R-BF 120p.2/370

Full-black solar module for the highest requirements

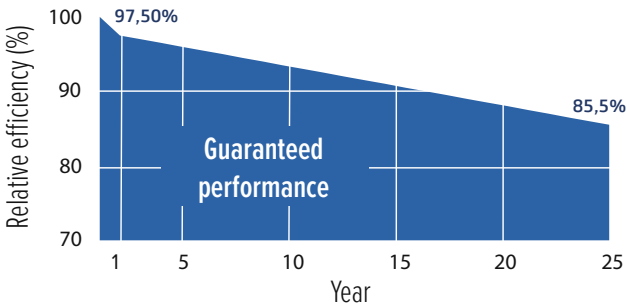
Warranty

- 25 year product warranty *)
- 25 years of linear benefit commitment
- Guaranteed plus tolerance

*) with registration of the system. Otherwise 15 years.

Certifications

- IEC 61215:2016 (module reliability)
- IEC 61730:2016 (module safety)
- IEC TS 62804-1:2015 (PID resistance)
- IEC 61701:2020 (salt spray resistance)



Safety

Electrical safety and mechanical robustness in all weather conditions are important aspects when choosing the right solar module.

Electric security - The R-BF is approved for a system voltage of up to 1,500V. For maximum electrical safety, it is equipped with potted junction boxes rated IP68 and original STÄUBLI MC4 connectors.

Resilient - The specially hardened glass is resistant to the harshest weather conditions. The module is certified for resistance to salty air (class 5) and is therefore approved for use near the coast.

Reliability

A solar system is a long-lasting investment. The durability of the modules is thus a key quality criterion.

Certified production facilities - All SOLYCO solar modules are produced in the most modern, highly automated factories with the highest manufacturing standards to ensure consistent quality.

Performance

A high electricity production under all operating conditions - in addition to the longevity – forms the basis for the economic viability of the solar system.

High specific yield - High power yield even in unfavorable weather conditions - thanks to excellent weak light behavior and a good temperature coefficient.

Highly efficient solar cells - Modern half-cell technology with multi-busbar interconnection forms the basis for the outstanding performance of our modules. The half-cell interconnection minimizes internal power losses and the risk of hot spots in the event of partial shade.

3x PID stable - All our modules are certified against potential-induced degradation (PID). The test cycle according to IEC TS 62804-1:2015 was even run 3 times (288h at T = 85°C and RH of 85%) and proves the top performance of the R-BF over a long period of time.

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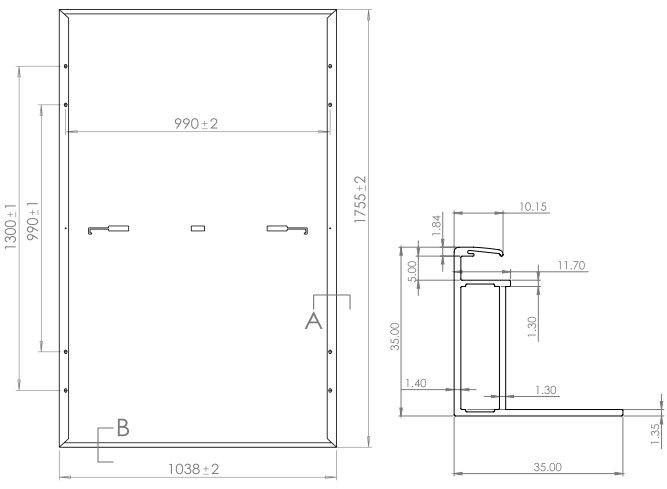
R-BF 120p.2/370

Module with black backsheet and black frame

Technical data



General data

Cell technology	PERC; monocrystalline
Cell size and number	166mm x 83mm; 120 pcs.
Module dimensions	1,755mm x 1,038mm x 35mm
Module weight	19.5kg
Frame	Aluminum anodized (black)
Front glass	3.2mm tempered solar glass with anti-reflective coating
Junction box	3 pcs. With one bypass diode each, IP68 potted junction box
Connectors	4mm² solar cable with a length of 120cm; orginal STÄUBLI MC4-Evo 2
Packing	31 modules vertically on pallet, 806 / 40ft.

Connection and working conditions

Maximum system voltage	1,500V
Temperature range	-40°C ... +85°C
Mechanical resilience[1]	Pressure resistance tested at 5,400 Pa Wind suction load capacity tested at 2,400Pa
Safety class	II
Reverse current overload	20A
Fire class	C (UL 790)
Hail resistance	Hailstones up to 25mm in size and at a speed of 23m/s

[1] Specified pressure load resistance: 3,600Pa and suction load resistance: 1,600Pa

Electrical data (STC)

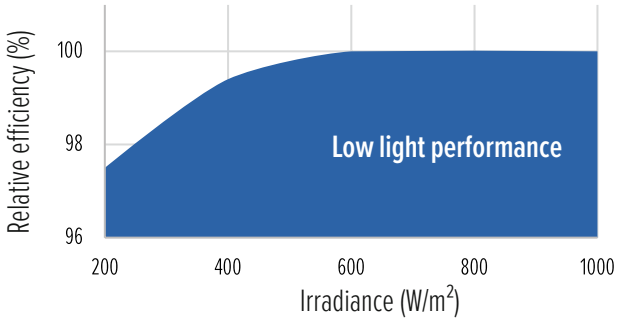
Nominal data at standard testing conditions (STC): Irradiance 1,000W/m²; Spectrum AM 1.5; module temperature 25°C; sorting for Pmax 0 to +5W

Module type	R-BF 120p.2/370
STC power output Pmax (Wp)	370
Nominal power voltage Vmp (V)	34.01
Nominal power current Imp (A)	10.88
Open circuit voltage Voc (V)	40.81
Short circuit current Isc (A)	11.33
Module efficiency (%)	20.3

Tolerance Pmax: ± 3,0%; tolerances Voc, Vmp, Isc, Imp: ± 5,0%

Temperature coefficients

TC at maximum power (Pmax)	-0.35% / °C
TC of open circuit voltage (Voc)	-0.28% / °C
TC of short circuit current (Isc)	+0.048% / °C



Electrical data (NMOT)

Nominal data at NMOT (Nominal Module Operation Temperature): Irradiation intensity 800W/m²; spectral distribution AM 1.5; ambient temperature 20°C; wind velocity 1m/s

Solar cell temperature (°C)	45 +/- 2
Power output (Wp)	272
Nominal power voltage Vmp (V)	31.26
Nominal power current Imp (A)	8.70
Open circuit voltage Voc (V)	37.75
Short circuit current Isc (A)	9.13

Tolerance Pmax: ± 3,0%; tolerances Voc, Vmp, Isc, Imp: ± 5,0%

This data sheet corresponds to DIN EN 50380.
Developed and designed in Germany.

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DE 63944028

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