



Deutsche
Qualität
Garantiert



METEOR
N-TYPE TOPCON TECHNOLOGY

CMD-144BDS/FC 560W-580W

More power, less degradation

- ★ Unique Short-Edge-Smooth Design effectively reduces the impact of dust accumulation and improves power generation gain under extreme weather condition.
- ★ Applied to all the application scenarios and Ideal for small angle installation scenarios.
- ★ High reliability, stable operation under harsh conditions.
- ★ Using excellent frame sealing technology to ensure the IP68 Waterproof and the mechanical load.

30 YEARS
Performance Warranty

up to **30 YEARS***
Product Warranty

*The regular product warranty is 15 years, please refer to the latest version of AESOLAR Limited Warranty for the duration of the product warranty under special conditions. for extensions, please contact AESOLAR staff.



LID
RESISTANT



PID
RESISTANT



SALT CORROSION
RESISTANT



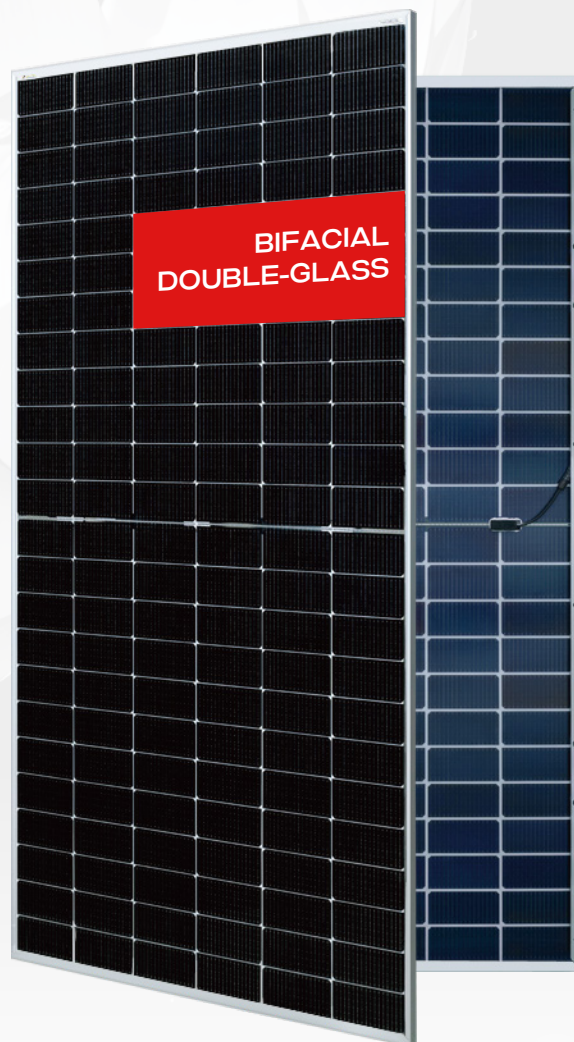
SAND
RESISTANT



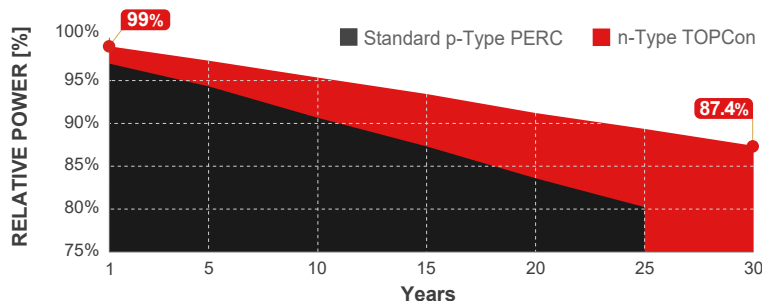
AMMONIA
RESISTANT



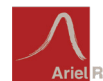
HIGHLY STABLE
AND TOUGH



OUR PERFORMANCE WARRANTY



SYSTEM AND PRODUCT CERTIFICATIONS



IEC 61215 IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111257249

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



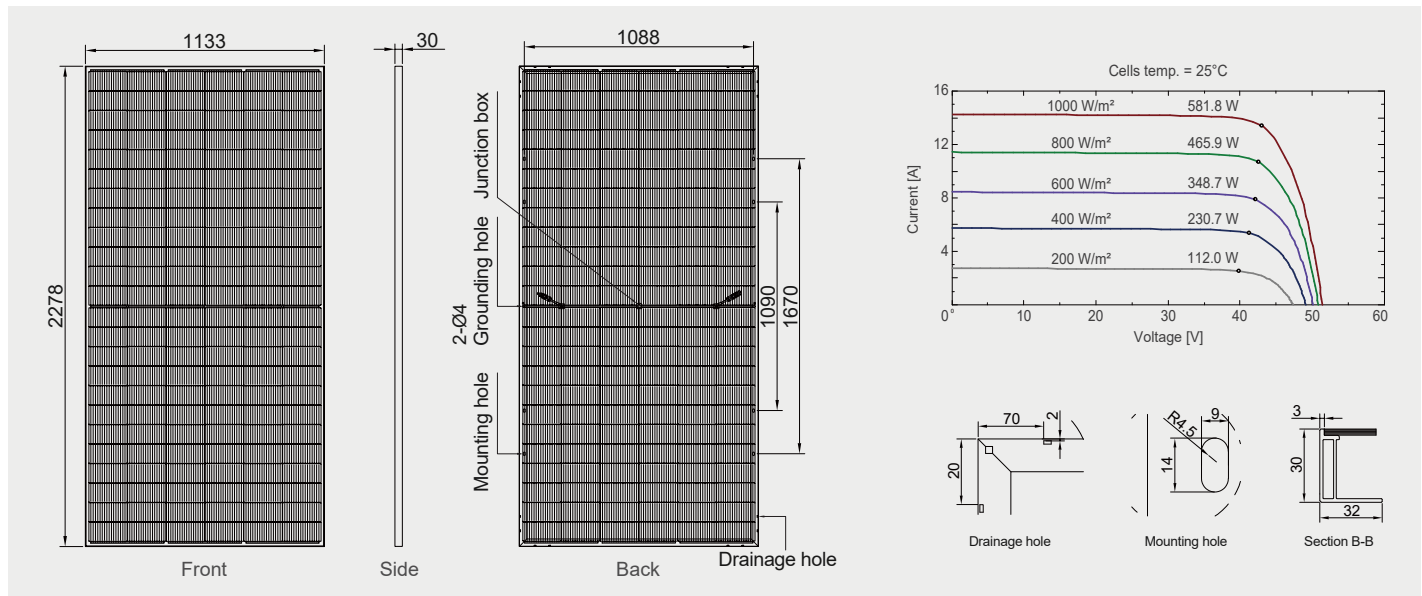
AESOLAR

www.ae-solar.com

AE CMD-144BDS/FC 560W-580W

N-TYPE TOPCON TECHNOLOGY PV MODULE

BIFACIAL • DOUBLE-GLASS



Electrical specifications (STC*):

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)	50.38	50.49	50.62	50.73	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), measurement tolerance P_{max} : $\pm 3\%$

Electrical specifications (NMOT*):

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)

Bifacial electrical specifications

Max. power front-side P_{max} front (Wp)	560	565	570	575	580
Backside Power Gain	5% 10%	5% 10%	5% 10%	5% 10%	5% 10%
Total equivalent power P_{max} equ (Wp)	588 616	593 622	598 627	604 633	610 639
Module efficiency η (%)	22.79 23.87	22.99 24.09	23.18 24.29	23.39 24.51	23.62 24.75

*Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on the mounting (structure, height, tilt angle, etc.) and albedo of the ground.

Mechanical and design specification

Cell type	n-Type TOPCon technology, half-cut cells
No. of cells	144
Bifaciality	80 $\pm$ 5%
Front cover	2.0 mm glass, 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 mm², 350 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 or 244 kg/m²
Snow load	5400 Pa or 550 kg/m²
Fire rating	Class A (according to UL 790)

Temperature ratings

Operating temperature	-40 to +85°C
Temp. coefficient of P_{max}	-0.29 %/°C
Temp. coefficient of V_{oc}	-0.25 %/°C
Temp. coefficient of I_{sc}	0.046 %/°C
Nom. operating cell temp. NOCT	42 $\pm$ 2°C

Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	720 pcs / 40 HQ
Size / Pallet	2310 mm x 1140 mm x 1245 mm
Weight	1160 kg / pallet