

MPV-M-Sama 1 - Innovation on 1.43 m²

Ideal for Rooftop Installations

The attractive, frameless modules, 1.43 m² large, are made up of one amorphous silicon and one micromorph silicon layer. The micromorph tandem layer absorbs a particularly broad spectrum of light, which leads to excellent energy production even during diffuse or low light conditions. These modules are particularly well suited for rooftop installations.



Reliability, Warranty and Safety

- High reliability certified according to IEC 61646:2008, IEC 61730-1:2007 and IEC 61730-2:2007
- "Made in EU" certificate
- Product warranty of 10 years on material and workmanship
- Performance guarantee:
 - 10 years (90 % of minimum stabilized rated power output)
 - 25 years (80 % of minimum stabilized rated power output)
- Fully recyclable due to PV-Cycle membership

About Masdar PV GmbH

Masdar PV GmbH develops and produces innovative thin-film solar products and solutions. Part of the Masdar Power business unit, Masdar PV GmbH is a 100% subsidiary of Masdar, Abu Dhabi's multifaceted initiative for innovative technologies, launched and owned by the Mubadala Development Company.

⊕ EFFICIENT

Excellent energy output even during diffuse or low light conditions

⊕ SUPERIOR YIELD

Higher yields than crystalline modules in hot climates due to better temperature coefficient

⊕ SAFE

Financially powerful investor ensures continued existence

⊕ QUALITY GUARANTEED

10-year product warranty
25-year performance guarantee*

⊕ CERTIFIED

Certified high-tech module, "Made in Germany", guaranteeing high quality products

⊕ TESTED

Independent tests confirm mechanical stability of the modules even under conditions of high wind and snow loads

⊕ POSITIVE SORTING

Superior specific yields due to positive sorting within power classes

⊕ AESTHETIC

Black striped module design meets highest aesthetic expectations

⊕ SUSTAINABLE

Short energy payback time due to low process temperatures and careful selection of materials

⊕ RECYCLABLE

Manufactured with non-toxic materials

*80 % of minimum stabilised rated power output





a-Si/ μ c-Si Thin-Film PV Module

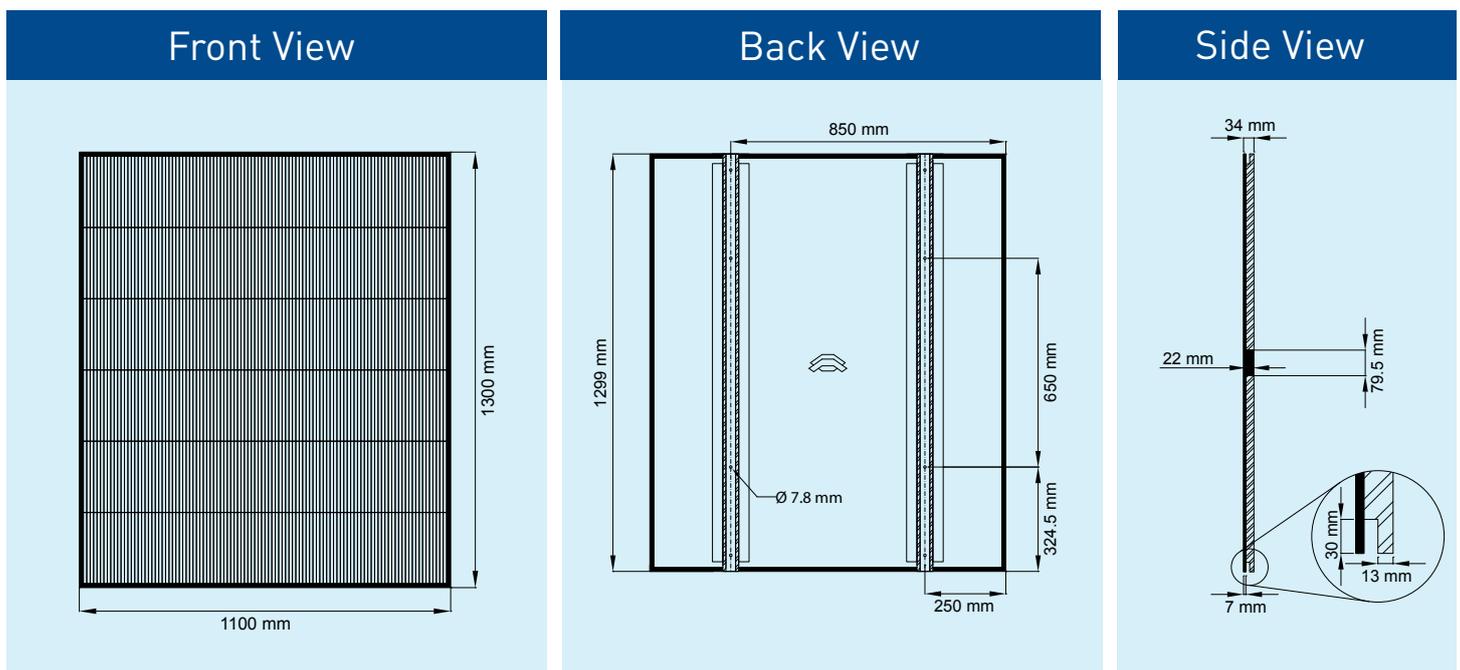
Parameter	Unit	MPV120-M	MPV125-M	MPV130-M	MPV135-M	MPV140-M
Nominal peak power (P_{mpp})	W	120	125	130	135	140
Nominal voltage (V_{mpp})	V	111.2	112.6	110.7	111.8	113
Nominal current (I_{mpp})	A	1.08	1.11	1.18	1.21	1.24
Open circuit voltage (V_{oc})	V	142.4	143.6	140.4	142.2	143.9
Short circuit current (I_{sc})	A	1.26	1.30	1.39	1.41	1.43
Maximum system voltage (V_{max})	V	1000				
Maximum reverse current (I_R)	A				3	
Bypass diode current (I_B)	A				10	
Temperature coefficient (P_{mpp})	%/K				-0.27	
Temperature coefficient (V_{oc})	%/K				-0.37	
Temperature coefficient (I_{sc})	%/K				0.1	
Length	mm				1300	
Width	mm				1100	
Area	m ²				1.43	
Thickness of module (incl. backrails)	mm				7 (34)	
Weight	kg				30	
Operating temperature range	°C				-40 to +85	

Negative grounding required

 Standard test conditions (STC) = 1000 W/m², 25°C, AM 1.5

Dimensions

The drawings are not drawn to scale! For valid measurements, please refer to the installation guide!



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