

Sunmaxx PX-1 Premium PVT-Module



Highest efficiency and space-saving:

The simultaneous generation of electricity and heat enables a higher total efficiency.

Flexible operation:

For use on roofs or open spaces. From residential buildings to industrial buildings to cold local heating networks.

Combination with heat pumps and geothermal energy:

By using PVT-Modules, heat pumps can be operated more efficiently, and geothermal probes can be regenerated.

Generates more electricity:

Generates more electricity: Thanks to the cooling of the PVT module, an increase of 5 to 10 % in electrical output is achieved.*

Plug & Play:

Installation-friendly connectors make it easy to connect the electrics and hydraulics.

Sustainability:

The aluminium heat exchanger on the back is optimised to save material and is easily recyclable. Produced with 100% independently certified green electricity.

Address:

Sunmaxx PVT GmbH

Schutterwälder Str. 13, 01458 Ottendorf-Okrilla

Contact:

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Made in Europe:

Our modules are manufactured in the EU to the highest quality standards.

Completely carefree:

10 years Product Guarantee 25 years linear performance guarantee (electrical power) 97% after the 1st year, 80% after the 25th year



Specifications Sunmaxx PX-1

GENERAL	UNIT		
Dimensions	[mm]	1,725 x 1,137 x 40	
Weight	[kg]	29	
Front	-	Highly transparent solar glass ESG (3.2 mm)	
Heat exchanger	-	Aluminium-Alloy	
Frame	-	Anodised aluminium, black	
Cell background film	-	Polymer film black	

ELECTRICAL DATA	UNIT	425 W	430 W	435 W	440 W
Туре	-	108 M10 Mono half cell TopCon			
Nominal PV power **	[w]	425	430	435	440
Voltage MPP VMPP	[V]	31.3	31.4	31.6	31.7
Current MPP IMPP	[A]	13.6	13.7	13.8	13.9
Open circuit voltage Voc	[V]	37.9	38.1	38.2	38.4
Short circuit current lsc	[A]	14.3	14.4	14.4	14.6
Efficiency	[%]	21.8	22.0	22.3	22.5
Max. system voltage VDc	[V]	1,500			
Reverse current load capacity	[A]	25			
Temperature coefficients	[%]	current α + 0.045%/K voltage β – 0.25%/K power γ -0.30%/K			
Connection	-	3-part junction box according to IEC 62790, MC4 original connector according to EN 62852			

THERMAL DATA	UNIT	
Thermal power ***	[w]	1,200
Thermal carrier medium	-	Water-glycol mixture
Volume thermal carrier medium	[1]	0.7
Pressure drop ****	[mBar]	29
Hydraulic connection	-	Plug in connector with flexible tube
Testing pressure	Bar	6
Operating pressure	Bar	1 – 2
Specific flow	[l/h]	50 – 150
Stagnation temperature	°C	81
Thermal collector efficiency: η₀ *****	-	0.76 / 0.60 (Voc / Mpp)

* Estimation without obligation

** STC Conditions

*** Radiation: 1,000 W/m², Volume Flow: 144 I/h, Temperature: 25 °C, Wind speed: 0 m/s, Delta T = 0 Kelvin, MPP measuring

**** 100 l/h, 20 °C (water)

***** Radiation: 1,000 W/m², Volume Flow: 144 I/h, Temperature: 25 °C, Wind speed: 0 m/s, Delta T = 0 Kelvin 0,76 corresponds to 1,522 W, 0,6 corresponds to 1,200 W Measurement accuracy PMPP at STC -3/+3% | Tolerance remaining electrical values -10/+10% Certification: Solar Keymark DIN EN 12975:2022-06 / DIN EN ISO 9806:2018-06