

BAUER

Solartechnik GmbH

BS-144M6HBB-GG 440 - 450 W
glass/glass - transparent - black frame



PERFORMANCE GUARANTEE

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



CERTIFICATION

Permanent in-house quality control, multiple certifications by accredited inspection bodies



EFFICIENCY

High efficiency for optimum yield - innovations directly influence the production process



POSITIVE POWER TOLERANCE

Exclusive delivery of solar modules with positive power tolerance only



BIFACIAL TECHNOLOGY

Double-sided solar cells and a transparent back side increase the potential power output by up to 30%



PERC HALF-CELL TECHNOLOGY

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



WEATHERPROOF

Standardized mechanical load test guards against damage from wind and weather



GERMAN GUARANTOR

In case of need it is ensured that a German company assumes the claim settlement



SAFETY

High-quality components ensure maximum protection in all weather conditions



PID TEST

The solar cells of our high performance modules are tested for PID



REINSURANCE COVERAGE

The cooperation with the insurance company is guaranteeing even higher levels of financial stability & reliability - BAUER is insured for 12 years of the product's warranty and 25 years of the product's performance guarantee



BS-144M6HBB-GG

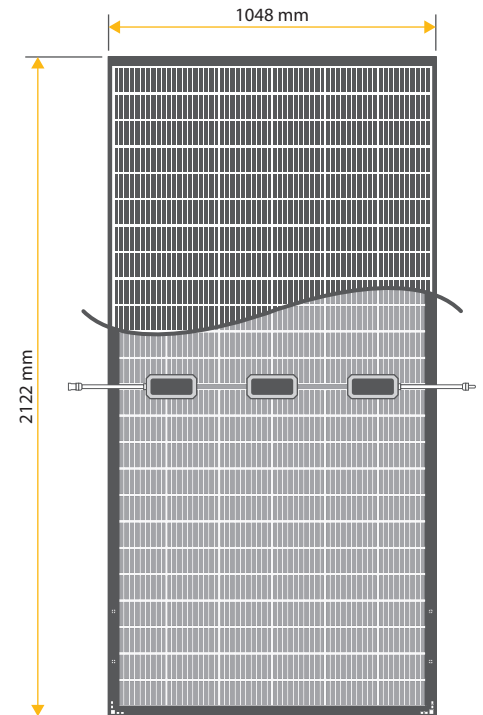
FRONTSIDE

BACKSIDE

PROVEN & GUARANTEED BY
BAUER SOLARTECHNIK
HIGH QUALITY STANDARDS BY GERMAN ENGINEERS

BS-144M6HBB-GG 440 - 450 W

MECHANICAL DATA	
Module dimensions	2122 x 1048 x 35mm
Weight	27.8 kg
Frame	Anodized aluminium alloy (black)
Frontside	High transparency, antireflection coated, semi-toughened safety glass, 2mm
Embedding material	EVA
Backside	Glazed & semi-toughened safety glass, 2mm
Solar cells	144 monocrystalline PERC bifacial half-cells
Bifaciality	70% (bifaciality coefficient = P_{max} backside (STC) / P_{max} frontside (STC), tolerance: $\pm 10\%$)
Connection	IP ≥ 68 , 3 bypass diodes
Cable & connector	1x4 mm ² , 1300 mm, MC4 compatible

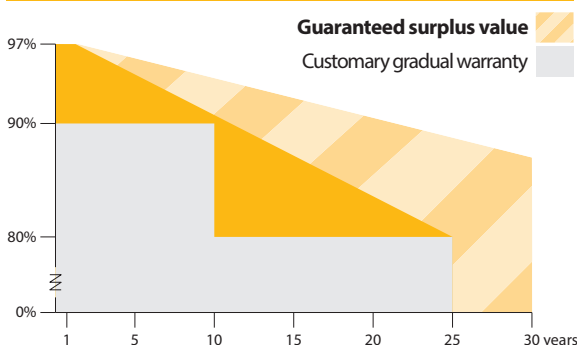


OPERATIONAL CONDITIONS	
Operating temperature	-40 to 85°C
Static load	5400 Pa (snow/wind)
Hail	Ø 25 mm at 23 m/s

ELECTRICAL DATA ¹		BS-440-144M6HBB-GG	BS-445-144M6HBB-GG	BS-450-144M6HBB-GG
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)	49.0	49.20	49.40
Short circuit current	I_{sc} (A)	11.36	11.44	11.52
Voltage at max. power	V_{mpp} (V)	40.80	41.00	41.20
Current at max. power	I_{mpp} (A)	10.79	10.86	10.93
Module efficiency	η_m (%)	19.79	20.01	20.24
Nominal operating cell temperature	NOCT (°C)	45 \pm 2		
Temperature coefficient of V_{oc}	$T_k (V_{oc})$	-0.260 %/°C		
Temperature coefficient of I_{sc}	$T_k (I_{sc})$	+0.054 %/°C		
Temperature coefficient of P_{mpp}	$T_k (P_{mpp})$	-0.320 %/°C		
Maximum system voltage DC (TÜV)	(V)	1500		
Maximum series fuse rating	(A)	20		
Bifaciality performance increase:*	10% P_{mpp} (W)	484 (+44)	489 (+44)	495 (+45)
	20% P_{mpp} (W)	528 (+88)	534 (+89)	540 (+90)
	30% P_{mpp} (W)	572 (+132)	578 (+133)	585 (+135)

*depending on Albedo and irradiation conditions at the installation site





LINEAR PERFORMANCE GUARANTEE



WARRANTY CONDITIONS²

Product warranty	30 years
Performance guarantee	30 years (min. 87% after 30 years)

QUALIFICATION & CERTIFICATION

IEC 61215	IEC 61730	   
Fire Class A		

PACKAGING UNITS

Modules per container	660 pcs
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¹Values under Standard Test Conditions (STC): air mass 1.5 AM, irradiance 1000 W/m², cell temperature 25°C. STC measuring tolerance: $\pm 3\%$ (P_{max}), $\pm 10\%$ (V_{max} , I_{mpp} , V_{OC} , I_{SC}). ²Nominal value is specified in the written warranty conditions. A possible light-induced degradation in power is not taken into account. The beneficiary under the reinsurance policy of MunichRe is solely Bauer Solar GmbH. Please contact us to get information on how this insurance coverage benefits you as a customer. Note: Please read safety instructions and installation manual before using this product. Subject to change. © 2022 CANSOLAR Corp. and Bauer Solar GmbH. Effective 28th of January 2022.

