

SOLYCO Pro

R-TG 96n.5 /455-460



Maximum reliability and efficiency: The bifacial TOPCon double-glass bestseller optimized for residential buildings



Maximum energy generation

TOPCon double-glass module with an impressive efficiency of 23 %, providing higher energy yield.



Increased output through bifaciality

More energy thanks to a very good bifaciality coefficient of 80 %.



Extended longevity

Special combination of embedding materials guarantees maximum longevity and reliability.



Best cell quality

Exceptional reliability thanks to the exclusive use of Grade A cells. 100 % EL tested.

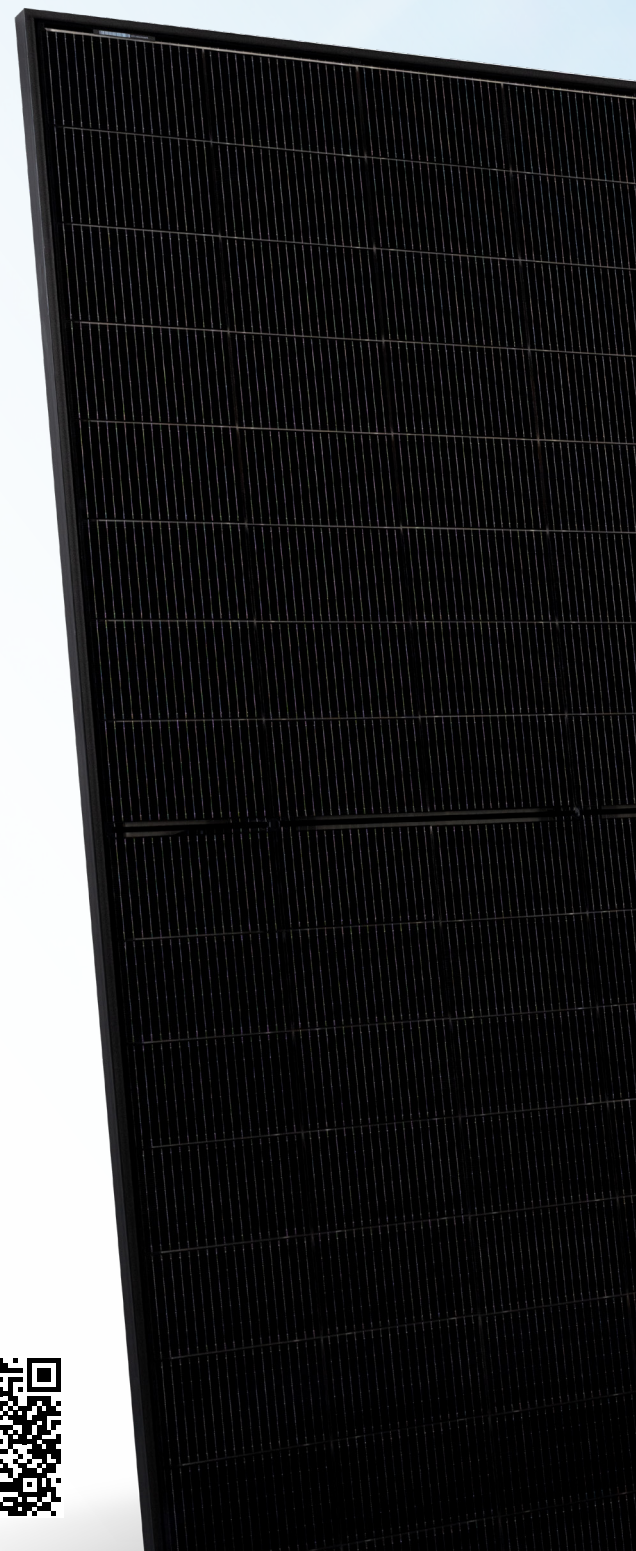


Improved warranty

Up to 30 years product warranty and 87.4 % performance guarantee after 30 years due to exceeded standards.

Certificates

- IEC 61215:2021 (module reliability)
- IEC 61730:2016 (module safety)
- IEC TS 62804-1:2015 (PID resistance)
- IEC 61701:2020 (salt mist resistance)
- IEC 62716:2013 (ammonia resistance)



Superior Solar Solutions

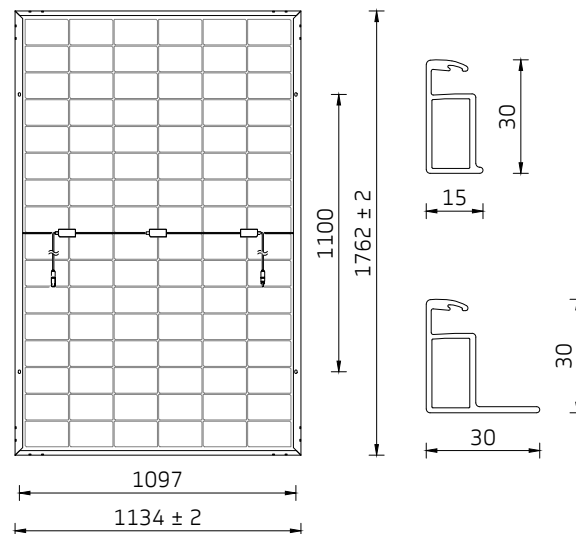
 German
Warranty Provider



R-TG 96n.5 /455-460

Mechanical data

Cell technology	TOPCon, monocrystalline
Cell size and quantity	182 mm x 105 mm; 96 half cells
Module dimensions	1762 mm x 1134 mm x 30 mm
Module weight	24,5 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	455 Wp			460 Wp		
	STC	NMOT	BNPI	STC	NMOT	BNPI
STC power output P _{max} (Wp)	455	347	503	460	351	509
Nominal power voltage V _{mp} (V)	30.69	28.80	30.83	30.95	29.04	31.09
Nominal power current I _{mp} (A)	14.83	12.05	16.30	14.87	12.08	16.34
Open circuit voltage V _{oc} (V)	36.18	34.82	36.49	36.32	34.96	36.62
Short circuit current I _{sc} (A)	15.78	12.72	17.60	15.83	12.76	17.66
Bifacial coefficient (%)	80 ± 5			80 ± 5		
Module efficiency (%)	22.8			23.0		

Packaging



36
modules vertically per pallet



936
modules per truck



936
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. 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})	-0.29 %/°C
TC of open circuit voltage (V _{oc})	-0.25 %/°C
TC of short circuit current (I _{sc})	+0.048 %/°C
Nominal module operating temperature (NMOT)	42 ± 2

