



BAUER SOLARTECHNIK **SUPERBLACK** BS-144M6HBB 440 - 450 W

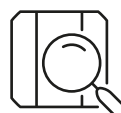
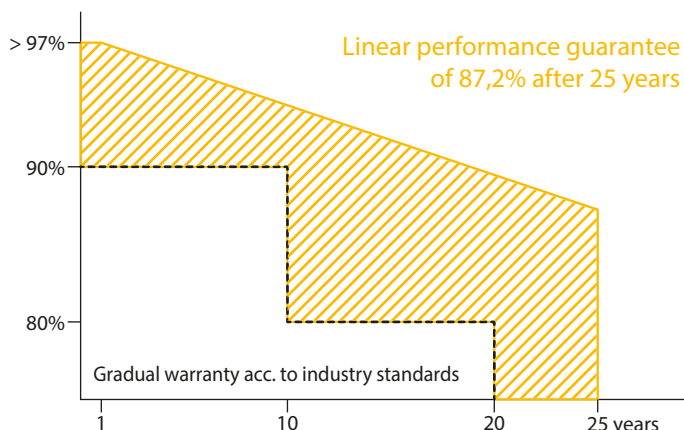
MONOCRYSTALLINE HALF-CELL MODULE - BLACK



Sample

BAUER guarantees a minimum performance value of 87,2% after 25 years for the SUPERBLACK glass-foil solar modules.

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



PID TEST

The solar cells of this module are tested for Potential-induced Degradation (PID)



CERTIFICATION

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



HALF-CELL TECHNOLOGY

Double the amount of cells on the same surface area reduces power loss in case of e.g. shadowing



GERMAN GUARANTOR

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



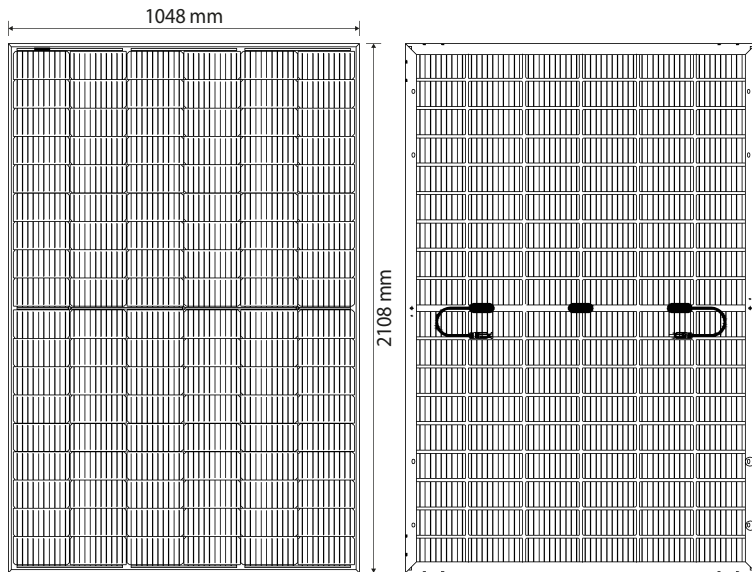
PERFORMANCE GUARANTEE

20 year warranty and a linear performance guarantee over a period of 25 years



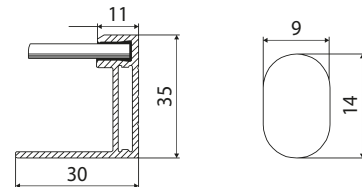
REINSURANCE COVERAGE

BAUER is reinsured for 12 years of the product's warranty and 25 years of the product's performance guarantee



BAUER SOLARTECHNIK SUPERBLACK

BS-144M6HBB 440 - 450 W



WARRANTIES¹

20 years product warranty

25 years performance guarantee

PHYSICAL SPECIFICATIONS

Module dimensions	2108 × 1048 × 35mm
Weight	24,4 kg
Frame	Anodized aluminium alloy (black)
Frontside	Superblack anti-reflection glass, 3,2 mm
Embedding material	EVA
Backside	Foil (black)
Solar Cells	144 monocrystalline half-cells
Bifaciality	-
Junction box	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

PACKAGING

Pallets/modules per truck	682
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ELECTRICAL CHARACTERISTICS²

		BS-440-144M6HBB	BS-445-144M6HBB	BS-450-144M6HBB
Maximum power	P _{max} (W)	440	445	450
Power output tolerance	P _{max} (%)	0 ~ +3	0 ~ +3	0 ~ +3
Open circuit voltage	V _{oc} (V)	49,60	49,80	50,00
Short circuit current	I _{sc} (A)	11,34	11,42	11,50
Voltage at maximum power	V _{mpp} (V)	41,00	41,20	41,40
Current at maximum power	I _{mpp} (A)	10,74	10,81	10,87
Module efficiency	η _m (%)	19,92	20,14	20,37
Nominal operating cell temperature	NOCT (°C)	45 +/- 2		
Temperature coefficient of Voc	T _k (Voc)	-0,27 %/°C		
Temperature coefficient of Isc	T _k (Isc)	+0,048 %/°C		
Temperature coefficient of P _{mpp}	T _k (P _{mpp})	-0,35 %/°C		
Maximum system voltage DC (TÜV)	(V)	1000		
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 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.
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DISTRIBUTION