

Deutsche  
Qualität  
Garantiert

**AE SOLAR**  
alternative energy



120

HALF  
CELLS

166  
mm

CELL  
SIZE



LID  
RESISTANT



HIGHLY STABLE  
AND TOUGH

**OMET**

ENRICH YOUR  
ENERGY YIELD

30

years

Performance  
Guarantee

15

years

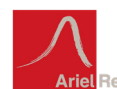
Product  
Warranty

SILICON HETEROJUNCTION PV MODULES  
HALF-CUT CELLS • BIFACIAL • DOUBLE-GLASS

**380W-400W**  
AE TMC-120BDS Series



IEC 61215  
IEC 61730  
Regular Production Surveillance  
Type Tested and Monitored



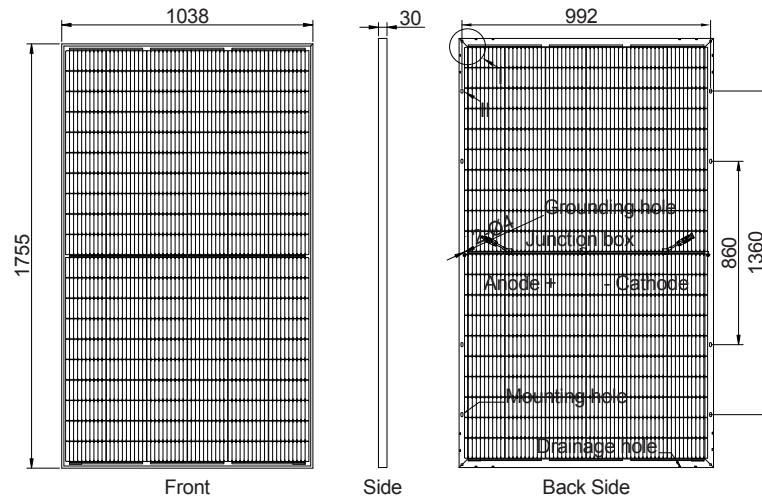
[www.ae-solar.com](http://www.ae-solar.com)



## AE TMC-120BDS Series 380W-400W

### Mechanical and design specification

Cell type	Silicon Heterojunction technology, Half-cut cells, 166 mm
No. of cells	120
Bifaciality	80±5%
Glass	2.0 mm, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP 68 rated
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm <sup>2</sup> , 200 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	1755 mm x 1038 mm x 30 mm
Weight	23.5 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>

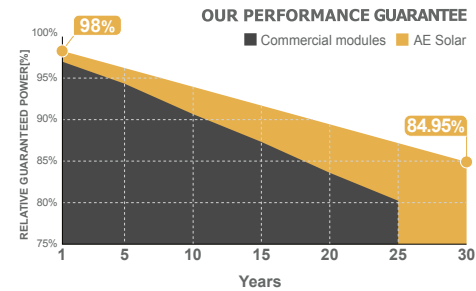
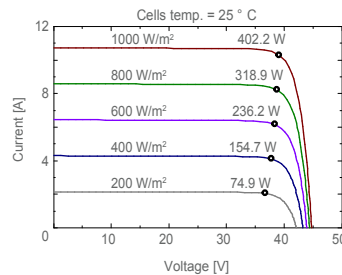
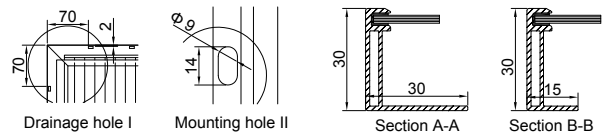


### Packaging information

Packaging configuration	72 pcs / double pallets
Loading capacity	936 pcs / 40 HQ
Size / Pallet	1790 mm x 1140 mm x 2320 mm
Weight	1725 kg / double pallets

### Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of $P_{max}$	(%/°C)	-0.26
Temp.coefficient of $V_{oc}$	(%/°C)	-0.24
Temp.coefficient of $I_{sc}$	(%/°C)	0.04
Nom. operating temp. NOCT	(°C)	44 ± 2



### Electrical specifications (STC\*): AE380TMC-120BDS AE385TMC-120BDS AE390TMC-120BDS AE395TMC-120BDS AE400TMC-120BDS

Nominal Max. Power	$P_{max}$ (Wp)	380	385	390	395	400
Maximum operating voltage	$V_{MPP}$ (V)	37.52	37.70	37.91	38.16	38.36
Maximum operating current	$I_{MPP}$ (A)	10.14	10.22	10.30	10.36	10.43
Open-circuit voltage	$V_{oc}$ (V)	44.22	44.35	44.48	44.61	44.74
Short-circuit current	$I_{sc}$ (A)	10.50	10.56	10.62	10.68	10.74
Module efficiency	$\eta$ (%)	20.86	21.13	21.41	21.68	21.96
Power tolerance	(W)	0~+5				
Maximum system Voltage	(V)	1500				
Maximum series fuse rating	(A)	20				

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

### Electrical specifications (NMOT\*): AE380TMC-120BDS AE385TMC-120BDS AE390TMC-120BDS AE395TMC-120BDS AE400TMC-120BDS

Nominal Max. Power	$P_{max}$ (Wp)	287	291	295	298	302
Maximum operating voltage	$V_{MPP}$ (V)	35.40	35.60	35.80	36.00	36.20
Maximum operating current	$I_{MPP}$ (A)	8.11	8.18	8.24	8.39	8.34
Open-circuit voltage	$V_{oc}$ (V)	41.80	42.00	42.20	42.40	42.60
Short-circuit current	$I_{sc}$ (A)	8.40	8.45	8.50	8.54	8.59

\*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.

