



Inspiring green-energy since 2003



AE BIFACIAL DOUBLE GLASS MONOCRYSTALLINE PV MODULES

AE MD - 1 44BD Series 535W - 550W

144 CELLS	PID RESISTANT	SALT CORROSION RESISTANT	SAND RESISTANT	NH₃ RESISTANT	HIGHLY STABLE AND TOUGH
---------------------	-------------------------	------------------------------------	--------------------------	------------------------------------	-----------------------------------

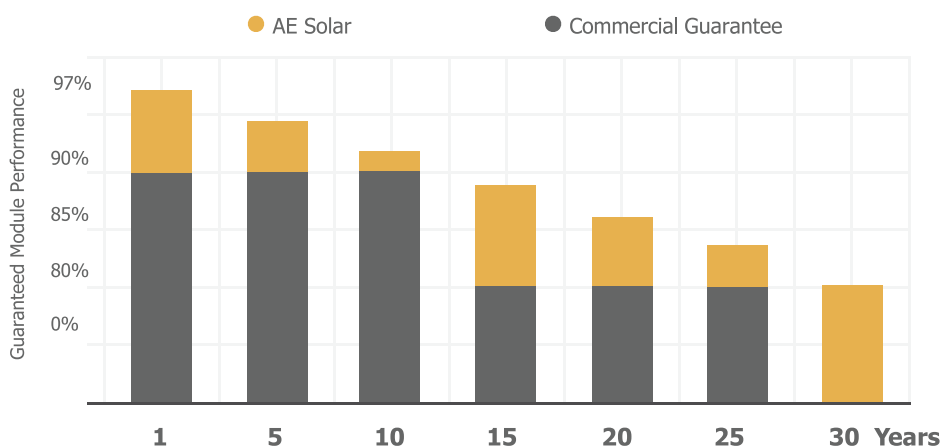
✓ GERMAN QUALITY
AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

+ 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 BIFACIAL DOUBLE GLASS Series 535W - 550W

SPECIFICATIONS

AE535MD-144BD AE540MD-144BD AE545MD-144BD AE550MD-144BD

Nominal Max. Power	P _{max} (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)	-40 to +85			
Maximum system voltage DC	V (IEC)	1500			
Maximum series fuse rating	(A)	25			
Power tolerance	(W)	0 ~ +5			
Temp. coefficients of P _{max}	(%/°C)	-0.350			
Temp. coefficients of V _{oc}	(%/°C)	-0.275			
Temp. coefficients of I _{sc}	(%/°C)	0.045			
Nom. Operating cell temp.(NOCT)	(°C)	45±2			
Bifaciality	Glazing 70%	(±5%)			

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.

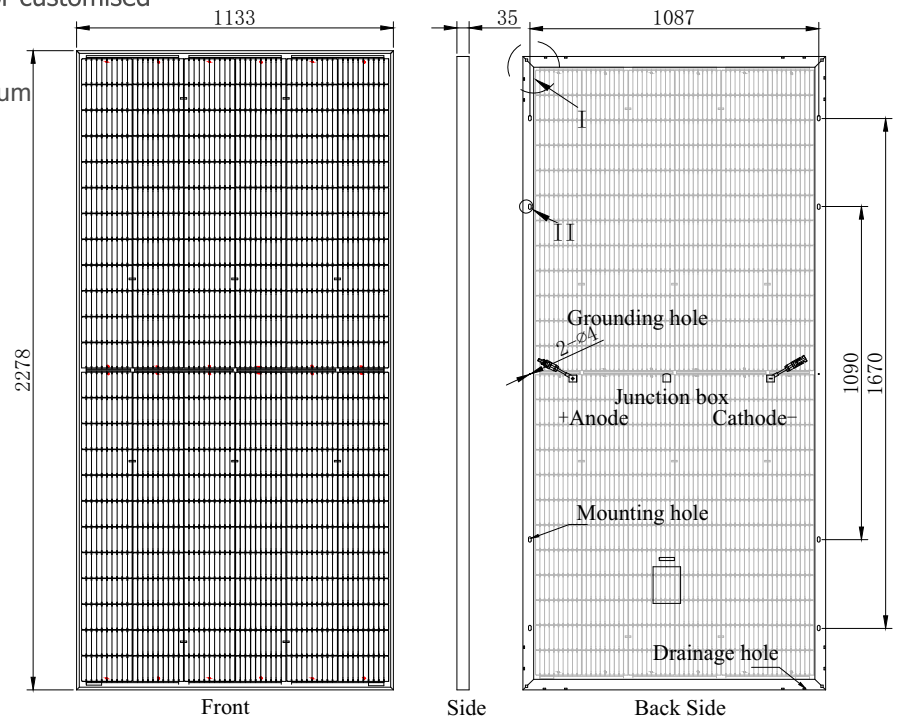
MATERIAL CHARACTERISTICS

Cell type	Gallium doped Mono-crystalline 182 mm x 91 mm
No. of cells	144 Cells (72 Full Cells)
Dimensions	2278 mm x 1133 mm x 35 mm
Weight	33 kg
Junction box	IP 68 rated (3 bypass diodes)
Output cable	1 x 4.0 mm ² , 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/m ²
Mechanical load	5400 Pa / 550 kg/m ²

PACKAGING INFORMATION

Packing configuration	62 pcs / double pallet
Loading Capacity	620 pcs / 40HQ
Size / pallet	2310 x 1140 x 2490 mm ³
Weight	2170kg /double pallet

DIMENSIONS



CERTIFICATES



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