



Deutsche
Qualität
Garantiert



N-TYPE TOPCON TECHNOLOGY

CMER-132BDS 610W-630W

More power, less degradation

23.34%

MAXIMUM EFFICIENCY

132

HALF CELLS

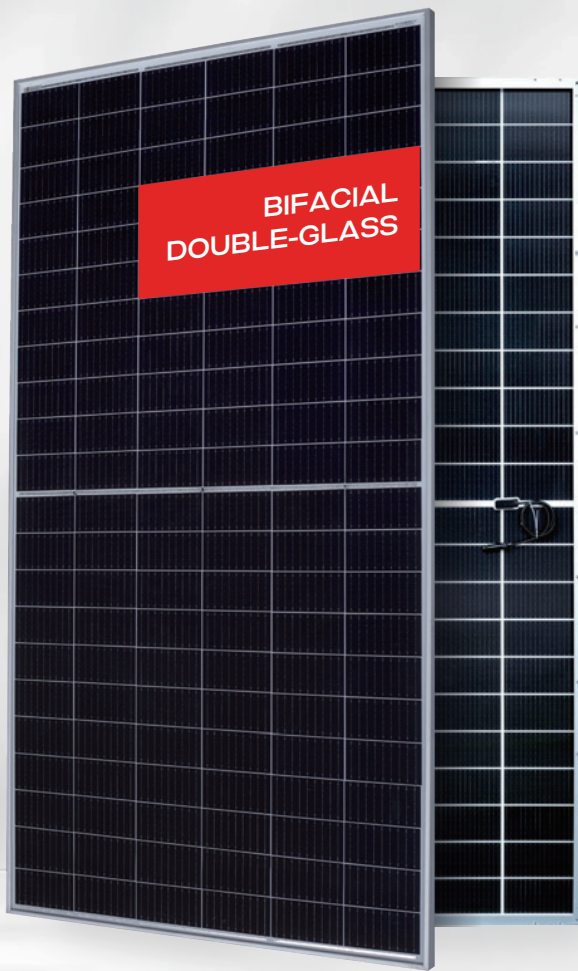
30 YEARS

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.



LID RESISTANT



PID RESISTANT



SALT CORROSION RESISTANT



SAND RESISTANT

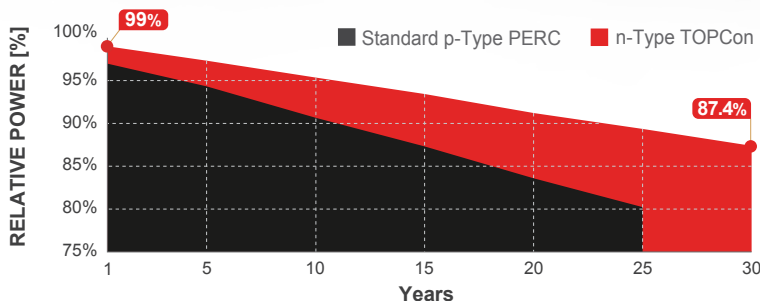


AMMONIA RESISTANT

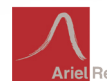


HIGHLY STABLE AND TOUGH

OUR PERFORMANCE WARRANTY



SYSTEM AND PRODUCT CERTIFICATIONS



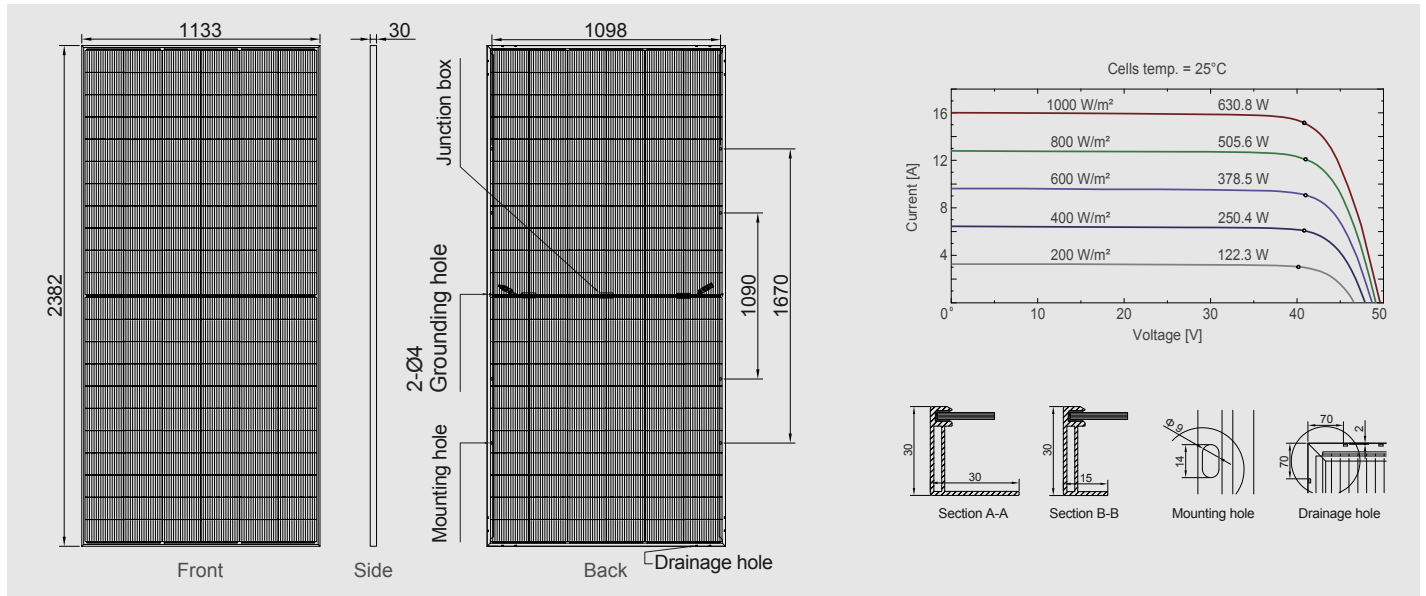
AESOLAR

www.ae-solar.com

AE CMER-132BDS 610W-630W

N-TYPE TOPCON TECHNOLOGY PV MODULE

BIFACIAL • DOUBLE-GLASS



Electrical specifications (STC*):

Parameter	Symbol	610	615	620	625	630
Nominal max. power	P_{max} (Wp)	610	615	620	625	630
Maximum operating voltage	V_{MPP} (V)	40.80	41.10	41.40	41.70	42.00
Maximum operating current	I_{MPP} (A)	14.95	14.96	14.98	14.99	15.00
Open-circuit voltage	V_{oc} (V)	49.00	49.30	49.60	49.90	50.20
Short-circuit current	I_{sc} (A)	15.96	15.99	16.03	16.06	16.09
Module efficiency	η (%)	22.60	22.79	22.97	23.16	23.34
Power tolerance	(W)	0~+5				
Maximum system voltage	(V)	1500				
Maximum series fuse rating	(A)	30				

*STC: Standard Test Conditions (irradiance 1000 W/m², cell temperature 25°C and air mass of AM1.5), measurement tolerance Pmax: ±3%

Electrical specifications (NMOT*):

Parameter	Symbol	467	470	474	478	482
Nominal max. power	P_{max} (Wp)	467	470	474	478	482
Maximum operating voltage	V_{MPP} (V)	38.20	38.40	38.60	38.80	39.00
Maximum operating current	I_{MPP} (A)	12.23	12.24	12.28	12.32	12.36
Open-circuit voltage	V_{oc} (V)	46.50	46.80	47.10	47.40	47.70
Short-circuit current	I_{sc} (A)	12.88	12.88	12.90	12.93	12.95

*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

Parameter	610	615	620	625	630
Max. power front-side $P_{max front}$ (Wp)	610	615	620	625	630
Backside Power Gain	5% 10%	5% 10%	5% 10%	5% 10%	5% 10%
Total equivalent power $P_{max equ}$ (Wp)	641 671	646 677	651 682	656 686	662 693
Module efficiency η (%)	23.73 24.86	23.93 25.07	24.12 25.27	24.32 25.48	24.51 25.67

*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	132
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 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2382 mm x 1133 mm x 30 mm
Weight	33.7 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa or 244 kg/m ²
Snow load	5400 Pa or 550 kg/m ²
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}	-0.24 %/°C
Temp. coefficient of I_{sc}	0.040 %/°C
Nom. operating cell temp. NOCT	43 ± 2°C

Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	720 pcs / 40 HQ
Size / Pallet	1160 mm x 1140 mm x 2500 mm (Upright)
Weight	1241 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.