SCHOTT POWER™ POLY Polycrystalline Solar Modules



SCHOTT Solar has been a leading global developer and manufacturer of solar products for over 53 years. Engineered in Germany, the high quality SCHOTT POWER™ POLY modules offer the following unique advantages suitable for large PV projects.

Industry-leading warranty: SCHOTT Solar offers an industry leading warranty including 10 years product warranty and 25 years linear power output warranty. The linear power output warranty provides 6% more guaranteed power over the 25 year period compared to standard step-down warranties common in the industry.

Positive sorting: SCHOTT Solar modules are among the industry leaders in lower output tolerances. SCHOTT POWER $^{\text{M}}$ POLY modules are sorted to a positive tolerance (minus zero watts) which provides for a stable, high-energy output in which you can feel secure.

Long-term reliability: SCHOTT modules are environmentally tested to double the industry certification standards for thermal cycling and damp heat tests to ensure consistent and superior performance over the long term. In addition, SCHOTT Solar has performance data from over 25 years of actual field testing that supports our high quality products.

Optimal form factor: The optimal size and light weight of SCHOTT POWER™ POLY modules help reduce installation time and cost significantly for large fixed tilt and tracker systems.

Current Sorting: SCHOTT POWER™ POLY modules are sorted in two current classes which further enables maximizing overall system output.

Up-to-date features: SCHOTT Solar modules offer up-to-date electrical features such as double insulated PV cables for use with transformerless inverters and locking connectors.

SCHOTT POWER™ POLY 275/280/285

Key Benefits

- Industry-leading warranty
- Positive sorting
- Long-term reliability
- Optimal form factor
- Current sorting
- Up-to-date features



Technical Data

Data at standard test conditions (STC)

Module type		S	CHOTT POWER™ POI	LY
Nominal power [Wp] [†]	P_{mpp}	275	280	285
Voltage at nominal power [V]	U_{mpp}	35.5	35.8	35.9
Current at nominal power [A]	I_{mpp}	7.75	7.83	7.94
Open-circuit voltage [V]	V_{oc}	44.1	44.3	44.5
Short-circuit current [A]	I _{sc}	8.37	8.42	8.52
Module Efficiency [%]	η	14.1	14.3	14.6

STC (1,000 W/m², AM 1.5 cell temperature 25°C) Power sorting tolerance: -0 Watts / +4.99 Watts

Data at Nominal Operating Cell Temperature (NOCT)

Nominal power [Wp]	P_{mpp}	198	203	204
Voltage at nominal power [V]	V_{mpp}	31.9	32.3	32.4
Open-circuit voltage [V]	V _{oc}	39.9	40.7	40.8
Short-circuit current [A]	I_{SC}	6.76	6.80	6.88
Temperature [°C]	T_{NOCT}	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 (1000 W/m²) will be achieved.

Temperature Coefficients

Power [%/°C]	P_{mpp}	-0.45
Open-circuit voltage [%/°C]	V_{mpp}	-0.33
Short circuit current [%/°C]	I_{SC}	+0.045

Characteristic Data

Solar cells per module	72
·	
Cell type	Polycrystalline, 6 in x 6 in (156 mm x 156 mm)
Junction Box	IP65 with 3 bypass diodes
Janes Son	
	PV Wire 43.3 in (1100 mm) x 0.15 in ² (4 mm ²⁾
Dimensions junction box	4.3 in x 2.5 in x 0.94 in (110 mm x 65 mm x 24 mm)
Front side cover	Low iron solar glass
FLOUR Side Cover	LOW ITOH SOIAL GLASS
Back side cover	Foil
Frame material	Anodized Aluminum

Dimensions and Weight

Dimensions	77.3 in (1965 mm) x 39.1 in (993 mm)
Thickness	1.37 in (35 mm)
Weight	43.3 lbs (21 kg)

Limits

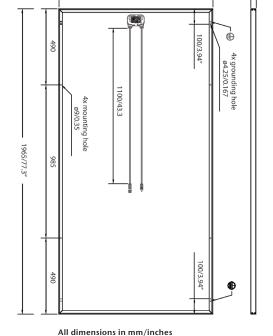
System voltage [V _{DC}]	600
Maximum reverse current [A]*	20
Operating module temperature [°C]	-20 to +85
Maximum load (lbs/ft²)	50
Fire classification	С

^{*} No external voltage greater than V_{oc} shall be applied to the module.

Certification

The SCHOTT POWER $^{\text{\tiny{M}}}$ POLY modules are certified to and meet the requirements of UL 1703.

SCHOTT Solar reserves the rights to make specification changes without notice. Please refer to the installation manual for installation and operations information. † Nominal value at STC conditions, ±4% measurement tolerance.



993/39.1"



SCHOTT Solar PV, Inc.

5201 Hawking Drive, SE Albuquerque, NM 87106 Toll free: 888-457-6527

Email: sales@us.schottsolar.com

