



GENERATION N-TYPE M10

BAUER SOLARTECHNIK

PREMIUM PROTECT

BS-120M10NHBB-GG 465 - 475 W

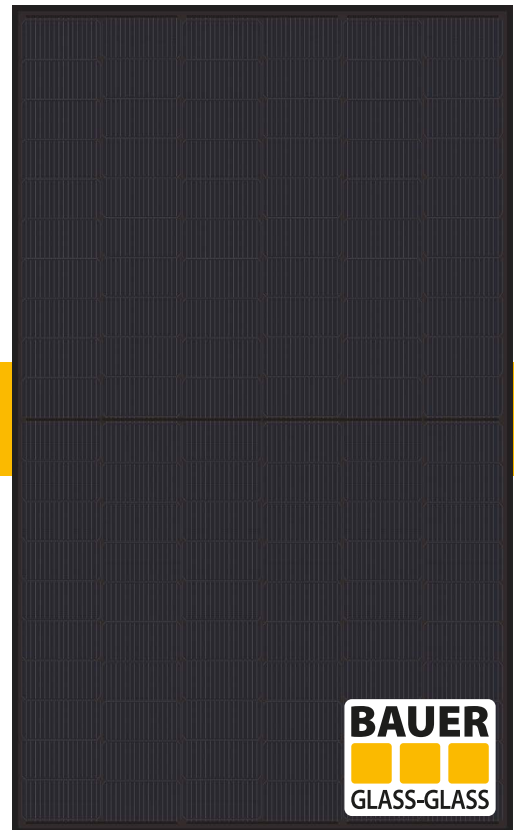
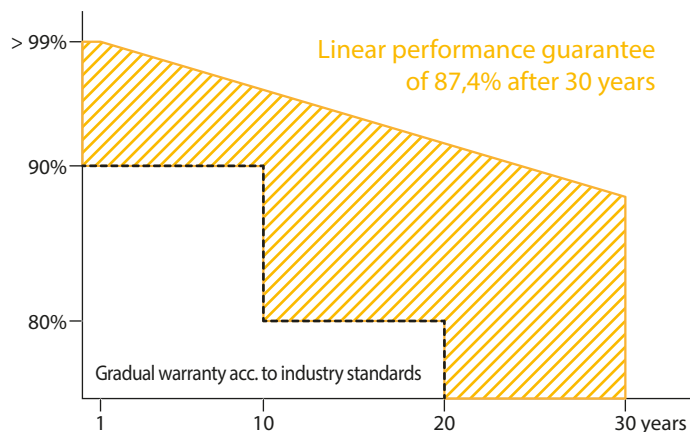
BIFACIAL GLASS-GLASS HALF-CELL MODULE

engineered & designed in
GERMANY



BAUER guarantees a minimum performance value of 87,4% after 30 years for the **PREMIUM PROTECT** glass-glass solar modules.

A comparison of **BAUER** glass-glass solar modules performance guarantee to conventional glass-foil modules according to industry standards:



Sample



FIRE CLASS A

Maximum fire protection through double glazing according to the highest security requirements



CERTIFICATION

Constant in-house quality controls - certified several times over by accredited inspection bodies



N-TYPE BIFACIAL HALF-CELLS

Up to 30% increase in yield through bifacial cells active on both sides and a transparent backside



GERMAN GUARANTOR

If necessary, it is guaranteed that a German company takes over any claim settlements



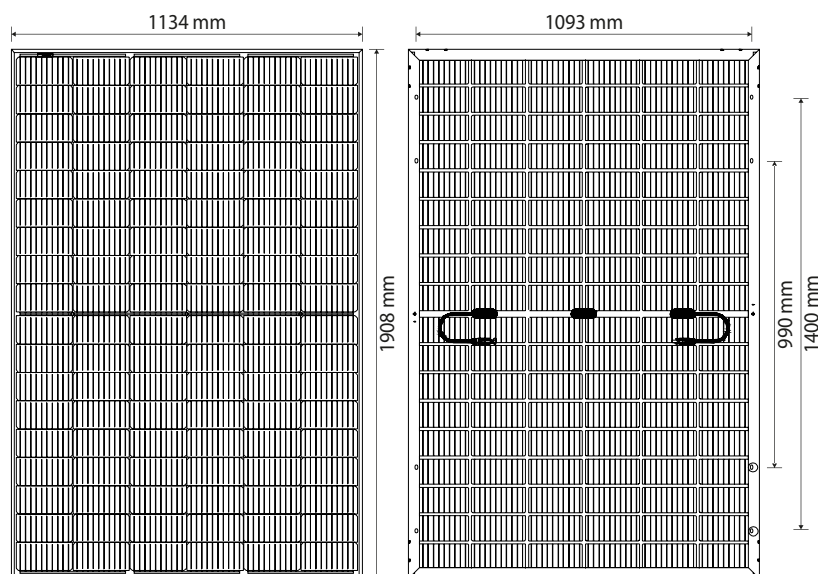
PERFORMANCE GUARANTEE

30 year warranty and a linear performance guarantee over a period of 30 years



REINSURANCE COVERAGE

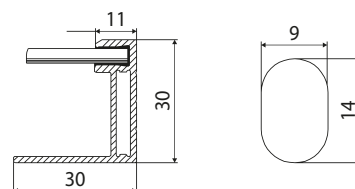
BAUER is reinsured for 30 years of the product's performance guarantee



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WARRANTIES¹

- 30 years product warranty
- 30 years performance guarantee

PHYSICAL SPECIFICATIONS

Module dimensions	1908 x 1134 x 30 mm
Weight	26,7 kg
Frame	Black anodized aluminium profile
Frontside	AR-coating Semi-toughened glass, 2 mm
Embedding material	EVA
Backside	Black-glazed & Semi-toughened glass, 2 mm
Solar cells	120 monocrystalline N-type bifacial half-cells
Bifaciality	80 % ± 10 %
Junction box(es)	IP68, 3 bypass diodes
Cable & connector	1x4 mm ² , 500 mm, MC4 compatible

OPERATING CONDITIONS

Operating temperature	-40 to 85°C
Static load	5400 Pa (snow/wind)
Hail	Ø 25 mm at 23 m/s

CERTIFICATION

IEC 61215, IEC 61730, fire class A acc. IEC 61730-2

PACKAGING

Modules per pallet	35
Pallets/modules per truck	22 / 770

ELECTRICAL CHARACTERISTICS²

		BS-465-120M10NHBB-GG	BS-470-120M10NHBB-GG	BS-475-120M10NHBB-GG
Maximum power	P _{max} (W)	465	470	475
Power output tolerance	P _{max} (%)	0 ~ +3	0 ~ +3	0 ~ +3
Open circuit voltage	V _{oc} (V)	42,21	42,37	42,53
Short circuit current	I _{sc} (A)	14,08	14,15	14,23
Voltage at maximum power	V _{mpp} (V)	34,92	35,07	35,23
Current at maximum power	I _{mpp} (A)	13,32	13,41	13,49
Module efficiency	η _m (%)	21,49	21,72	21,95
Bifaciality performance increase*	10 % P _{mpp} (W)	511,5 (+46,5)	517 (+47)	522,5 (+47,5)
	20 % P _{mpp} (W)	558 (+93)	564 (+94)	570 (+95)
	30 % P _{mpp} (W)	604,5 (+139,5)	611 (+141)	617,5 (+142,5)
Nominal operating cell temperature	NOCT (°C)	45 +/- 2		
Temperature coefficient of Voc	T _k (Voc)	-0,26 %/°C		
Temperature coefficient of Isc	T _k (Isc)	+0,046 %/°C		
Temperature coefficient of Pmpp	T _k (Pmpp)	-0,30 %/°C		
Maximum system voltage DC (TÜV)	(V)	1500		
Maximum series fuse rating	(A)	30		

¹Nominal value is specified in the written warranty conditions. A possible light-induced degradation in performance is not taken into account. ²Values under Standard Test Conditions (STC): air mass 1,5 AM, irradiance 1000 W/m², cell temperature 25°C. STC measuring tolerance: ±3 % (P_{max}), ±10 % (V_{max}, I_{mpp}, V_{OC}, I_{SC}). The beneficiary under the reinsurance policy is solely BAUER Solar Engineering GmbH. Please contact us to get information on how this insurance coverage benefits you as a customer. Note: please read the safety instructions and installation manual before using this product. Subject to change. © 2023 BAUER Solar Engineering GmbH. V3. Effective: 01.12.23