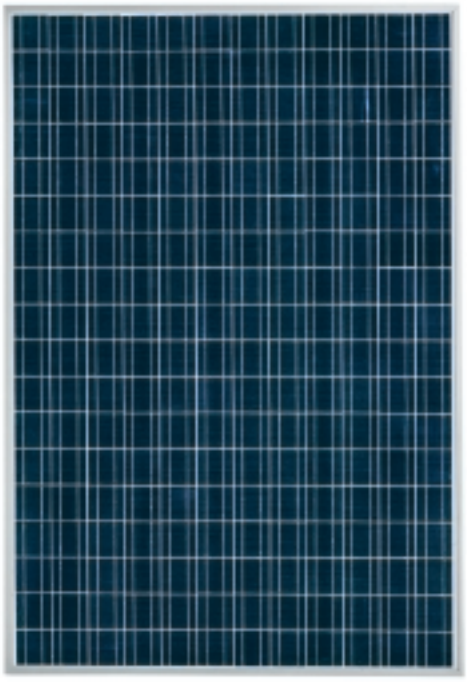
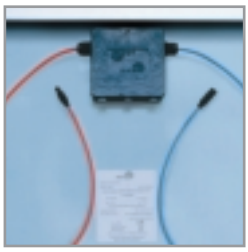
Extra-large module with EFG cells

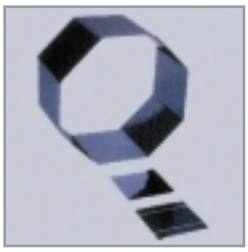


ASE-300-DG-FT

Module type key:
DG = dual-pane glass
F = framed
T = Thermoplastic cell embedding



Connection box ASE-300-DG-FT with bypass diodes, Suhner solar cables and MC®-Connectors.



Crystalline Si tubes are drawn as octagons from the molten mass, thus eliminating cutting loss

RWE SCHOTT Solar produces high-performance modules in energy output classes 50 Wp and higher. High-quality crystalline EFG and MAIN cells ensure maximum energy yield. These 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.

- **Largest standard module**
- **Quick and easy installation**
- **Long-term stability**
- **Tested as Best Module from "Stiftung Warentest"**
- **EFG-Technology**

Largest standard module: With a module surface area of 2.4 m^2, the ASE-300-DG-FT module from RWE SCHOTT Solar is the largest standard module available on the market today.

Quick and easy installation: The self-supporting design with an anodized aluminum frame ensures quick and easy installation on standard mounting frames. Suitable for both stand-alone applications and large-scale systems.

Long-term stability: The full-square cells are manufactured using the EFG process and embedded in hardened dual-pane glass. A specially developed encapsulant ensures long-term stability, even under extreme climatic conditions.

Tested as Best Module: In September 1999, "Stiftung Warentest" published this module with a test result of 1.8. The tested RWE SCHOTT Solar module was the only module with a score less than 2.0.

EFG-Technology: The patented EFG-Technology employed by RWE SCHOTT Solar provides for highly economical wafer-production and low raw-material consumption.

RWE SCHOTT Solar

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}	285 Wp	300 Wp	315 Wp
Voltage at maximum-power point	U_{mpp}	50.5 V	51.2 V	51.7 V
Current at maximum-power point	I_{mpp}	5.64 A	5.9 A	6.1 A
Open-circuit voltage	U_{oc}	60 V	60 V	64.5 V
Short-circuit current	I_{sc}	6.2 A	6.4 A	6.7 A

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

Dimensions and weights

Area	2.42 m²
Dimensions (tolerances ± 4 mm)	1.892 x 1.283 mm²
Thickness with frame (± 2 mm)	50.8 mm
Weight	approx. 50 kg

Characteristic data

Solar cells per module	216
Type of solar cell	EFG solar cells (multi-crystalline, 10 x 10 cm² full-square)
Connections	Connection box with bypass diodes, MC®-Connectors with cable (4 mm², Suhner RADOX 125 A, length of both poles 160 cm).

Cell 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

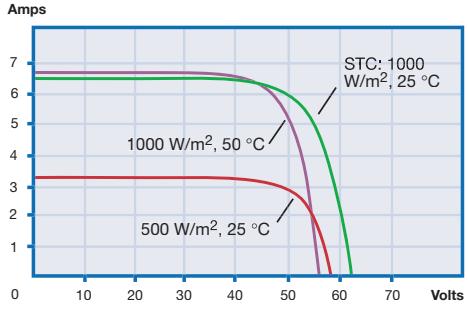
Limits

Max. system voltage	1000 V_{DC}
Operating module temperature	-40… +90 °C
Storm resistance	Wind speed of 130 km/h ≙ 800 Pa and safety factor of 3

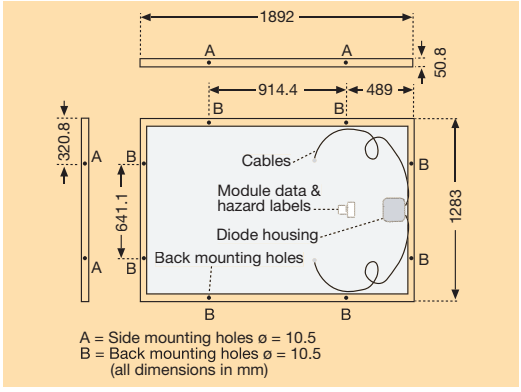
The right is reserved to make technical modifications.

Qualifications

The ASE-300-DG-FT Module complies with the requirements of IEC 61215, NREL IQT, UL-1703 (USA) Fire Class A, Electrical Protection Class II and the EU guidelines, e.g. EMC according to DIN EN.



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



A = Side mounting holes ø = 10.5
B = Back mounting holes ø = 10.5
(all dimensions in mm)

RWE SCHOTT Solar GmbH
Carl-Zeiss-Str. 4
63755 Alzenau
P +49 (0) 60 23 / 91-05
F +49 (0) 60 23 / 91-17 00
E sales@rweschottsolar.com
I www.rweschottsolar.com

RWE SCHOTT Solar