



➔ **Monocrystalline high-performance cells**

- high energy yield with compact dimensions
- 100% final inspection with individual record of Electrical parameter

➔ **Quality**

- 72 monocrystalline high-performance cells
- produced after German high-class graduations
- frame resists high wind force and big snowy loads
- protection class II up to 1.000 V system voltage

➔ **Certified**

- complies with the requirements of IEC 61215 and certified by TÜV Rheinland
- production according to ISO 9001:2000

➔ **Warranties**

- 5 years product warranty*
- 10 years performance warranty (90%)*
- 25 years performance warranty (80%)*

➔ **Cost optimization**

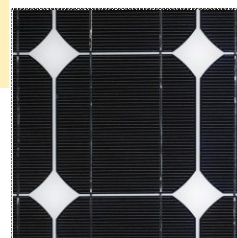
- quick and cost-effective assembly by delivery
- ready for connection and pre-assembled cables
- multi-compatible solar plugs & connectors
- integrated bypass diodes

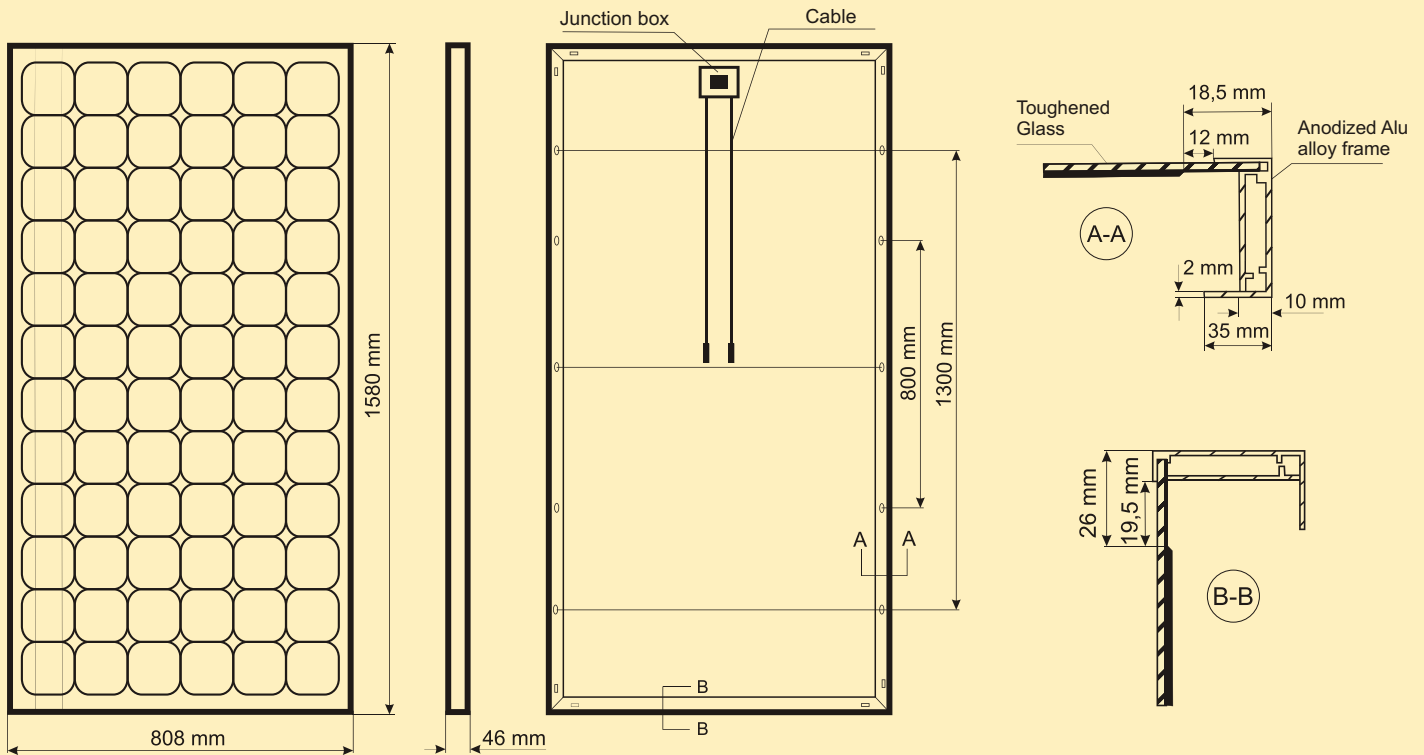
➔ **Yield security**

- through minimum performance tolerance $\pm 3\%$
- suitable for network feeding systems



*Current warranty conditions applicable for these products are available upon request from your local specialist dealer for Sunenergy Bohne GmbH.





SE-M-72-Series

Article number	No.	160M	165M	170M	175M	180M	185M	190M
Electrical parameters*								
Module class / performance ($P_{MPP} \pm 3\%$)	(Wp)	160	165	170	175	180	185	190
Nominal voltage (U_{MPP})	(V)	34,8	35,2	35,8	36,6	37,2	37,8	37,88
Nominal current (I_{MPP})	(A)	4,65	4,70	4,75	4,80	4,85	4,90	5,04
Open-circuit voltage (U_{oc})	(V)	43,0	43,4	43,8	44,2	44,6	45,0	45,1
Short-circuit current (I_{sc})	(A)	5,15	5,20	5,25	5,30	5,35	5,40	5,45
Performance tolerance	(%)	(± 3)	(± 3)	(± 3)	(± 3)	(± 3)	(± 3)	(± 3)
Temperature coefficient of nominal performance	(%/°C)	-0,48	-0,48	-0,48	-0,48	-0,48	-0,48	-0,48
Temperature coefficient of open-circuit voltage	(%/°C)	-0,34	-0,34	-0,34	-0,34	-0,34	-0,34	-0,34
Temperature coefficient of short-circuit current	(%/°C)	0,038	0,038	0,038	0,038	0,038	0,038	0,038
Dimensions and weight								
Length	(mm)	1580	1580	1580	1580	1580	1580	1580
Width	(mm)	808	808	808	808	808	808	808
Height	(mm)	46	46	46	46	46	46	46
Weight	(kg)	15	15	15	15	15	15	15

*Electrical parameters under standard conditions: 1000W/m², spectrum AM 1.5, cell temperature 25 °C.
 The data contained in this technical sheet are subject to changes which serve technical progress.

Your local Sunenergy dealer