

## 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:

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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	400 W	405 W	410 W	415 W
Type	-	108 M10 Mono half cell PERC			
Nominal PV power **	[W]	400	405	410	415
Voltage MPP $V_{MPP}$	[V]	32.6	32.7	32.8	32.9
Current MPP $I_{MPP}$	[A]	12.3	12.4	12.5	12.7
Open circuit voltage $V_{oc}$	[V]	39.5	39.6	39.6	39.7
Short circuit current $I_{sc}$	[A]	13.0	13.2	13.3	13.5
Efficiency	[%]	20.4	20.6	20.9	21.2
Max. system voltage $V_{DC}$	[V]	1,500			
Reverse current load capacity	[A]	25			
Temperature coefficients	[%]	power $\alpha$ + 0.05%/K voltage $\beta$ - 0.26%/K current $\gamma$ -0,34%/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	[l]	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: $\eta_0$ *****	-	0.76 / 0.60 ( $V_{oc} / M_{PP}$ )

\* Estimation without obligation

\*\* STC Conditions

\*\*\* Radiation: 1000 W/m<sup>2</sup>, Volume Flow: 144 l/h, Temperature: 25 °C, Wind speed: 0 m/s, Delta T = 0 Kelvin, MPP measuring

\*\*\*\* 100 l/h, 20 °C (water)

\*\*\*\*\* Radiation: 1000 W/m<sup>2</sup>, Volume Flow: 144 l/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  $P_{MPP}$  at STC -3/+3% | Tolerance remaining electrical values -10/+10%

Certification: Solar Keymark DIN EN 12975:2022-06 / DIN EN ISO 9806:2018-06