

eMetal 3.1m – for Buildings & BIPV

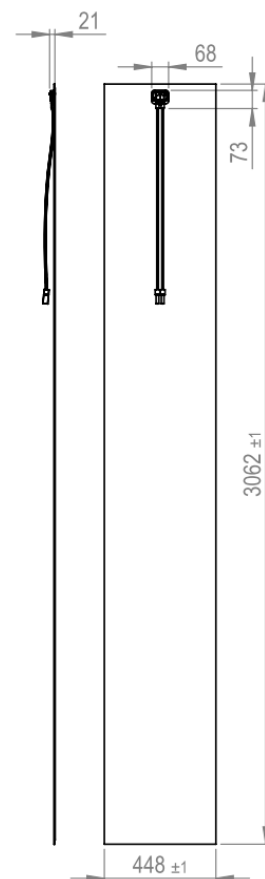


Description

The eMetal is a semi-flexible and lightweight solar panel designed for installation on roof structures with limited load bearing capacity, aesthetical metal BIPV facades and many more demanding solar applications.

Features

- Most elegant and aesthetic solar module, beautiful uniform design
- High energy yield due to excellent shadow tolerance and temperature stability
- Easy installation – drill & fix –mounting instruction available on request
- Applicable for roofs and facades – semi-bendable
- Ultra-low weight, < 4 kg/m²
- Unbreakable & robust - no glass, no micro cracks
- EL tested
- Made in Switzerland
- Available in 0.8m, 1.6m, 2.3m and 3m length
- Available with black frame color for highest aesthetics



Dimensions

Length	[mm]	3062
Width	[mm]	448
Thickness at module	[mm]	2.2
Thickness at J-Box	[mm]	21 ± 1
Weight	[Kg]	5.5

Electrical characteristics at STC¹

			SF 100	SF 105	SF 110	SF 115	SF 120
Model number							
Nominal power	Pmpp	[W]	100	105	110	115	120
Tolerance		[W]	-0/+5	-0/+5	-0/+5	-0/+5	-0/+5
Voltage at nom. power	Vmpp	[V]	34	35	36	37	38
Current at nom. power	Impp	[A]	2.94	3.00	3.06	3.11	3.16
Open circuit voltage	Voc	[V]	46	47	48	49	50
Short circuit current	Isc	[A]	3.20	3.25	3.30	3.35	3.40
Max. system voltage	IEC	[V]			1000		
Max. serial fuse rating		[A]			10		

Thermal characteristics

Temperature coefficient	Voc	[%/°C]			-0.3		
Temperature coefficient	Isc	[%/°C]			0.01		
Temperature coefficient	Pmpp	[%/°C]			-0.35		

Operating conditions

Temperature range	[°C]	-40 to +85
Max. mechanical load		2400 Pa, 245 kg/m ²

Additional data

Cell type	Flexible CIGS
Junction box	Front side including bypass diode, IP67, MC4 type / MC4 connectors, 700mm long cable (4 mm ²)
Encapsulation	Fluoropolymer front sheet / 1mm alu back plate
Parallel connection	Y-connector available
Customization	Possible on request for larger volumes / Optional front and back-side junction box

Warranty & certification

Performance guarantee	10 years on 90% of Pmpp under STC ¹ & 20 year on 80% of Pmpp under STC ¹
Warranty	5 years' workmanship after delivery date
Certification	IEC 61646 2nd Ed testing underway; IEC 61730 testing underway
Safety class	II

Notes

¹ STC: 1000 W/m², AM1.5G, 25°C, stabilized module state

² NOCT: 800 W/m², AM1.5G, 20°C, Wind Velocity = 1 m/s

We continuously develop our products. Electrical and physical properties subject to change without prior notice.

Distribution & Installation Partner: