Solar module with textured POLY cells

High-quality crystalline solar cells ensure maximum energy yield. SCHOTT Solar modules have been awarded top ratings in a number of independent studies and surveys. Every module type is designed – from frame to connection box – for cost-effective system integration.

Narrow output tolerance: A very narrow module output selection permits serial connection with low connection losses.

Quick and easy installation: The anodized aluminum frame and the preinstalled cable with Tyco-Connectors ensure quick and easy installation.

System voltage up to 1000 V: The Safety Class II module is configured for system voltage of up to 1000 V. It is suitable for grid-connected systems.

One step ahead: The special SCHOTT Solar cell technology with isotexturing using multicrystalline wafers ensures optimum output and efficiency.

347.5

810°3

1620°5

9778°3

Aldimensions in mm

138

- Narrow output tolerance
- Quick and easy installation
- System voltage up to 1000 V
- Higher performance/more efficiency
- One step ahead



SCHOTT POLY™ 165/170/175/180



Technical Data

Electrical data

The electrical data apply to standard test conditions (STC):

Irradiance at the module level of 1.000 W/m² with spectrum AM 1.5 and a cell temperature of 25 °C.



Nominal power	P _{nom}	165 Wp	170 Wp	175 Wp	180 Wp
Voltage at maximum-power point	U _{mpp}	35.1 V	35.5 V	35.9 V	36.3 V
Current at maximum-power point	I _{mpp}	4.70 A	4.78 A	4.87 A	4.95 A
Open-circuit voltage	U_{oc}	43.6 V	44.0 V	44.3 V	44.6 V
Short-circuit current	I _{sc}	5.27 A	5.30 A	5.34 A	5.39 A

I[A]

5,0

4,0

3,0

2,0

1000 W/m², 25 °C

800 W/m², 25 °C

500 W/m², 25 °C

The rated power may vary by \pm 4% and all other electrical parameters by \pm 10%.

Dimensions and weights



Dimensions (tolerances ± 3 mm)	1,620 mm x 810 mm
Thickness with frame (± 1 mm)	50 mm
Weight	approx. 15.5 kg

Characteristic data



Solar cells per module	72
Type of solar cell	MAIN-isotex solar cell (multi-crystalline, 12.5 x 12.5 cm², full-square)
Connection	Connection box with bypass diodes, 4 mm ² -solar cable with Tyco- Connectors, lenght of pole 1 m each

Temperature coefficients



Power	$T_K(P_n)$	- 0.47 %/°C
Open-circuit voltage	T_K (U_{oc})	- 0.38 %/°C
Short-circuit current	T_K (I_{sc})	+ 0.10 %/°C

1,0 1000 W/m², 50 °C 0 10 20 30 40 U[V] Current/voltage characteristics with dependence on

irradiance and module-temperature.

Limits



Max. system voltage	1000 V _{DC}
Operating module temperature	-40 +85 °C
Max. load	Pressure: 5,400 N/m ² or 550 kg/m ²
	(IEC 61215 Ed. 2)
	Suction: 5,400 N/m ² or 550 kg/m ²

The right is reserved to make technical modifications.

Qualifications



The SCHOTT POLY™ 165/170/175/180 complies with the requirements of IEC 61215 and IEC 61730, Electrical Protection Class II and the CE-guidelines.



