

# R-WF 108n.3/430

# Solar module for the highest requirements with TOPCon technology



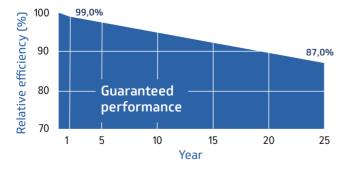
## Warranty

- 15 (25\*) year product warranty
- 25 years of linear benefit commitment
- Guaranteed plus tolerance

\*with system registration.

### **Certifications**

- IEC 61215: 2016 (Module reliability)
- IEC 61730: 2016 (Module safety)



### Safety

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

**Electric security** - The R-WF is approved for a system voltage of up to 1500V. For maximum electrical safety, it is equipped with potted junction boxes rated IP68 and original STÄUBLI MC4-Evo 2 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 an important quality aspect.

**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.

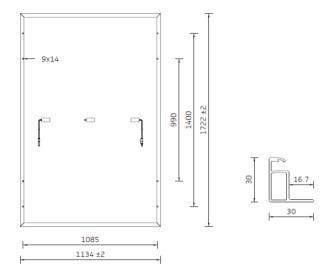
**TOPCon solar cell technology** – This technology enables a particularly high cell efficiency of >24%. It is characterized by very good temperature behaviour, excellent weak light properties and a high degree of bifaciality

**Highest peak performance** – With a nominal power of 430Wp and a module efficiency of 22%, this module is the ideal choice for all roof systems.

# R-WF 108n.3/430

Module with white backsheet, black frame and highly efficient TOPCon cells

# Technical data



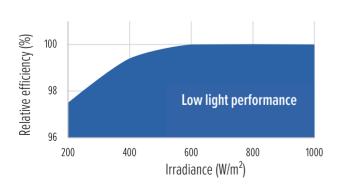
### **Connection and working conditions**

Maximum system voltage	1500V
Temperature range	-40°C +85°C
Mechanical resilience <sup>1</sup>	Pressure resistance tested at 5400Pa Wind suction load capacity tested at 2400Pa
Safety class	II
Reverse current overload	20A
Fire class	C (UL 790)
Hail resistance	Hailstones up to 40mm in size and at a speed of 27.5m/s (HW4)

 $<sup>^1\!\</sup>text{Specified}$  pressure load resistance: 3600Pa and suction load resistance: 1600Pa

#### **Temperature coefficients**

<u> </u>	
TC of maximum power (Pmax)	-0.30% /°C
TC of open circuit voltage (Voc)	-0.25% /°C
TC of short circuit current (Isc)	+0.045% /°C



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

#### **General data**

Cell technology	TOPCon; monocrystalline
Cell size and number	182mm x 91mm; 108 pcs.
Module dimensions	1722mm x 1134mm x 30mm
Module weight	20.5kg
Frame	Aluminium anodized (black)
Front glass	3.2mm tempered solar glass with anti-reflective coating
Junction box; degree of protection	3 pcs. with one bypass diode each potted junction box IP68 fully encapsulated
Connectors	4mm <sup>2</sup> solar cable, length 120cm; MC4-Evo 2
Packing	36 modules vertical on pallet, 936 / 40ft.

### Electrical data (STC)

Nominal data at standard testing conditions (STC): Irradiation 1000W/m<sup>2</sup>; Spectrum AM 1.5: module temperature 25°C: sorting for Pmax 0 to +5W

Spectrum AM 1.5; module temperature 25°C; sorting for Pmax 0 to +5W		
Module type	R-WF 108n.3/430	
STC power output Pmax (Wp)	430	
Nominal power voltage Vmp (V)	31.88	
Nominal power current Imp (A)	13.49	
Open circuit voltage Voc (V)	38.49	
Short circuit current Isc (A)	14.23	
Module efficiency (%)	22	

Tolerance Pmax:  $\pm 3,0\%$ ; Voc, Vmp, Isc, Imp tolerances:  $\pm 5,0\%$ 

### Electrical data (NMOT)

Nominal data at NMOT (Nominal Module Operation Temperature): Irradiation intensity 800W/m<sup>2</sup>; spectral distribution AM 1.5; ambient temperature 20°C; wind velocity 1m/s

Module type	R-WF 108n.3/430
Solar cell temperature (°C)	45+/- 2
Power output (Wp)	327
Nominal power voltage Vmp (V)	30.10
Nominal power current Imp (A)	10.87
Open circuit voltage Voc (V)	36.40
Short circuit current lsc (A)	11.47

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









