

R-BG 108nBC.6 /480-485



The new full-black high-performance module with back-contact technology. Maximum aesthetics and highest efficiency for your roof



Maximum energy generation

Bifacial back-contact double-glass module with high module efficiency of 23.8 % for higher yield.



Aesthetic roof integration

The full-black design provides an aesthetic and appealing appearance.



Improved shading performance

Even with partial shading, modules can generate more power without the risk of hotspots.



Extra performance

Reduced shading due to cell interconnection on the back of the module.



Improved warranty

Up to 30 years product warranty and 88.85 % performance guarantee after 30 years due to exceeded standards.

Certificates

- IEC 61215:2016 (module reliability)
- IEC 61730:2016 (module safety)
- IEC 61701:2020 (salt mist resistance)
- IEC 62716:2020 (ammonia resistance)

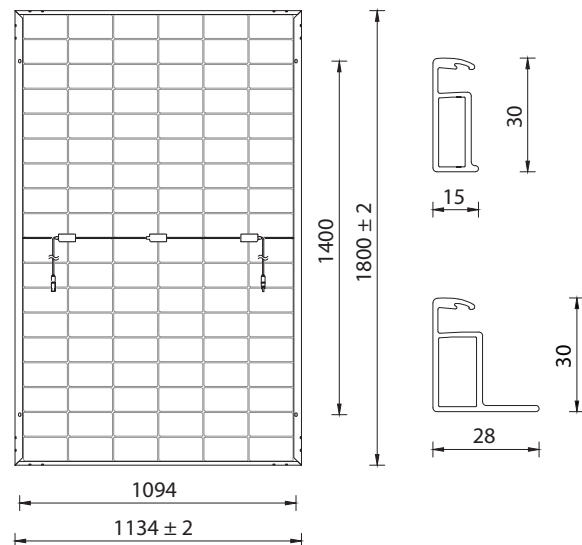




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Mechanical data

Cell technology	Back-contact, monocrystalline
Cell size and quantity	182 mm x 96 mm; 108 half cells
Module dimensions	1800 mm x 1134 mm x 30 mm
Module weight	24.8 kg
Frame	Black anodised aluminium
Front glass	2.0 mm tempered solar glass with anti-reflective coating
Back glass	2.0 mm tempered solar glass
Junction box and IP rating	3 pcs with one bypass diode each, potted in accordance with IP68
Cable and connector	4 mm ² solar cable, length 120 cm, STÄUBLI MC4-Evo 2 connector



Electrical data

Conditions	480 Wp			485 Wp		
	STC	NMOT	BNPI	STC	NMOT	BNPI
STC power output P _{max} (Wp)	480	364	520	485	368	525
Nominal power voltage V _{mp} (V)	33.84	32.11	33.85	33.94	32.21	33.94
Nominal power current I _{mp} (A)	14.19	11.35	15.38	14.30	11.44	15.48
Open circuit voltage V _{oc} (V)	40.76	38.67	40.74	40.89	38.80	40.85
Short circuit current I _{sc} (A)	14.96	12.09	16.16	15.03	12.15	16.27
Bifacial coefficient (%)	70 ± 5			70 ± 5		
Module efficiency (%)	23.5			23.8		

Packaging

	37 modules vertically per pallet
	888 modules per truck
	986 kg per pallet

STC (nominal data under standard test conditions): irradiance 1000 W/m²; AM 1.5 spectrum; module temperature 25 °C; sorting for P_{max} 0 to +5 W. NMOT (nominal data at Nominal Module Operating Temperature): irradiance 800 W/m²; AM 1.5 spectrum; ambient temperature 20 °C; wind velocity 1 m/s. BNPI (Bifacial Nameplate Irradiance): irradiance 1000 W/m² at the front and 135 W/m² at the back; applied according to a method defined in IEC TS 60904-1-2. Sorting for P_{max} 0 to 5 W. P_{max} tolerance: ±3.0 %; V_{oc}, V_{mp}, I_{sc}, I_{mp} tolerances: ±5.0 %.

Connection and operating conditions

Maximum system voltage	1500 V
Operating temperature range	-40 °C ... +85 °C
Mechanical resilience ¹	Pressure resistance tested at 5400 Pa Wind suction load resistance tested at 2400 Pa
Safety class	II
Reverse current overload	30 A
Fire classes ²	A (UL 790) B _{ROOF} (t1) according to DIN EN 13501-5:2016
Hail resistance	Hailstones up to 30 mm in size and at a speed of 23.9 m/s (HW3)

¹ Specified pressure load resistance: 3600 Pa and suction load resistance: 1600 Pa;

² For all roof slopes.

Temperature coefficients

TC of the maximum power (P _{max})	-0.26 %/°C
TC of open circuit voltage (V _{oc})	-0.22 %/°C
TC of short circuit current (I _{sc})	+0.05 %/°C
Nominal module operating temperature (NMOT)	42 ± 2

