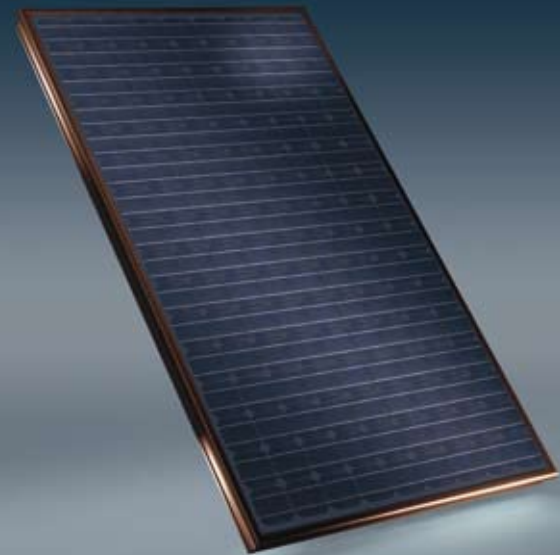
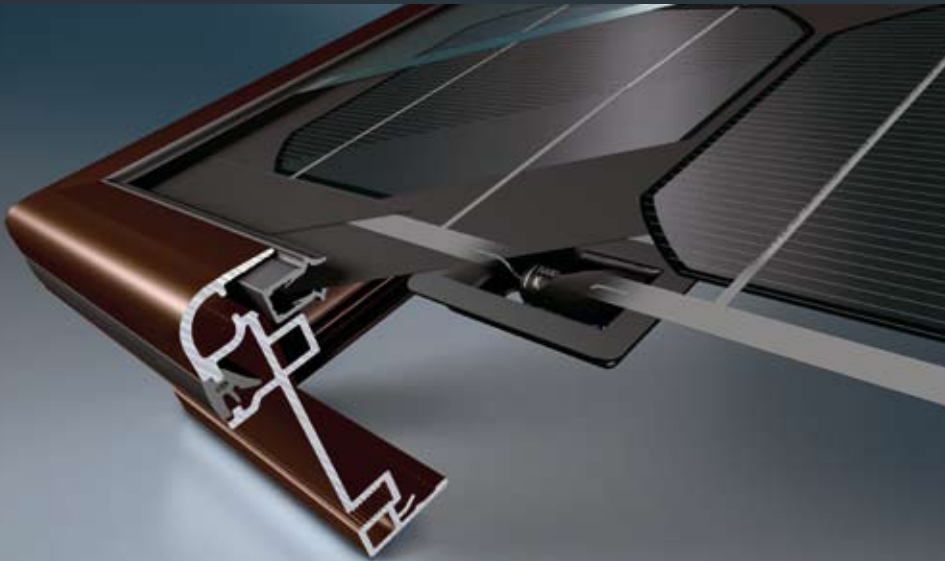


Schüco S PMU-2 Series

Premium Photovoltaic Modules



Schüco Premium Line: designed to perfection

The Schüco Premium Line denotes uncompromising quality, individual installation options and innovative and elegant design. Photovoltaic modules in the S PMU-2 series supplement the Schüco Premium Line with high-performance photovoltaic components.

Perfect integration and a variety of installation options

Schüco S PMU-2 modules have an anodised aluminium frame that is available in any RAL colour on request. The modules are suitable for on-roof, flat-roof, in-roof, and whole roof installation without visible retaining clips and can be installed on the façade or as a canopy. They can be combined with Schüco solar thermal collectors and roof windows in the same module size.

PV module of the highest quality

Schüco PV modules in the S PMU-2 series have monocrystalline solar cells with a dark Tedlar foil backing. The modules have a rated output of at least 310 watts thanks to their unusually large surface area. The performance tolerance is +3/-3%; only modules of the highest quality provide this level of reliability.

Comprehensive guarantee

Schüco S PMU-2 modules have a 5-year product guarantee. In fact, the guarantee on output values is considerably longer – after 25 years, the Schüco module will still provide at least 80% of its rated output. Every S PMU-2 module is manufactured according to current quality standards.

Optimised labelling

Prior to delivery, every S PMU-2 module is subject to a visual and electrical quality test. The output data measured is indicated on the reverse of the module. Homogeneous module fields can be grouped together quickly and effectively during installation.

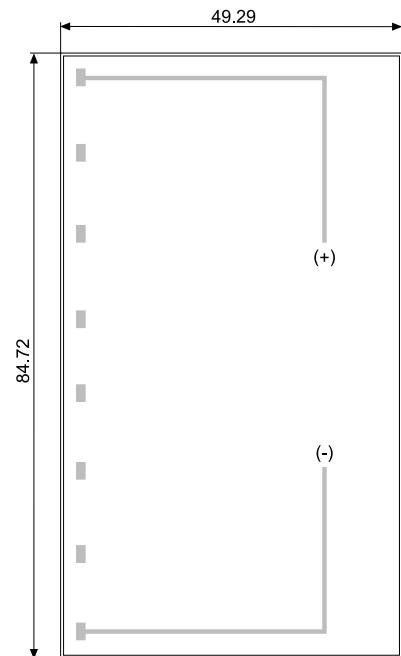
High level of operational reliability

Schüco S PMU-2 modules have eight connecting buttons on the reverse that are each fitted with a bypass diode bridge. This prevents individual solar cells from overheating (hot-spot effect). This ensures the reliable operation of the whole system from module fields to inverters.

SCHÜCO

Technical Data

Electrical specifications	Module output classes		
Power output under standard test conditions STC)*	S 310-PMU-2	S 320-PMU-2	S 330-PMU-2
Rated output (P_{mpp})	310 W	320 W	330 W
Effective output tolerance (ΔP_{mpp})	+3 % / -3 %	+3 % / -3 %	+3 % / -3 %
Guaranteed minimum output ($P_{mpp \min}$)	300.7 W	310.4 W	320.1 W
Number, layout and size of cells	144 (9x16) 5" monocrystalline cells		
Rated voltage (U_{mpp})	72.3 V	72.3 V	72.4 V
Rated current (I_{mpp})	4.3 A	4.4 A	4.5 A
Open circuit voltage (U_{oc})	88.1 V	88.1 V	88.6 V
Short circuit current (I_{sc})	4.65 A	4.75 A	4.8 A
Cell efficiency	15.4 %	15.8 %	16.2 %
Module efficiency	11.5 %	11.9 %	12.2 %
Temperature coefficient α (P_{mpp})	-0.37 % /°C	-0.37 % /°C	-0.37 % /°C
Temperature coefficient β (I_{sc})	+0.09 % /°C	+0.09 % /°C	+0.09 % /°C
Temperature coefficient χ (U_{oc})	-0.34 % /°C	-0.34 % /°C	-0.34 % /°C
Temperature coefficient δ (I_{mpp})	+0.09 % /°C	+0.09 % /°C	+0.09 % /°C
Temperature coefficient ξ (U_{mpp})	-0.34 % /°C	-0.34 % /°C	-0.34 % /°C
Normal operating cell temperature (NOCT**)	114.8 °F (46°C)	114.8 °F (46°C)	114.8 °F (46°C)
Maximum system voltage permitted	600 V	600 V	600 V



* Irradiance 1,000 W/m², Air Mass 1.5, cell temperature 77°F

** Irradiance 800 W/m², ambient temperature 68°F, wind speed 2.24 mph

Mechanical Specifications	
Outer dimensions	84.72 x 49.29 x 3.66 in. (2,152 x 1,252 x 93 mm)
Aluminum frame	Anodized, bronze (appr. RAL 8019)
Front glass	Tempered safety glass
Weight	108.03 lbs. (49 kg)
Connection system / diameter of cable	Schüco MC-T4 compatible / 4 mm ² / 12 AWG
Lengths: plus / minus cable	62.99 in. + 1.97 in. / 62.99 in. + 1.97 in. (160 cm + 5 cm / 160 cm + 5 cm)

Miscellaneous	
Weight of packing unit	110.23 lbs. (50 kg)
Schüco Art. -No. S 310-PMU-2	232960
Schüco Art. -No. S 320-PMU-2	232961
Schüco Art. -No. S 330-PMU-2	232962
Packing unit	1 module

Qualification and guarantees	
Electrical classification	Safety class II
Product standard	UL 1703 / IEC 61215-2
Extended product guarantee	5 years
Guarantee of 90 % performance $P_{mpp \min}$	12 years
Guarantee of 80 % performance $P_{mpp \min}$	25 years

Schüco USA L.P.
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