



Deutsche  
Qualität  
Garantiert



N-TYPE TOPCON TECHNOLOGY

# CME-132BDS 680W-700W

More power, less degradation

**22.57%**

MAXIMUM EFFICIENCY

**132**

HALF CELLS

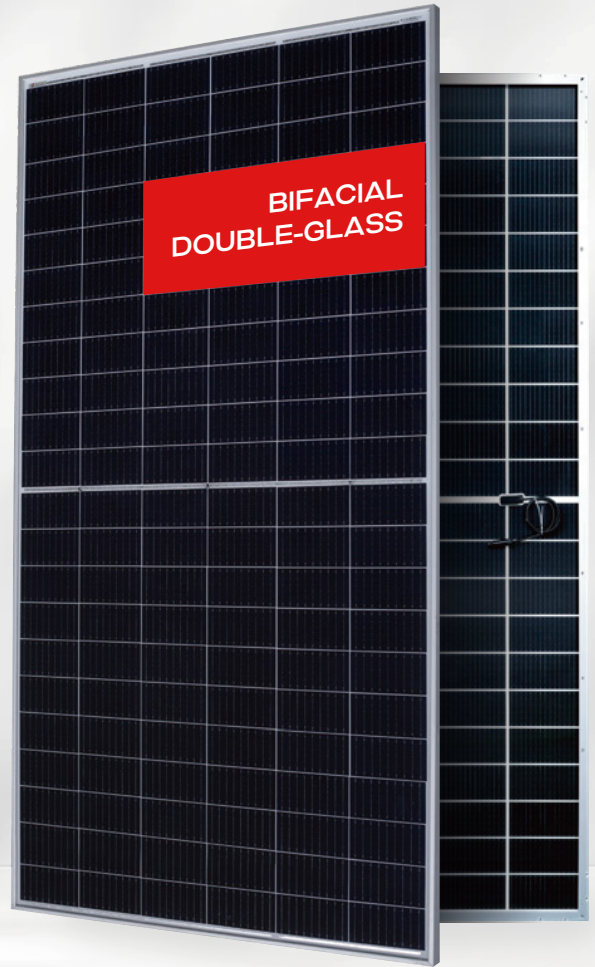
**30 YEARS**

Performance Warranty

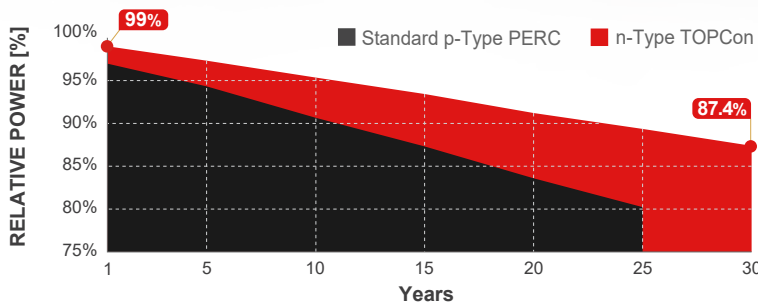
up to **30 YEARS\***

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.



## 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)

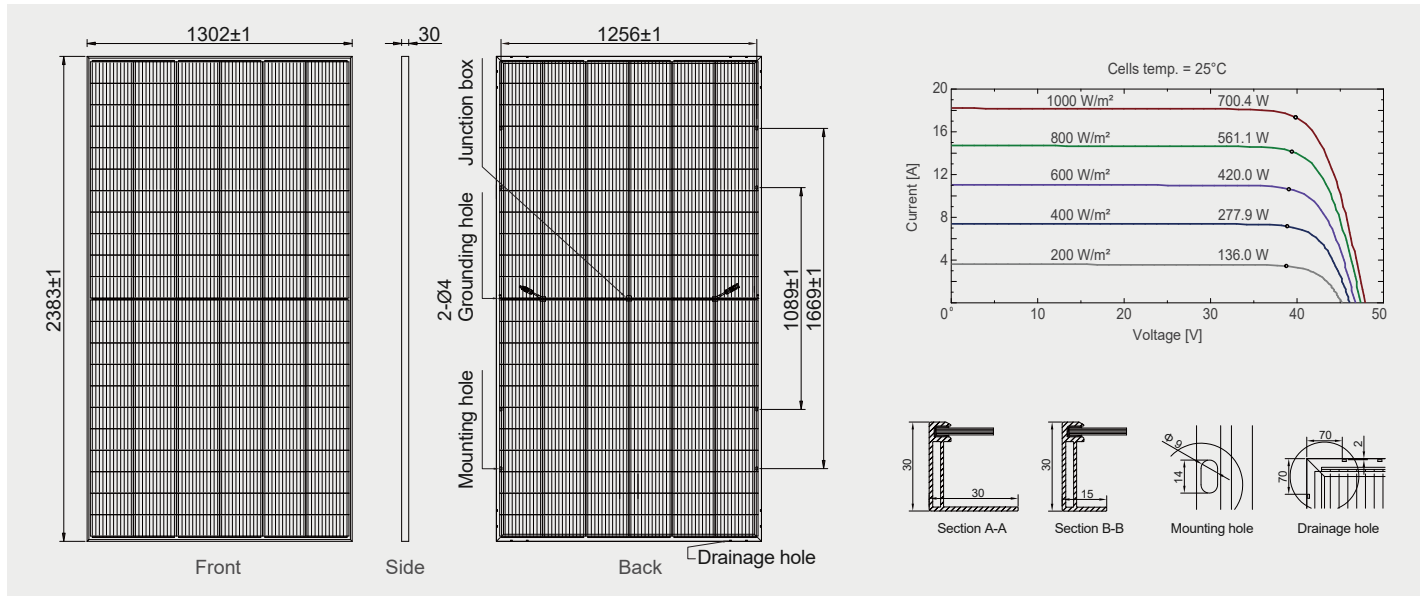


www.ae-solar.com

# AE CME-132BDS 680W-700W

N-TYPE TOPCON TECHNOLOGY PV MODULE

BIFACIAL • DOUBLE-GLASS



## Electrical specifications (STC\*):

	$P_{max}$ (Wp)	680	685	690	695	700
Nominal max. power	$P_{max}$ (Wp)	680	685	690	695	700
Maximum operating voltage	$V_{MPP}$ (V)	39.65	39.85	40.10	40.30	40.52
Maximum operating current	$I_{MPP}$ (A)	17.16	17.19	17.23	17.25	17.28
Open-circuit voltage	$V_{oc}$ (V)	47.40	47.70	47.90	48.10	48.30
Short-circuit current	$I_{sc}$ (A)	18.18	18.21	18.25	18.28	18.31
Module efficiency	$\eta$ (%)	21.92	22.08	22.24	22.41	22.57
Power tolerance	(W)	0~+5				
Maximum system voltage	(V)	1500				
Maximum series fuse rating	(A)	30				

\*STC: Standard Test Conditions (irradiance 1000 W/m<sup>2</sup>, cell temperature 25°C and air mass of AM1.5), measurement tolerance P<sub>max</sub>: ±3%

## Electrical specifications (NMOT\*):

	$P_{max}$ (Wp)	517	521	525	529	533
Nominal max. power	$P_{max}$ (Wp)	517	521	525	529	533
Maximum operating voltage	$V_{MPP}$ (V)	37.20	37.30	37.60	37.85	38.10
Maximum operating current	$I_{MPP}$ (A)	13.91	13.94	13.97	13.98	14.00
Open-circuit voltage	$V_{oc}$ (V)	44.90	45.20	45.40	45.60	45.80
Short-circuit current	$I_{sc}$ (A)	14.65	14.67	14.71	14.75	14.79

\*NMOT: Normal Module Operating Temperature (irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

## Bifacial electrical specifications

Max. power front-side	680										685										690										695										700									
$P_{max}$ front (Wp)	680										685										690										695										700									
Backside Power Gain	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%														
Total equivalent power	714	748	719	754	725	760	730	765	735	770	714	748	719	754	725	760	730	765	735	770	714	748	719	754	725	760	730	765	735	770	714	748	719	754	725	760	730	765	735	770	714	748	719	754	725	760	730	765	735	770
Module efficiency	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82
$\eta$ (%)	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82	23.03	24.12	23.18	24.29	23.38	24.50	23.53	24.65	23.70	24.82

\*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	1 x 4 mm <sup>2</sup> , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2383 mm x 1302 mm x 30 mm
Weight	37 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa or 244 kg/m <sup>2</sup>
Snow load	5400 Pa or 550 kg/m <sup>2</sup>
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	648 pcs / 40 HQ
Size / Pallet	1350 mm x 1140 mm x 2500 mm (Upright)
Weight	1364 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.