

 Deutsche  
 Qualität  
 Garantiert



**60**

FULL CELLS



SHADING RESISTANT



HOT SPOT RESISTANT



LID RESISTANT



PID RESISTANT



SALT CORROSION RESISTANT



SAND RESISTANT



AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH



# HSF

Shading Resistant Technology

**30**

years  
Performance Guarantee

**15**

years  
Product Warranty

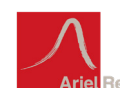
MONO-CRYSTALLINE PV MODULES  
FULL CELLS • MONO-FACIAL

**325W-335W**  
AE SMB-60 Series



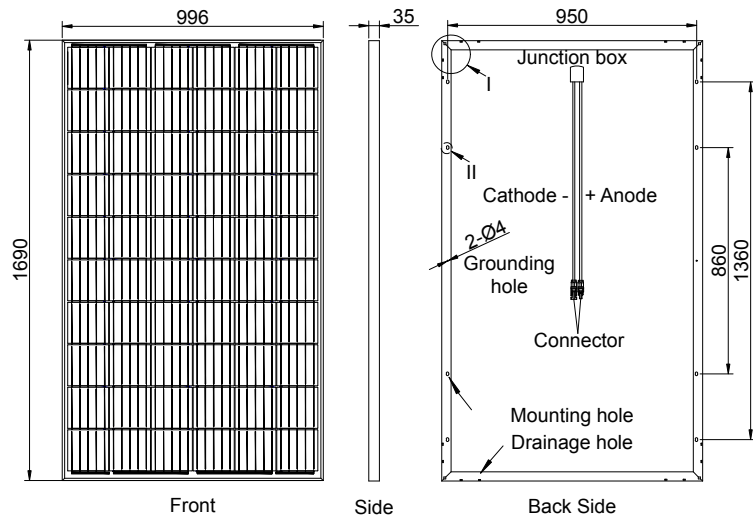
IEC 61215  
IEC 61730  
Regular Production Surveillance  
Type Tested and Monitored

IEC 62716 (Ammonia corrosion)  
IEC 61701 (Salt mist corrosion)  
IEC 60068 (Sand and dust)  
IEC 62804 (PID resistance)



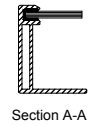
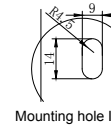
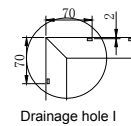
### Mechanical and design specification

Cell type	Gallium-doped Mono c-Si PERC, Full cells, 158.75mm
No. of cells	60
Glass	3,2 mm, high transmission, AR coated, tempered
Encapsulation	EVA
Back cover	White Backsheet
Junction box	IP 68 rated
Frame	35 mm anodized Aluminium alloy
Cable	1 x 4 mm <sup>2</sup> , 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1690 mm x 996 mm x 35 mm
Weight	19 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa/ 244 kg/ m <sup>2</sup>
Mechanical load	5400 Pa/ 550 kg/ m <sup>2</sup>



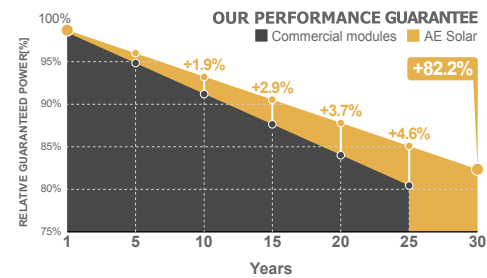
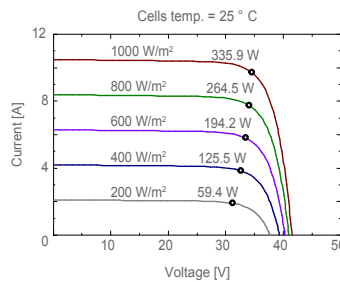
### Packaging information

Packaging configuration	66 pcs / double pallet
Loading capacity	858 pcs / 40 HQ
Size / Pallet	1725 mm x 1140 mm x 2395 mm
Weight	1355 kg / double pallets



### Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P <sub>max</sub>	(%/°C)	-0.37
Temp.coefficient of V <sub>oc</sub>	(%/°C)	-0.28
Temp.coefficient of I <sub>sc</sub>	(%/°C)	0.048
Nom. operating temp. NOCT	(°C)	45 ± 2



Electrical specifications (STC*):	AE325SMB-60	AE330SMB-60	AE335SMB-60	
Nominal Max. Power	P <sub>max</sub> (Wp)	325	330	335
Maximum operating voltage	V <sub>MPP</sub> (V)	33.61	33.81	34.02
Maximum operating current	I <sub>MPP</sub> (A)	9.68	9.76	9.85
Open-circuit voltage	V <sub>oc</sub> (V)	41.10	41.31	41.49
Short-circuit current	I <sub>sc</sub> (A)	10.20	10.37	10.49
Module efficiency	η (%)	19.31	19.61	19.90
Power tolerance	(W)		0~+5	
Maximum system Voltage	(V)		1500	
Maximum series fuse rating	(A)		15	

\*STC: Standard test conditions (Irradiance 1000 W/m<sup>2</sup>, Cell temperature 25°C and air mass of AM1.5)

Electrical specifications (NMOT*):	AE325SMB-60	AE330SMB-60	AE335SMB-60	
Nominal Max. Power	P <sub>max</sub> (Wp)	245	248	252
Maximum operating voltage	V <sub>MPP</sub> (V)	31.60	31.80	32.00
Maximum operating current	I <sub>MPP</sub> (A)	7.74	7.81	7.88
Open-circuit voltage	V <sub>oc</sub> (V)	37.90	38.10	38.30
Short-circuit current	I <sub>sc</sub> (A)	8.16	8.30	8.39

\*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)

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.