

CMD-L132BD 505W-525W

Extreme resistance
to wind and snow

Highest bifaciality
in real conditions

21.58%
Maximum Efficiency

132
Half Cells

30 YEARS
Performance Warranty

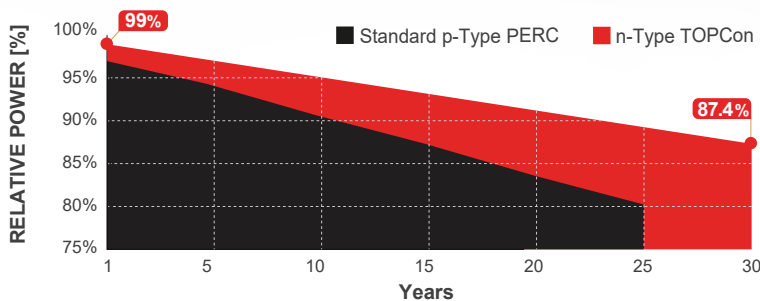
up to **30 YEARS***
Product Warranty

*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.

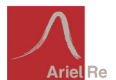


www.ae-solar.com

OUR PERFORMANCE WARRANTY



SYSTEM AND PRODUCT CERTIFICATIONS



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



AESOLAR



NO
SELF-SHADING



LID
RESISTANT



PID
RESISTANT



EXTREME
RESISTANT
TO WIND



EXTREME
RESISTANT
TO SNOW

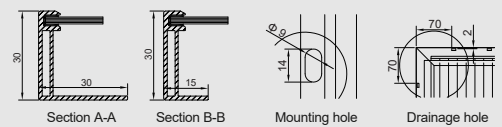
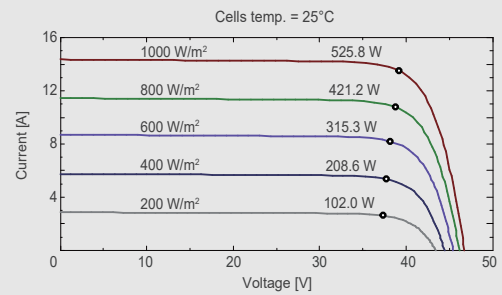
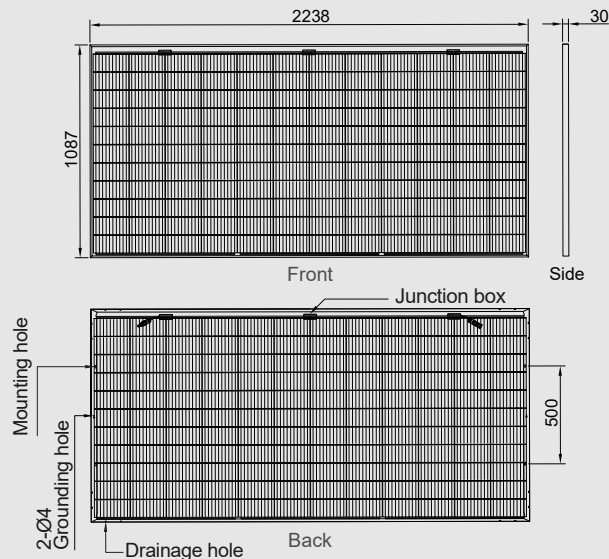


HIGHLY STABLE
AND TOUGH

AE CMD-L132BD 505W-525W

N-TYPE TOPCON TECHNOLOGY PV MODULE

BIFACIAL • DOUBLE-GLASS



Electrical specifications (STC*):

Nominal max. power	P_{max} (Wp)	505	510	515	520	525
Maximum operating voltage	V_{MPP} (V)	38.23	38.40	38.61	38.78	38.92
Maximum operating current	I_{MPP} (A)	13.21	13.28	13.34	13.41	13.49
Open-circuit voltage	V_{oc} (V)	45.21	45.46	45.72	45.93	46.15
Short-circuit current	I_{sc} (A)	14.14	14.20	14.26	14.33	14.40
Module efficiency	η (%)	20.76	20.96	21.17	21.38	21.58
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)	384	388	391	395	399
Maximum operating voltage	V_{MPP} (V)	35.42	35.63	35.74	35.94	36.14
Maximum operating current	I_{MPP} (A)	10.84	10.89	10.94	10.99	11.04
Open-circuit voltage	V_{oc} (V)	42.64	42.89	43.04	43.29	43.54
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)	505		510		515		520		525	
Backside power gain	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%
Total equivalent power P _{max equ} (Wp)	530	556	536	561	541	567	546	572	551	578
Module efficiency η (%)	21.80	22.83	22.01	23.06	22.23	23.29	22.44	23.51	22.66	23.74

*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 $\pm$ 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm, high transmission solar glass, tempered
Junction box	IP68 rated, 3 bypass diodes
Frame	30 mm anodized aluminium alloy
Cable	1 x 4 mm ² , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1087 mm x 2238 mm x 30 mm
Weight	31 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

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	2260 mm x 1140 mm x 1210 mm
Weight	1156 kg / pallet