

Solar module with MAIN cells



ASE-165-GT-FT/MC

Module type key:

G = Glass
 T = Tedlar
 F = Framed
 T = Thermoplastic cell embedding
 MC = MAIN cell

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
- Quick and easy installation
- System voltage up to 860 V
- One step ahead



Tyco-Connectors

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 860 V: The Safety Class II module is configured for system voltage of up to 860 V. It is suitable for grid-connected systems.

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

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}	160 Wp	165 Wp	170 Wp
Voltage at maximum-power point	U _{mpp}	35.9 V	36.0 V	36.0 V
Current at maximum-power point	I _{mpp}	4.46 A	4.58 A	4.71 A
Open-circuit voltage	U _{oc}	43.5 V	43.8 V	44.0 V
Short-circuit current	I _{sc}	5.12 A	5.18 A	5.25 A

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

Dimensions and weights



Dimensions (tolerances ± 3 mm)	1620 mm x 810 mm
Thickness with frame (tolerances ± 1 mm)	50 mm
Weight	approx. 15.5 kg

Characteristic data



Solar cells per module	72
Type of solar cell	MAIN solar cell (multi-crystalline, 12.5 x 12.5 cm ² , full-square)
Connection	Connection box with bypass diodes, 4 mm ² -solar cable with Tyco-Connectors, length 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

Limits



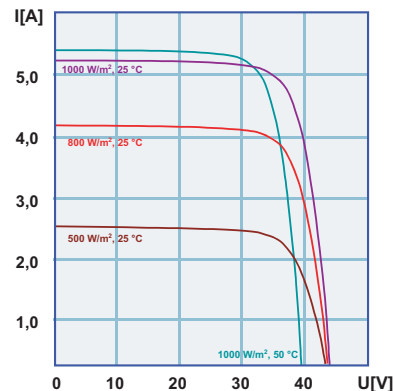
Max. system voltage	860 V _{DC}
Operating module temperature	-40... +90 °C
Max. load	Pressure: 5,400 N/m ² or 550 kg/m ² (IEC 61215 Ed. 2) Suction: 5,400 N/m ² or 550 kg/m ²

The right is reserved to make technical modifications.

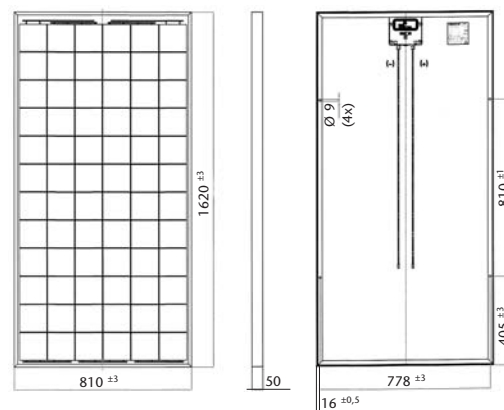
Qualifications



The ASE-165-GT-FT/MC complies with the requirements of IEC 61215, Electrical Protection Class II and the EWG guideline 89/392 (CE).



Current/voltage characteristics with dependence on irradiance and module-temperature.



MANAGEMENTSYSTEM
 Certified by DQS according to
 DIN EN ISO 9001:2000 · Reg.-No. 2184
 DIN EN ISO 14001:1996 · Reg.-No. 2184

SCHOTT Solar GmbH

Carl-Zeiss-Strasse 4

63755 Alzenau

Germany

Phone.: +49 (0) 60 23 / 91 - 05

Fax: +49 (0) 60 23 / 91 - 17 00

E-Mail: solar.sales@schott.com

www.schott.com/solar

SCHOTT
 solar