



Deutsche
Qualität
Garantiert



SMART HOT-SPOT FREE
SHADING RESISTANT TECHNOLOGY

SMD-108E 395W-410W

Maximizing the energy yield

HOT-SPOT FREE TECHNOLOGY
protects different segments of cells
by dedicated bypass diodes

21.03%
MAXIMUM EFFICIENCY

108
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.



SHADING
RESISTANT



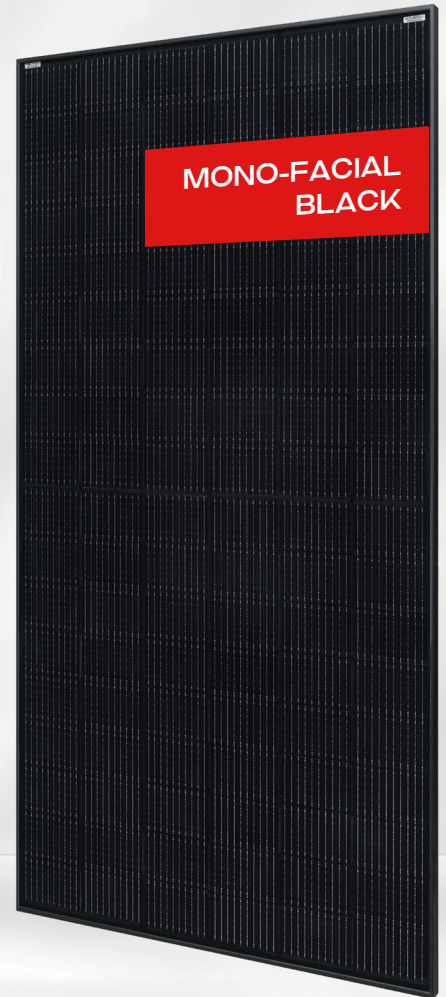
HOT SPOT
RESISTANT



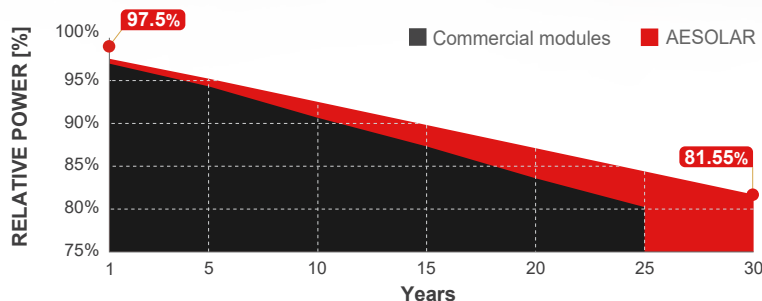
LID
RESISTANT



HIGHLY STABLE
AND TOUGH



OUR PERFORMANCE WARRANTY



SYSTEM AND PRODUCT CERTIFICATIONS



IEC 61215 IEC 61730
Regular Production Surveillance

www.tuv.com
ID 1111251295



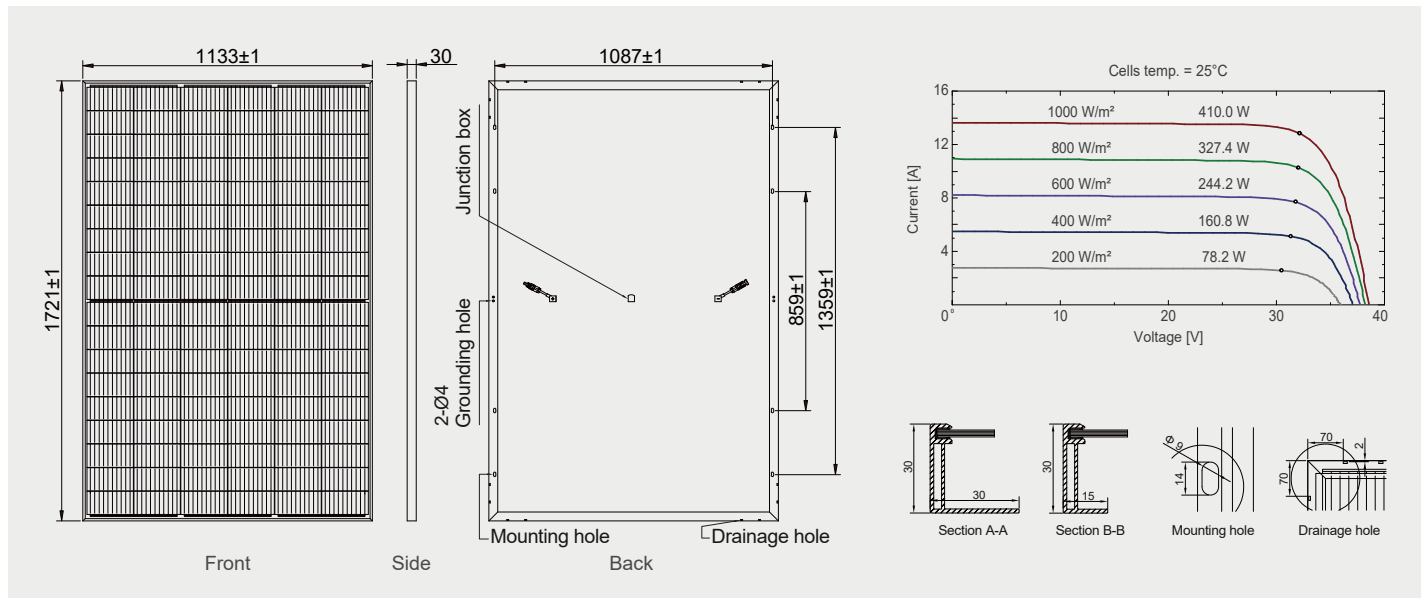
AESOLAR

www.ae-solar.com

AE SMD-108E 395W-410W

SMART HOT-SPOT FREE SHADING RESISTANT TECHNOLOGY

MONO-FACIAL • BLACK



Electrical specifications (STC*):

Nominal max. Power	P_{max} (Wp)	395	400	405	410
Maximum operating voltage	V_{MPP} (V)	31.80	31.35	31.62	31.88
Maximum operating current	I_{MPP} (A)	12.71	12.76	12.81	12.86
Open-circuit voltage	V_{oc} (V)	37.36	37.69	38.02	38.35
Short-circuit current	I_{sc} (A)	13.47	13.52	13.57	13.62
Module efficiency	η (%)	20.26	20.51	20.77	21.03
Power tolerance	(W)			0~+5	
Maximum system Voltage	(V)			1000	
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%

Mechanical and design specification

Cell type	Gallium-doped mono c-Si PERC, half-cut cells
No. of cells	108
Front cover	3.2 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	Backsheet with black color on the solar cell side and white color on the air side
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	1721 mm x 1133 mm x 30 mm
Weight	20.3 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

Temperature ratings

Operating temperature	-40 to +85°C
Temp. coefficient of P_{max}	-0.35 %/°C
Temp. coefficient of V_{oc}	-0.275 %/°C
Temp. coefficient of I_{sc}	0.048 %/°C
Nom. operating cell temp. NOCT	45 ± 2°C

Packaging information

Packaging configuration	36 pcs / pallet
Loading capacity	936 pcs / 40 HQ
Size / Pallet	1755 mm x 1140 mm x 1245 mm
Weight	764 kg / pallet

Electrical specifications (NMOT*):

Nominal max. Power	P_{max} (Wp)	298	301	304	308
Maximum operating voltage	V_{MPP} (V)	29.30	29.50	29.70	29.90
Maximum operating current	I_{MPP} (A)	10.17	10.21	10.25	10.29
Open-circuit voltage	V_{oc} (V)	35.20	35.40	35.60	35.80
Short-circuit current	I_{sc} (A)	10.78	10.82	10.86	10.90

*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)

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.