

SOLAR MODULE

Sunways Solar Module SM 210U

Sunways SM 210U Solar Modules are equipped with high-quality Sunways Solar Cells, and therefore guarantee maximum reliability and power yield. With their graded output classes they enable custom-tailored planning of photovoltaic systems.



Category overview

Category:	multicrystalline
Module size (length x width):	1680 mm x 990 mm
Area:	1,66 m ²
Thickness incl. frame:	50 mm
Weight:	24 kg
Output classes:	220 / 215 / 210 / 205 Wp

Product features

- Integrated Sunways Solar Cells with high degree of efficiency for maximum yields
- Low output tolerance of ± 3 percent
- High reliability and quality
- Cells and modules manufactured in Germany
- 4 mm highly transparent solar glass and 50 mm aluminium frame profile for excellent stability and long life
- In-house cell development for optimised production processes and highest degrees of innovation

Module Designation/Article No.

SM 210U · 220 Wp :	SM210UA13
SM 210U · 215 Wp :	SM210UA12
SM 210U · 210 Wp :	SM210UA11
SM 210U · 205 Wp :	SM210UA10

Information and Sales

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Photovoltaic Technology

Technical Data of SM 210U

Output classes	220	215	210	205
Article No.	SM210UA13	SM210UA12	SM210UA11	SM210UA10

Electrical data at STC

Rated output P_{MPP} (W)	220	215	210	205
MPP voltage (V)	28,40	28,30	28,20	28,00
MPP current (A)	7,75	7,60	7,45	7,32
Open-circuit voltage (V)	37,20	37,00	36,80	36,70
Short-circuit current (A)	8,38	8,33	8,28	8,24

STC-Standard Test Conditions: Air mass AM 1,5 – Irradiation 1000 W/m² – Cell temperature 25°C

Electrical data at NOCT

Rated output P_{MPP} (W)	164	160	157	153
MPP voltage (V)	26,00	25,90	25,80	25,70
MPP current (A)	6,30	6,18	6,06	5,96
Open-circuit voltage (V)	34,80	34,60	34,40	34,40
Short-circuit current (A)	6,78	6,74	6,70	6,67

The NOCT values are typical values. NOCT: Nominal operating cell temperature (= 45°C)

Typical cell temperature with: Irradiation 800 W/m² – Ambient temperature 20°C – Wind speed 1 m/s

Other electrical parameters

System voltage (V)	870
Temperature coefficient P_{MPP} (%/°C)	-0,34
Temperature coefficient I_{SC} (%/°C)	0,06
Temperature coefficient U_{OC} (%/°C)	-0,32

Limit values

Permissible module temperature	-40 to +80°C
Installation specifications	No limitations

Design

Cells	60 Sunways Solar Cells, multicrystalline
Cell dimensions	156 x 156 mm, completely square
Front	Solar glass 4 mm, highly transparent
Encapsulation	EVA - Solar Cells - EVA
Back	PLF-polyester laminated film
Frame	Aluminium, bright anodised
Connection	2 x 1,2 m solar cables with TYCO-Solarlok connectors
Bypass diodes	3 pieces

Qualifications and Certificates

Protection class II, IEC 61215, CE

Dimensional drawings

