



TOPCON N-TYPE M10

BAUER SOLARTECHNIK

SUPERBLACK

BS-120M10HBB-GG 470 - 480 W

BIFACIAL GLASS-GLASS HALF-CELL MODULE

BAUER SOLAR GERMANY



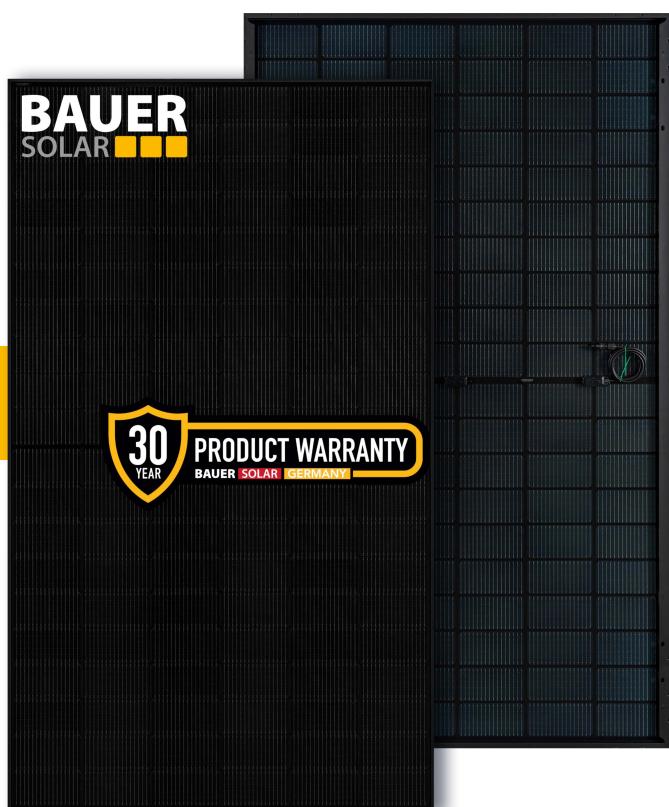
BAUER
SOLAR



30
YEAR

PRODUCT WARRANTY

BAUER SOLAR GERMANY



GRADE "A" N-TYPE BIFACIAL HALF CELLS



Only Grade "A" half-cells are used in the production of all BAUER solar modules and only the blackest are selected. Up to 30% increase in yield through bifacial cells active on both sides and a glass backside.



LOW LIGHT PERFORMANCE

Stronger performance in low lighting conditions than PERC modules, such as overcast days, mornings and evenings helping to ensure a higher energy output than PERC every day.



STABILITY & DURABILITY

2 x 2 mm tempered anti-reflective solar glass; dirt-repellent, scratch-resistant, durable and shock-proof.



CERTIFICATION

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



FIRE CLASS A

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



WARRANTY & GUARANTEE

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



GERMAN GUARANTOR

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



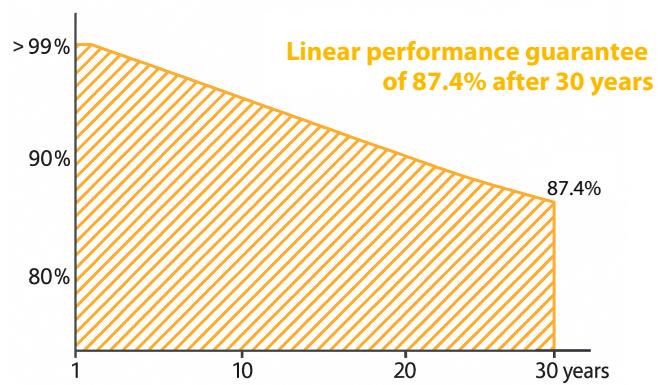
REINSURANCE COVERAGE

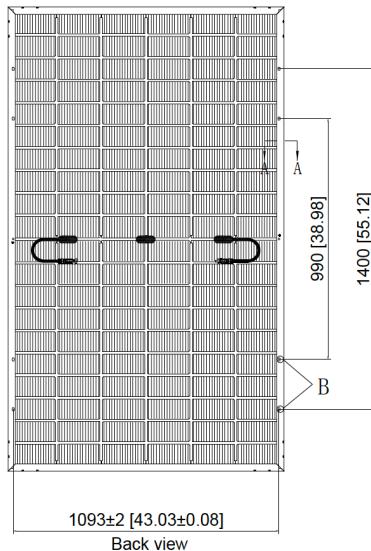
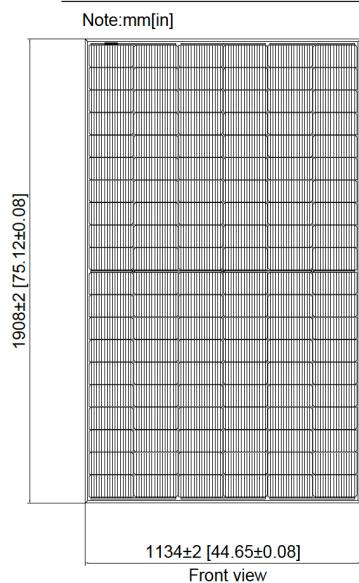
BAUER is re-insured with Munich RE for 15 years of the product warranty & 30 years of the performance guarantee.

BAUER
GUARANTEE

Our extended guarantee covers the module guarantee and a lump-sum compensation for the replacement of a defective module (Guarantee conditions as of 01.12.2023).

BAUER guarantees a minimum performance value of 87.4% after 30 years for the **SUPERBLACK** glass-glass solar modules.

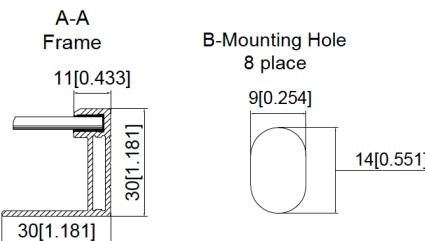




BAUER SOLARTECHNIK

SUPERBLACK

BS-120M10HBB-GG 470 - 480 W



WARRANTIES¹

30 year product warranty

30 year performance guarantee

OPERATING CONDITIONS

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

CERTIFICATION

IEC 61215, 61730-1/2, 61701 (Salt mist), 62716 (Ammonia)
CSA; Fire Class: A (IEC); (USA) Type 29

PACKAGING

Modules per pallet	35
Pallets/modules per truck	24/840

PHYSICAL SPECIFICATIONS

Module dimensions	1908 x 1134 x 30 mm
Weight	26.7 kg
Frame	Black anodized aluminum 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	4 mm ² , 1300 mm, Stäubli MC4/EVO2A

ELECTRICAL CHARACTERISTICS²

	BS-470-120M10HBB-GG	BS-475-120M10HBB-GG	BS-480-120M10HBB-GG
Maximum power	Pmax (W)	470	475
Power output tolerance	Pmax (%)	0 ~ +3	0 ~ +3
Open circuit voltage	Voc (V)	42.37	42.53
Short circuit current	Isc (A)	14.15	14.23
Voltage at maximum power	Vmpp (V)	35.07	35.23
Current at maximum power	Impp (A)	13.41	13.49
Module efficiency	~m (%)	21.72	21.95
	10 % Pmpp (W)	517 (+47)	522.5 (+47.5)
Bifaciality performance increase*	20 % Pmpp (W)	564 (+94)	570 (+95)
*depending on Albedo and irradiation conditions at installation site	30 % Pmpp (W)	611 (+141)	617.5 (+142.5)
Nominal operating cell temperature	NOCT (°C)	45 +/- 2	45 +/- 2
Temperature coefficient of Voc	Tk (Voc)	-0.26 %/°C	-0.26 %/°C
Temperature coefficient of Isc	Tk (Isc)	+0.046 %/°C	+0.046 %/°C
Temperature coefficient of Pmpp	Tk (Pmpp)	-0.30 %/°C	-0.30 %/°C
Maximum system voltage DC (TÜV)	(V)	1500	1500
Maximum series fuse rating	(A)	30	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 pressure 1.5 AM, irradiance 1000 W/m², cell temperature 25°C. STC measuring tolerance: ± 3 % (Pmax), ± 10 % (Vmax, Impp, VOC, ISC). 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 installation manual before using this product. Subject to change.

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