



PREFA SOLAR

SOLAR PANEL DATA SHEET

SOLAR PANEL PREFALZ 500/650

Symbol image

INNOVATIVE & POWERFUL TOPCON CELL TECHNOLOGY

LONG-LASTING AND DURABLE

The glass/glass PV modules are characterised by extraordinary robustness against environmental influences. They are moisture-resistant and can also withstand higher mechanical loads, whether from hail, storms or snow loads.

MORE EVEN HEAT DISSIPATION

The PREFALZ modules ensure more even heat dissipation, especially in environments with extreme temperature fluctuations. This results in minimal performance loss and ensures reliable power generation over a longer period of time.

HIGH EFFICIENCY

With their 10% higher performance compared to the conventional PERC cell, the TOPCon cells set a new standard. They convert more sunlight into electricity, even in diffuse light, resulting in higher overall efficiency.

PERFORMANCE GUARANTEE

10-year product guarantee and 25-year performance guarantee on the solar panel, which ensures a minimum performance of 85% of the nominal capacity after 25 years.

TYPE

SOLAR PANEL PREFALZ 500

SOLAR PANEL PREFALZ 650

ELECTRICAL PROPERTIES UNDER STC

STC (Standard Test Conditions): Irradiance 1,000 W/m², spectral distribution AM 1.5 | temperature 25±2°C, according to EN 60904-3

Nominal power P_{MPP}	150 Wp	150 Wp
Nominal voltage U_{MPP}	12.06 V	12.06 V
Nominal current I_{MPP}	12.44 A	12.44 A
Open-circuit voltage U_{OC}	14.15 V	14.15 V
Short-circuit current I_{SC}	12.96 A	12.96 A
Solar panel efficiency	18.3%	13.6%
Performance tolerance	+/- 5%	+/- 5%

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TYPE

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GENERAL DATA

Cells	2 × 20 High efficiency half-cut solar cells	2 × 20 High efficiency half-cut solar cells
Cell type	TOPCon	
Dimensions of the cell	182 × 91 mm	
Number of bypass diodes	1	
Glass specification	2 × 3.2 mm, prismatic	
Dimensions of the solar panel	2000 × 408 mm	2000 × 558 mm
Weight of the solar panel	15 kg (18 kg/m ²)	21 kg (18 kg/m ²)
Protection class	II	
Max. reverse current	15A	
Max. system voltage	1,000 V	
Solar panel connection	4.0 mm ² solar cable	
Connection and plug system	Decentralised junction box with original Stäubli MC4 connectors, IP 65, compliant with IEC 62790	
Origin	Produced in Austria	

THERMAL PROPERTIES

Voltage coefficient V_{oc}	-0.25%/K
Current coefficient I_{sc}	0.045%/K
Performance coefficient P_{max}	-0.32%/K
Operating temperature range	-40 ... +85°

CERTIFICATIONS, TESTS AND GUARANTEES

Salt spray/ammonia resistance	given
Expanded hail test	qualified for HW4
Applicable standards	Conformity according to IEC 61215 , IEC 61730
Performance guarantee P_{max}	min. 97% in the first year, then max. reduction of 0.5% p.a. for up to 25 years

