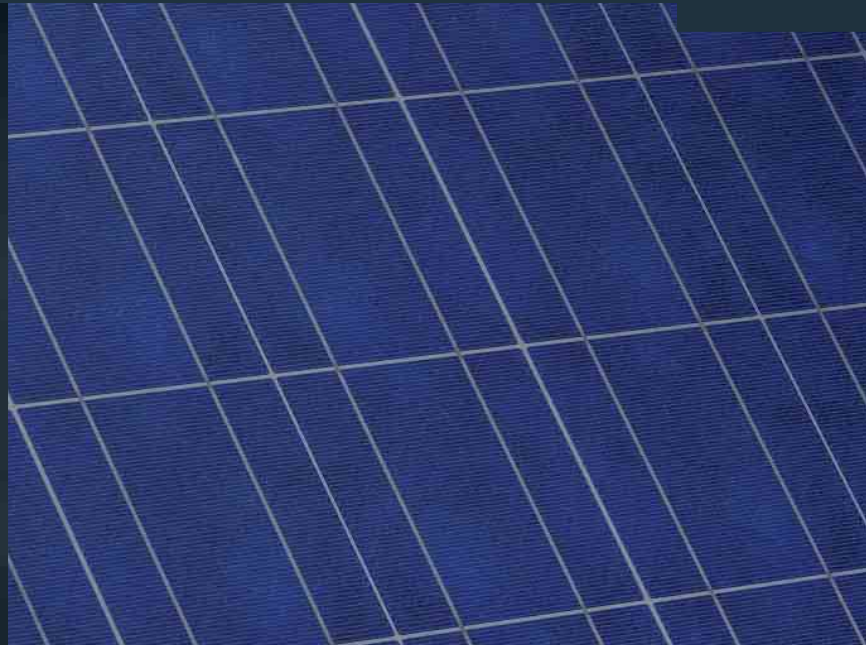


Schüco MPE modules in the PS 04 series

Technical information on performance classes 210 to 230 W_p



Highest quality PV modules

Schüco MPE modules in the PS 04 series are distinguished by polycrystalline solar cells with high cell efficiencies for the highest possible outputs per square meter of module area. The output tolerance of -0%/+5% ensures the highest quality and means increased outputs due to a guaranteed rated output for each module.

Comprehensive guarantee

Schüco MPE modules have a 5-year product guarantee. The guarantee on output values is considerably longer – after 25 years, the Schüco MPE module in the PS 04 series will still provide at least 80% of its rated output. Every module is manufactured according to current quality standards.

Optimized labeling

Prior to delivery, each module is subject to a visual and electrical quality test. The performance data measured are indicated on the back of the module and on the packaging. Homogeneous module fields can be grouped together quickly and effectively during installation.

The frames are constructed of aluminum alloy for maximum endurance in rugged weather conditions. They are also given a double oxidation coating for added protection against the elements, assuring impressive longevity even under adverse conditions. The load bearing capacity for snow and wind loads is 50 lbs/sq ft.

The modules fully adhere to Germany's stringent ISO 9001 and ISO 14001 quality and environmental standards. The modules are fully ETL certified and Intertek listed based on UL 1703. Every cell is individually inspected and power-matched to ensure consistent performance between the cells in the module array. More-over, each PV cell is individually inspected and checked for current reversion, micro cracks, chipping, warping.

*In accordance with the warranty conditions of Schüco USA L.P.

SCHÜCO

Schüco MPE modules in the PS 04 series

Photovoltaic Modules					
Product name	MPE 210 PS 04	MPE 215 PS 04	MPE 220 PS 04	MPE 225 PS 04	MPE 230 PS 04
Schüco article number	232 509	232 510	232 511	232 512	232 513
Electrical specifications					
STC Rated output (P _{mpp})	210 W _p	215 W _p	220 W _p	225 W _p	230 W _p
PTC Rated output (P _{mpp})	189.5 W _p	194.1 W _p	198.7 W _p	203.3 W _p	207.7 W _p
Output tolerance STC (Δ P _{mpp})	-0 %/+5 %	-0 %/+5 %	-0 %/+5 %	-0 %/+5 %	-0 %/+5 %
Warranted power output STC (P _{mpp} min)	210 W _p	215 W _p	220 W _p	225 W _p	230 W _p
Rated voltage (V _{mpp})*	28.9 V	29.0 V	29.3 V	29.5 V	29.8 V
Rated current (I _{mpp})*	7.26 A	7.43 A	7.52 A	7.63 A	7.71 A
Open circuit voltage (V _{oc})*	36.2 V	36.5 V	36.6 V	36.7 V	36.8 V
Short circuit current (I _{sc})*	7.91 A	8.01 A	8.09 A	8.19 A	8.34 A
Module efficiency	13,1 %	13,4 %	13,7 %	14,0 %	14,3 %
Temperature coefficient α (P _{mpp})*	-0.45 %/K	-0.45 %/K	-0.45 %/K	-0.45 %/K	-0.45 %/K
Temperature coefficient β (I _{sc})*	+0.06 %/K	+0.06 %/K	+0.06 %/K	+0.06 %/K	+0.06 %/K
Temperature coefficient χ (V _{oc})*	-0.35 %/K	-0.35 %/K	-0.35 %/K	-0.35 %/K	-0.35 %/K
Temperature coefficient δ (I _{mpp})*	+0.06 %/K	+0.06 %/K	+0.06 %/K	+0.06 %/K	+0.06 %/K
Temperature coefficient ε (V _{mpp})*	-0.35 %/K	-0.35 %/K	-0.35 %/K	-0.35 %/K	-0.35 %/K
Normal Operating Cell Temperature (NOCT)	113° F	113° F	113° F	113° F	113° F
Maximum system voltage USA NEC	600 V	600 V	600 V	600 V	600 V
Maximum system voltage SCII	600 V	600 V	600 V	600 V	600 V
Max. series fuse rating	15 A	15 A	15 A	15 A	15 A
Cell Technology					
Cell type	polycrystalline	polycrystalline	polycrystalline	polycrystalline	polycrystalline
Number of cells / cell arrangement	60 / 6 × 10	60 / 6 × 10	60 / 6 × 10	60 / 6 × 10	60 / 6 × 10
Cell dimension	6"	6"	6"	6"	6"
Mechanical specifications					
Outer dimensions	64.49 × 38.66 × 1.57 in	64.49 × 38.66 × 1.57 in	64.49 × 38.66 × 1.57 in	64.49 × 38.66 × 1.57 in	64.49 × 38.66 × 1.57 in
Frame technology (if applicable)	Aluminum frame, silver	Aluminum frame, silver	Aluminum frame, silver	Aluminum frame, silver	Aluminum frame, silver
Compound	Glass / EVA / Backsheet	Glass / EVA / Backsheet	Glass / EVA / Backsheet	Glass / EVA / Backsheet	Glass / EVA / Backsheet
Weight (module only)	44.1 lbs	44.1 lbs	44.1 lbs	44.1 lbs	44.1 lbs
Junction Box IP rating	IP 65	IP 65	IP 65	IP 65	IP 65
Cable length / diameter (if applicable)	40 in ± 2 in	40 in ± 2 in	40 in ± 2 in	40 in ± 2 in	40 in ± 2 in
Connector type	Schüco MC-T4 compatible	Schüco MC-T4 compatible	Schüco MC-T4 compatible	Schüco MC-T4 compatible	Schüco MC-T4 compatible
Qualification and warranties					
Product standard	UL 1703	UL 1703	UL 1703	UL 1703	UL 1703
Extended product warranty	5 years	5 years	5 years	5 years	5 years
Output warranty of 90% performance P _{mpp} (STC)	12 years	12 years	12 years	12 years	12 years
Output warranty of 80% performance P _{mpp} (STC)	25 years	25 years	25 years	25 years	25 years
Miscellaneous					
Packing unit	2 modules	2 modules	2 modules	2 modules	2 modules
Weight of packing unit	90.4 lbs	90.4 lbs	90.4 lbs	90.4 lbs	90.4 lbs

* Irradiance 1,000 W / m², air mass index 1.5, cell temperature 25° C

Schüco USA L.P.
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