485 Wp Full-Black | Back-Contact | Glass-Glass

UltraBlack Performance Protect



Your SOLYCO advantages for more protection and more yield.

- **Factory-fitted marten protection**
  Stainless-steel-sheathed cables protect against marten bites and costly repairs.
- **Lasting performance**
  The SOLYCO AKV® (anti-corrosion encapsulation) protects the cells against moisture and ageing.
- **More light, more yield**
  The SOLYCO Double AR Coating reduces reflections and brings more light to the cells than conventional modules.
- **Stable performance under partial shading**
  thanks to anti-shading cells with integrated current bypass

German guarantor

30-year product warranty and performance guarantee

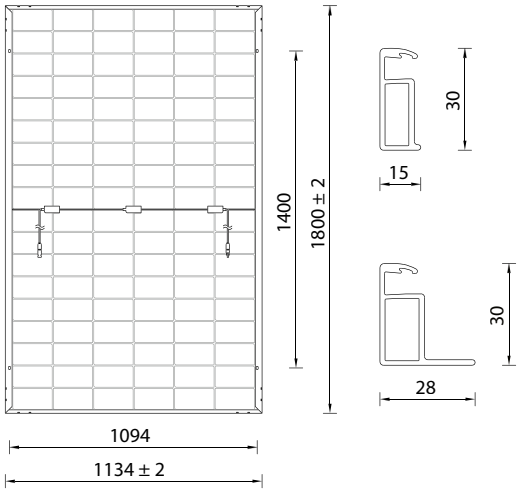
UltraBlack Performance Protect

SOLYCO Design R-BG 108nBC.6 Protect

Mechanical data

Cell technology	Back-contact, monocrystalline
Cell size and number	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 **Double AR Coating**
Rear glass	2.0 mm tempered solar glass with black cell gaps
Junction box and degree of protection	3 pcs. with one bypass diode each, IP68 fully potted
Cable with connector	4 mm² solar cable, 1200 mm, stainless steel braid sheathing (**marten protection**); Stäubli MC4-Evo 2

Dimensions



Electrical data

	480 Wp			485 Wp		
Conditions	STC	NMOT	BNPI	STC	NMOT	BNPI
STC nominal power Pmax (Wp)	480	364	520	485	368	525
Voltage at MPP Vmp (V)	33.84	32.11	33.85	33.94	32.21	33.94
Current at MPP Imp (A)	14.19	11.35	15.38	14.30	11.44	15.48
Open circuit voltage Voc (V)	40.76	38.67	40.74	40.89	38.80	40.85
Short circuit current Isc (A)	14.96	12.09	16.16	15.03	12.15	16.27
Bifaciality coefficient (%)	70 ± 5			70 ± 5		
Module efficiency (%)	23.5			23.8		

STC (nominal data at standard test conditions): irradiance 1000 W/m²; spectrum AM 1.5; module temperature 25 °C; NMOT (nominal data at nominal operating conditions): irradiance 800 W/m²; spectrum AM 1.5; ambient temperature 20 °C; wind speed 1 m/s. BNPI (Bifacial Nameplate Irradiance): irradiance 1000 W/m² on the front side and 135 W/m² on the rear side; IEC TS 60904-1-2. Sorting by Pmax 0 to +5 W. Tolerance Pmax: ±3.0 %; tolerances Voc, Vmp, Isc, Imp: ±5.0 %.

Packaging

37
Modules upright on pallet

888
Modules per truck

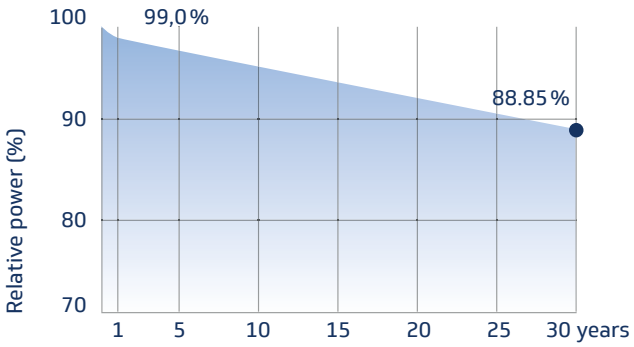
986
kg per pallet

Connection and operating conditions

Maximum system voltage	1500 V
Operating temperature range	-40 °C ... +85 °C
Mechanical load capacity[1]	Pressure load capacity tested at 5400 Pa Wind suction load capacity tested at 2400 Pa
Protection class	II
Maximum reverse current	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 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 pitches.

Guaranteed performance



Temperature coefficients

TC of maximum power (Pmax)	-0.26 %/°C
TC of open circuit voltage (Voc)	-0.22 %/°C
TC of short circuit current (Isc)	+0.05 %/°C
Nominal module operating temperature (NMOT)	42 ± 2

Certifications

IEC 61215:2021 (module reliability)
IEC 61730:2016 (module safety)
IEC 61701:2020 (salt mist resistance)
IEC 62716:2020 (ammonia resistance)

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