

SOLYCO Pro

R-TG 96h.5 /445-450

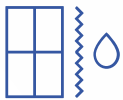


Outstanding temperature resilience and industry-leading performance guarantee: Advanced high-performance module with cutting-edge heterojunction technology



Superior temperature resilience

HJT double-glass module with an optimized temperature coefficient of 0.24 %.



Enhanced moisture protection

Added butyl coating provides optimal protection against moisture, extending module durability.



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

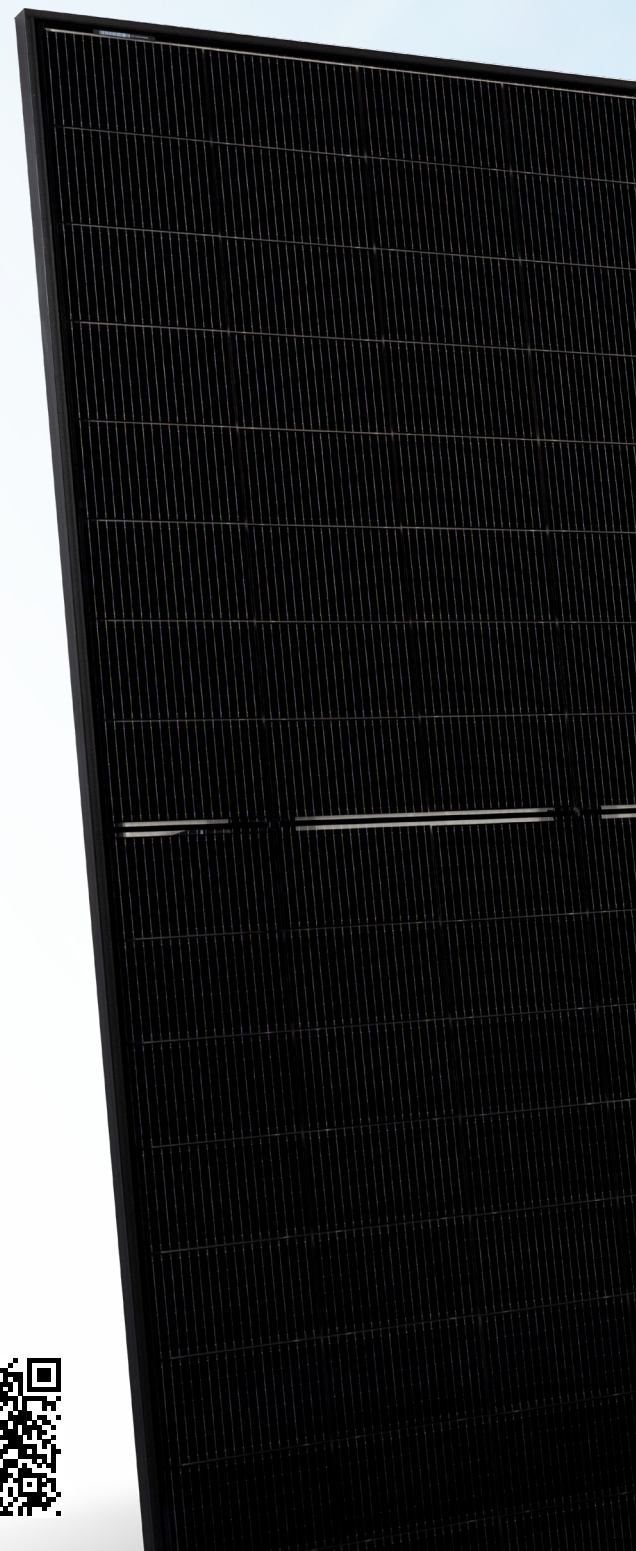
Up to 30 years product warranty and 90.3 % performance guarantee after 30 years due to exceeded standards.

Certificates

- IEC 61215:2016 (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)



DE 63944028



Superior Solar Solutions

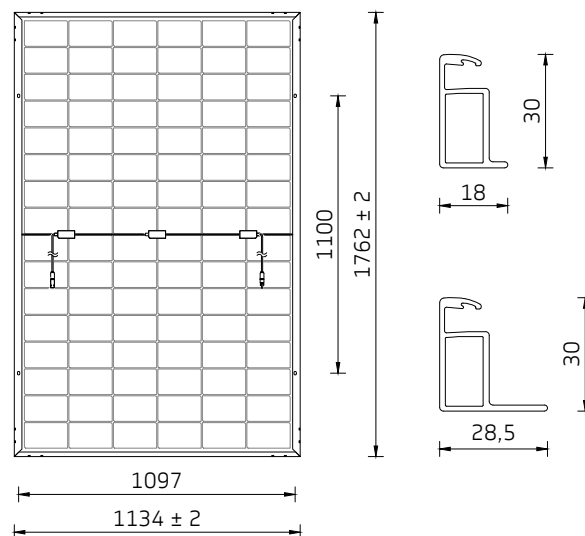
 German
Warranty Provider



R-TG 96h.5 /445-450

Mechanical data

Cell technology	HJT, 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	24,8 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	445 Wp			450 Wp		
	STC	NMOT	BNPI	STC	NMOT	BNPI
STC power output P _{max} (Wp)	445	338	499	450	343	504
Nominal power voltage V _{mp} (V)	30.61	29.12	30.83	30.83	29.45	30.94
Nominal power current I _{mp} (A)	14.54	11.62	16.19	14.60	11.67	16.31
Open circuit voltage V _{oc} (V)	36.45	34.79	36.75	36.72	35.05	36.85
Short circuit current I _{sc} (A)	15.24	12.18	17.29	15.53	12.41	17.42
Bifacial coefficient (%)	85 ± 5			85 ± 5		
Module efficiency (%)	22.3			22.52		

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 %.

Packaging



36
modules vertically per pallet



936
modules per truck



936
kg per pallet

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})	-0.24 %/°C
TC of open circuit voltage (V _{oc})	-0.24 %/°C
TC of short circuit current (I _{sc})	+0.04 %/°C
Nominal module operating temperature (NMOT)	44 ± 2

