.01	51.44	
Short-circuit current	I _{sc} (A)	13.52	13.57	13.62	13.67	
Module efficiency	(%)	20.73	20.92	21.12	21.31	
Operating temperature	(°C)	C) -40 to +85				
Maximum system voltage DC	V (IEC)	(IEC) 1500				
Maximum series fuse rating	(A)	25				
Power tolerance	(W)	0 ~ +5				
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)	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.

 $(\pm 5\%)$

Packing configuration

DIMENSIONS

Loading Capacity

Size / pallet

Weight

PACKAGING INFORMATION

62 pcs / double pallet

1804kg /double pallet

2310 x1140 x 2490 mm³

620 pcs / 40HQ

MATERIAL CHARACTERISTICS

Cell type Gallium doped Mono-crystalline 182 mm x 91 mm

Glazing 70%

No. of cells 144 Cells (72 Full Cells)

Dimensions 2278 mm x 1133 mm x 35 mm

Weight 27 kg

Bifaciality

Junction box IP 68 rated (3 bypass diodes)

Output cable 1 x 4.0 mm², 350 mm length or customised

Connector type MC4 / MC4 compatible

Frame Anodic oxidation coated aluminum

Hail resistance Max. Ø 25 mm, at 23 m/s

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

CERTIFICATES





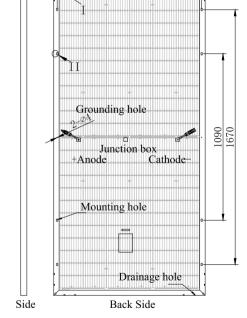






Front

1133





9



Drainage hole I

Mounting hole II

Section A-A

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

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