

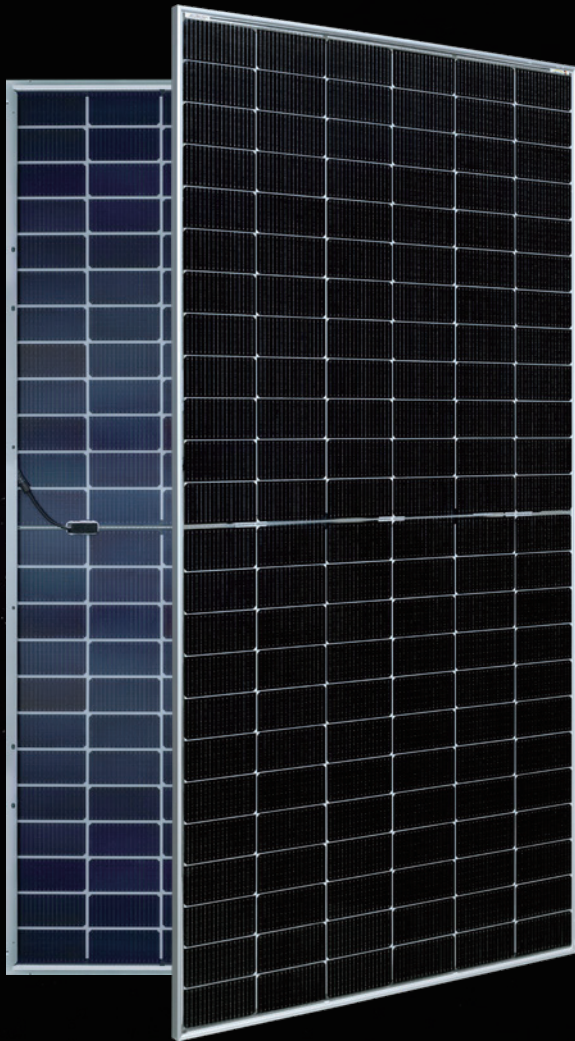
Deutsche
Qualität
Garantiert

TIER 1
BloombergNEF



AESOLAR

since 2003



mete^{///}r

More power, less degradation

30
years

Performance
Guarantee

15
years

Product
Guarantee

560W-580W

AE CMD-144BDS Series

N-TYPE TOPCON TECHNOLOGY PV MODULES
HALF-CUT CELLS • BIFACIAL • DOUBLE-GLASS

www.ae-solar.com

ver. 23.10.1

144

HALF
CELLS

182
mm

CELL
SIZE



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



SAND
RESISTANT



AMMONIA
RESISTANT

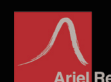


HIGHLY STABLE
AND TOUGH



IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored

IEC 62716 (Ammonia corrosion)
IEC 61701 (Salt mist corrosion)
IEC 60068 (Sand and dust)
IEC 62804 (PID resistance)



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Mechanical and design specification

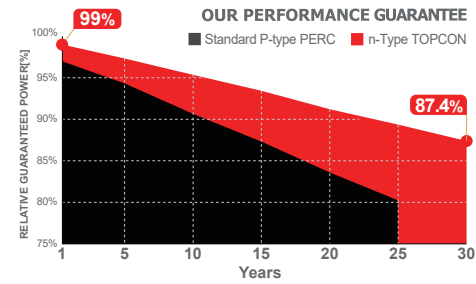
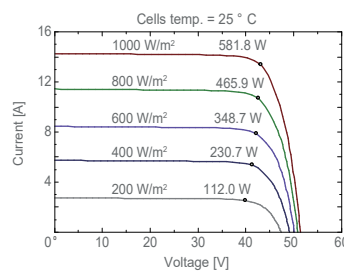
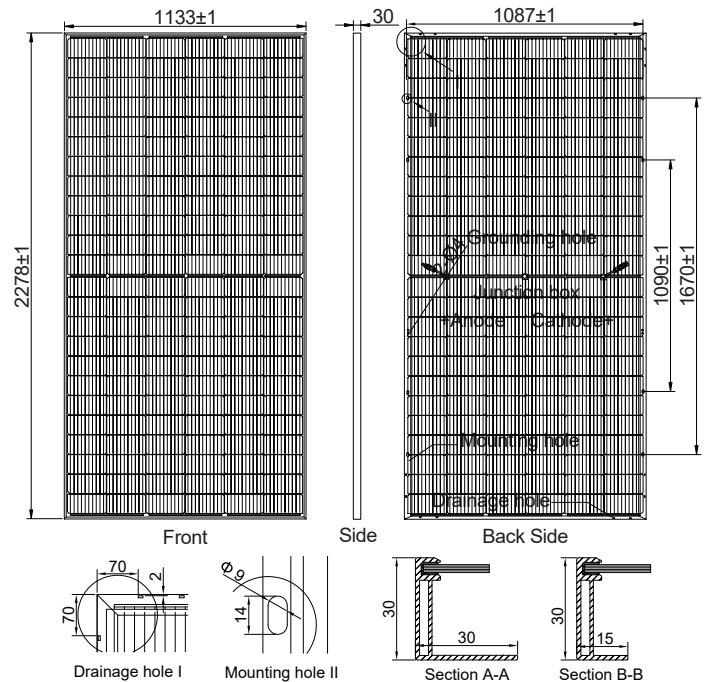
Cell type	N-type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	144
Bifaciality	80±5%
Glass	2.0 mm, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP68 rated, 3 Bypass Diodes
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm ² , 1200 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2278 mm x 1133 mm x 30 mm
Weight	31 kg
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
Fire Rating	Class A (according to UL 790)

Packaging information

Packaging configuration	72 pcs / double pallets
Loading capacity	720 pcs / 40 HQ
Size / Double pallets	2310 mm x 1140 mm x 2490 mm
Weight	2320 kg / double pallets

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P _{max}	(%/°C)	-0.30
Temp.coefficient of V _{oc}	(%/°C)	-0.25
Temp.coefficient of I _{sc}	(%/°C)	0.046
Nom. operating temp. NOCT	(°C)	42 ± 2



Electrical specifications (STC*): AE560CMD-144BDS AE565CMD-144BDS AE570CMD-144BDS AE575CMD-144BDS AE580CMD-144BDS

	P _{max} (Wp)	560	565	570	575	580
Nominal Max. Power	P _{max} (Wp)	560	565	570	575	580
Maximum operating voltage	V _{MPP} (V)	42.40	42.56	42.72	42.88	43.04
Maximum operating current	I _{MPP} (A)	13.21	13.28	13.34	13.41	13.49
Open-circuit voltage	V _{oc} (V)	50.23	50.39	50.55	50.68	50.86
Short-circuit current	I _{sc} (A)	14.14	14.20	14.26	14.33	14.40
Module efficiency	η (%)	21.70	21.89	22.08	22.28	22.47
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	25				

*STC: Standard test conditions (Irradiance 1000 W/m², Cell temperature 25°C and air mass of AM1.5)

Electrical specifications (NMOT*): AE560CMD-144BDS AE565CMD-144BDS AE570CMD-144BDS AE575CMD-144BDS AE580CMD-144BDS

	P _{max} (Wp)	426.0	430.1	434.0	437.4	440.0
Nominal Max. Power	P _{max} (Wp)	426.0	430.1	434.0	437.4	440.0
Maximum operating voltage	V _{MPP} (V)	39.30	39.50	39.70	39.80	39.90
Maximum operating current	I _{MPP} (A)	10.84	10.89	10.94	10.99	11.04
Open-circuit voltage	V _{oc} (V)	47.50	47.70	47.80	48.00	48.20
Short-circuit current	I _{sc} (A)	11.40	11.45	11.50	11.55	11.60

*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

The specifications and characteristics contained in this datasheet may deviate slightly from our actual products due to the product developments and uncertainty of measurement devices. The specifications included in the datasheet are subject to change without prior notice.