

SCHOTT POWER™ POLY series



SCHOTT POWER™ POLY
235/240/245/250

At a glance

- High long term stability
- Cost optimised project module
- Reduction of transportation and storage costs
- Easy and simple installation
- High resistance to adverse weather conditions

The global German company SCHOTT Solar started developing and manufacturing components for the solar industry in 1958.

High long term stability: The module achieves a high long term stability due to module components which fulfill the high SCHOTT Solar internal quality standard.

Cost optimised project module: This module is available for validated projects only. It is cost optimised due to the focus on the electrical and mechanical performance.

Reduction of transportation and storage costs: The delivery of an exact number of modules to the construction site minimises the transportation and storage costs for the installer.

Easy and simple installation: A simple and quick installation is ensured by a low module weight.

High resistance to adverse weather conditions: The test-verified pressure and suction loads of 5,400 Pa ensure the module withstands weather conditions including wind, storms, ice and snow.

Technical Data

Data at standard test conditions (STC)

Modul type		SCHOTT POWER™ POLY			
Nominal power [Wp]	P_{mpp}	≥ 235	≥ 240	≥ 245	≥ 250
Voltage at nominal power [V]	U_{mpp}	29.9	30.4	30.6	30.8
Current at nominal power [A]	I_{mpp}	7.86	7.89	8.01	8.12
Open-circuit voltage [V]	U_{oc}	37.0	37.2	37.5	37.8
Short-circuit current [A]	I_{sc}	8.32	8.47	8.62	8.66
Module efficiency (%)	η	14.4	14.7	15.0	15.3

STC (1,000 W/m²; AM 1.5; cell temperature 25°C)

Power tolerance (as measured by flasher): -0 W / +4.99 W

Data at normal operating cell temperature (NOCT)

Nominal power [Wp]	P_{mpp}	169	172	176	179
Voltage at nominal power [V]	U_{mpp}	27.0	27.4	27.6	27.8
Open-circuit voltage [V]	U_{oc}	33.7	34.0	34.2	34.5
Short-circuit current [A]	I_{sc}	6.67	6.79	6.91	6.94
Temperature [°C]	T_{NOCT}	47.0	47.0	47.0	47.0

NOCT (800 W/m², AM 1.5, windspeed 1 m/s, ambient temperature 20°C)

Data at low irradiation

At a low irradiation intensity of 200 W/m² (AM 1.5 and cell temperature 25°C) 97 % of the STC module efficiency (1,000 W/m²) will be achieved.

Temperature coefficients

Nominal power [%/K]	P_{mpp}	-0.45
Open-circuit voltage [%/K]	U_{oc}	-0.33
Short-circuit current [%/K]	I_{sc}	+0.04

Characteristic data

Solar cells per module	60
Cell type	Polycrystalline, 156 mm x 156 mm
Junction box	IP65 with 3 bypass diodes PV WIRE, 1000 mm x 4 mm ²
Connector	QC4 connector IP67 Tyco-Connector IP67
Dimensions junction box	102 x 85 x 20.5 mm
Front side cover	Low iron solar glass 3.2 mm
Back side cover	Foil
Frame material	Silver anodised aluminum

Dimensions and weight

Dimensions [mm]	1,652 x 990
Thickness [mm]	35
Weight [kg]	20.0

Limits

Maximum system voltage [V _{DC}]	1,000
Maximum reverse current I _R [A]*	20
Operating module temperature [°C]	-40 ... +85
Maximum load (to IEC 61215 ed. 2)	pressure 5,400 N/m ² or 550 kg/m ² suction 5,400 N/m ² or 550 kg/m ²
Application classification (to IEC 61730)	A
Fire classification (to IEC 61730)	C

* No external voltage in excess of U_{oc} shall be applied to the module.

Permission and certificates

The modules comply with the requirements of IEC 61215 ed. 2 and IEC 61730. Electrical Protection Class II and the CE-guidelines.

Power measurement accuracy: ± 4 %

The **installation manual** contains additional information on installation and operation. SCHOTT Solar Hareon Co., Ltd. reserves the right to make specification changes in this datasheet without notice. All information complies with the requirements of the standard EN 50380.

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