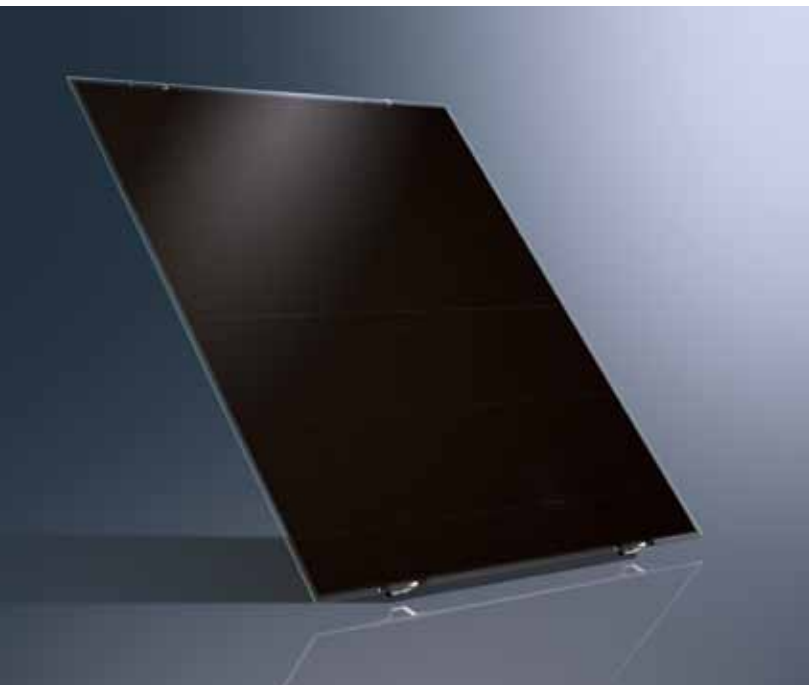


Schüco MPE Thin-Film Modules in the BL 01 Series

Technical information on the output categories 120 to 130 W_p



Innovative thin-film modules

Schüco MPE thin-film modules in the BL 01 series are characterized by their impressive performance and their high fabrication quality. The microcrystalline cell technology allows optimum power output at high operating temperatures, with diffuse light or non-optimum module orientation. This ensures maximum annual outputs. Due to the positive output tolerance, the rated output is achieved or exceeded.

Comprehensive guarantees*

The modules have an extended 10-year product guarantee. Schüco guarantees that these PV modules will deliver at least 90 % of their rated output over a 12 year period, and at least 80 % of their rated out-put over a 25 year period under standard test conditions.

Optimum labelling

Each Schüco PV module is subject to comprehensive quality and electrical tests after fabrication. The output data measured is indicated on the reverse side of the laminate and on the module packaging. This means that homogenous module fields can be grouped together effectively.

High level of operational reliability

A bypass diode bridge in the connection box prevents disproportionate lowering of output in shady conditions. This ensures that the whole system, from module fields to inverters, produces optimum outputs.

Environmental protection

Only small quantities of raw materials are needed to produce Schüco MPE thin-film modules in the BL 01 series, and the modules do not contain cadmium or lead. The energy payback period is approximately 1.5 years.

A coordinated PV system

Monocrystalline Schüco MPE thin-film modules in the BL 01 series fulfill the highest standards of stability and corrosion resistance. Together with the Schüco mounting system and Schüco inverters, they form a complete and flexible PV system for every project requirement.

* In accordance with the warranty conditions of Schüco USA LLLP



Green Technology for the Blue Planet
Clean Energy from Solar and Windows

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Schüco MPE Thin-Film Modules in the BL 01 Series*

Technical data

Key electrical data ¹⁾	MPE 120 BL 01	MPE 125 BL 01	MPE 130 BL 01	
Article number	258 203	258 204	258 205	
Rated output (P_{mpp})	120	125	130	
Output tolerance (ΔP_{mpp})		+5 / -0		W_p
Minimum power output ($P_{mpp, min}$)	120	125	130	
Rated voltage (U_{mpp})	108.9	109.4	110.2	V
Rated current (I_{mpp})	1.14	1.16	1.18	A
Open-circuit voltage (U_{OC})	140.1	141.0	141.9	V
Short circuit current (I_{SC})	1.35	1.37	1.39	A
Module efficiency	8.4	8.7	9.1	%
Temperature coefficient α (P_{mpp})		-0.28		
Temperature coefficient β (I_{SC})		+0.10		
Temperature coefficient χ (U_{OC})		-0.37		% / °C
Temperature coefficient δ (I_{mpp})		+0.08		
Temperature coefficient ϵ (U_{mpp})		-0.37		
Maximum permissible system voltage		1000		V
Reverse current stability		3		A

Performance data for 200 W/m ² / 25°C				
Rated voltage (U_{mpp})	104.7	108.3	113.1	V
Rated current (I_{mpp})	0.22	0.23	0.24	A
Open-circuit voltage (U_{OC})	126.3	131.4	135.5	V
Short circuit current (I_{SC})	0.30	0.32	0.33	A

¹⁾ The electrical values represent the stabilized module values under standard test conditions (STC: intensity of solar radiation 1,000 W/m², air mass 1.5, cell temperature 25 °C [77 °F]). During the first six weeks of operation, the module performance is higher. Please follow the installation and operating instructions. PV modules show electrical performance degradation over time. This occurs after commissioning, initially on a decreasing scale, then later in a linear progression. All key electrical data, with the exception of the rated output, is subject to a tolerance of ±5%. Key electrical data are typical values based on the measurement data from a produced module. No guarantee of the accuracy of the data is to be assumed for future production batches.

Partial load behavior	
Intensity of solar radiation	Module efficiency ²⁾
200 W/m ²	95.0 %

²⁾ In relation to a solar radiation intensity level of 1,000 W/m², 25 °C (77 °F), air mass index 1.5

Key mechanical data			
External dimensions (L x W x H)	1,300 x 1,100 x 7.1 mm (51.18 x 43.31 x 0.28 in)		
Height including mounting rail profiles	42.6 mm (1.68 in)		
Front glass	3.2 mm (0.13 in) solar glass with TCO film		
Rear glass	3.2 mm (0.13 in) float glass		
Weight	26.4 kg (58.2 lb)		
Connection system	MC-T4 compatible junction box with bypass diode		
Article No. prepared cable ³⁾ - 12 AWG (2.5 mm ²) with MC-T4 connection system	1	10	50
Length 0.80 m	257 201	257 202	257 203
Length 1.60 m	257 204	257 205	257 206

³⁾ Not supplied

Certifications and warranties ⁴⁾	
Electrical classification	Safety class II
Product standard	IEC 61646, EN 61730, UL 1703
Extended product warranty	10 years
Output warranty to 90 % $P_{mpp, min}$	12 years
Output warranty to 80 % $P_{mpp, min}$	25 years

⁴⁾ In accordance with the Schüco USA LLLP conditions of warranty

* Availability of the performance class will be checked upon request

