



Deutsche
Qualität
Garantiert



N-TYPE TOPCON TECHNOLOGY

Terra E (CMD-80BD) 315W- 335W

40%
HIGH TRANSPARENCY

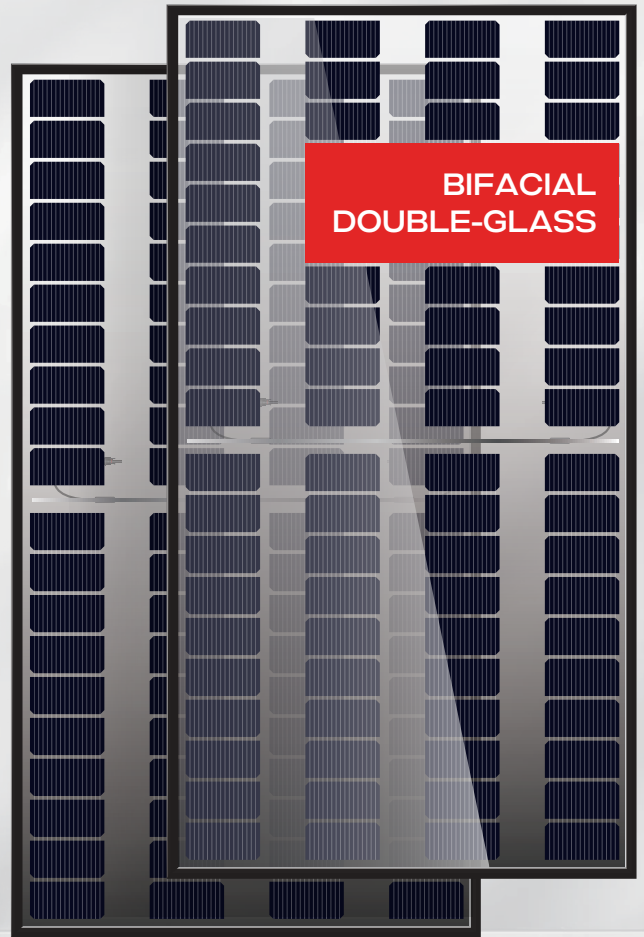
80
HALF CELLS

30 YEARS
Performance Warranty

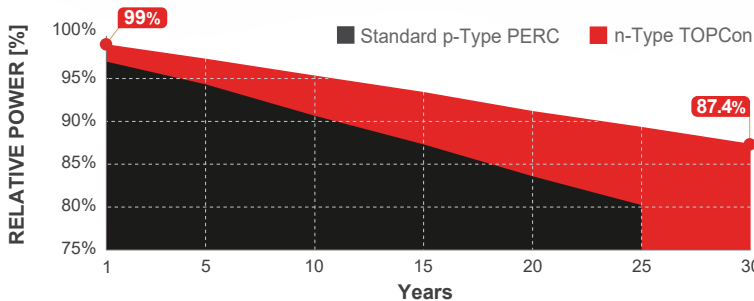
up to **30 YEARS***
Product Warranty

*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.

- Protects crops from heavy rain, hail, and wind
- Provides more stable temperature and humidity for crops
- Suitable for installation on greenhouse roofs
- 40% light transmission for homogeneous light distribution under the module
- Highly reliable and durable under mechanical loads



OUR PERFORMANCE WARRANTY



SYSTEM AND PRODUCT CERTIFICATIONS



LID RESISTANT



PID RESISTANT



SALT CORROSION RESISTANT



SAND RESISTANT



AMMONIA RESISTANT

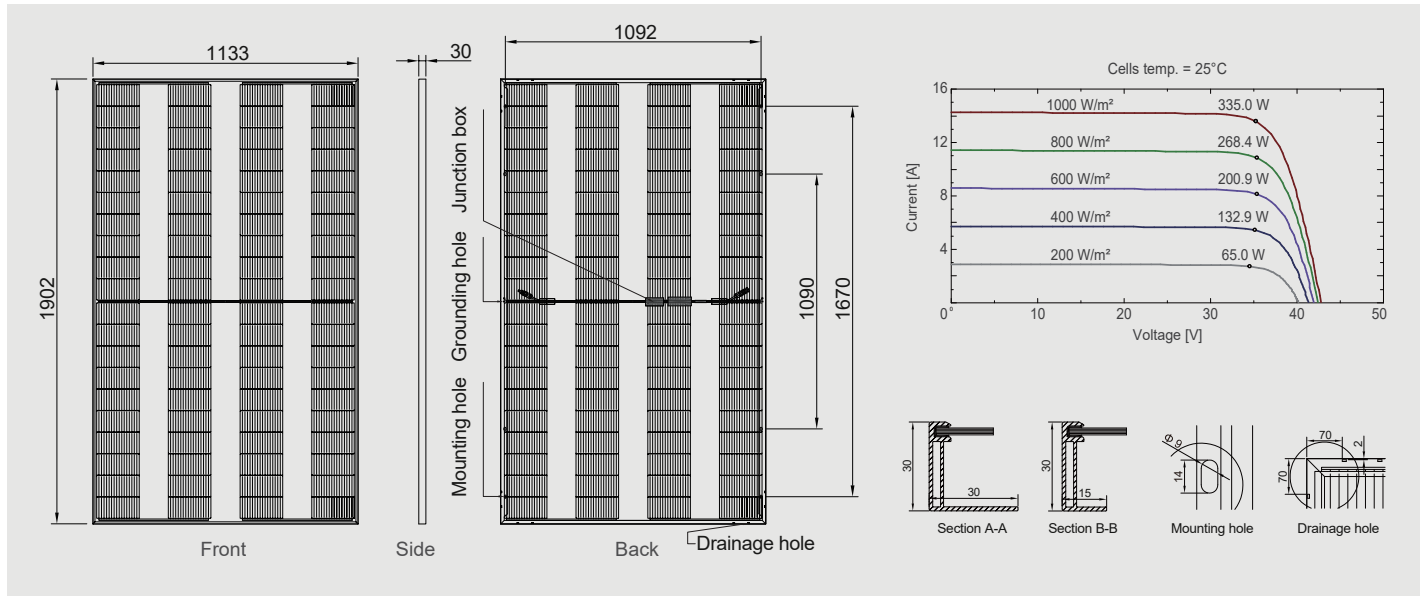


HIGHLY STABLE AND TOUGH

AE CMD-80BD 315W-335W

N-TYPE TOPCON TECHNOLOGY PV MODULE

BIFACIAL • DOUBLE-GLASS



Electrical specifications (STC*):

	P_{max} (Wp)	315	320	325	330	335
Nominal max. power	P_{max} (Wp)	315	320	325	330	335
Maximum operating voltage	V_{MPP} (V)	23.49	23.72	23.95	24.18	24.42
Maximum operating current	I_{MPP} (A)	13.41	13.49	13.57	13.65	13.72
Open-circuit voltage	V_{oc} (V)	28.18	28.47	28.75	29.05	29.35
Short-circuit current	I_{sc} (A)	14.15	14.23	14.31	14.38	14.45
Module efficiency	η (%)	14.62	14.85	15.08	15.31	15.55
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} : ±3%

Electrical specifications (NMOT*):

	P_{max} (Wp)	237	241	244	248	251
Nominal max. power	P_{max} (Wp)	237	241	244	248	251
Maximum operating voltage	V_{MPP} (V)	22.09	22.34	22.49	22.71	22.86
Maximum operating current	I_{MPP} (A)	10.73	10.79	10.85	10.92	10.98
Open-circuit voltage	V_{oc} (V)	26.27	26.55	26.74	27.02	27.20
Short-circuit current	I_{sc} (A)	11.42	11.49	11.55	11.62	11.68

*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	315		320		325		330		335	
P_{max} front (Wp)										
Backside Power Gain	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%
Total equivalent power										
P_{max} equ (Wp)	331	347	336	352	341	358	347	363	352	369
Module efficiency										
η (%)	15.35	16.08	15.59	16.34	15.83	16.59	16.08	16.84	16.33	17.11

*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	80
Transparency	40%
Bifaciality	80% +/- 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 (Including Connector)	1 x 4 mm², 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1902 mm x 1133 mm x 30 mm
Weight	25 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 ± 2°C

Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	864 pcs / 40 HQ
Size / Pallet	1945 mm x 1140 mm x 1245 mm
Weight	958 kg / pallet

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.