

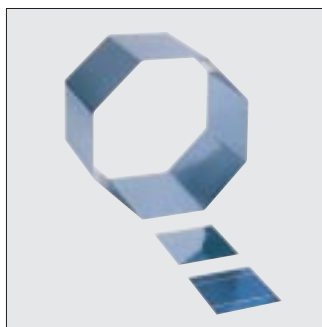
World's Most Powerful Battery Charging Photovoltaic Module with ASE's Crystal Clean™ EFG Cell Technology



ASE-300-DGF/17



ASE-300-DGF/17 connection box with bypass diodes. Module – module wiring with MC²-plug.



Crystalline octagonal Si tubes are drawn from the melt. There are no losses due to sawing.

The ASE-300-DGF/17 is ASE's low-voltage, large-area module typically used in systems charging 12, 24 and 48 volt batteries. The ASE 300 has been a power workhorse across the world serving everything from telecommunication sites to remote homes. Four of these modules in series create the perfect 1 kW/48 volt building block for grid-connected home systems with emergency battery back up. People who want a power system that they can depend on choose the ASE-300-DGF/17. Give your PV system the ASE 300 advantage.

Design Advantage

The size, power and completeness in this module make designing and installing a system a breeze.

Reliability Advantage

- Our advanced proprietary encapsulation system overcomes the decline in module performance associated with degradation of traditional EVA encapsulant.
- Weather barrier system on both the front and back of the module protects against tear, penetration, fire, electrical-conductance, delamination, and moisture.
- Our patented no-lead high reliability soldering system ensures long life, while making the module environmentally benign for disposal or recycling.

Quality Advantage

ASE Americas' quality program is focused on meeting or exceeding expected performance and reducing system losses:

- Each module is individually tested under ASE Americas' calibrated solar simulator.
- Module-module wiring losses are included in the rating.
- Each of the 216 crystalline silicon cells is inspected and power matched.

Installation Advantage

We designed the ASE-300-DG/17 to save time and cost:

- Large area requires fewer interconnects and structural members.
- Module-module wiring is incorporated in the module.
- Wiring comes neatly clipped inside module frame – no need to secure wiring in the field.
- Unique ASE quick-connects reduce source circuit wiring time to minutes.

Certification Advantage

- To provide our customers with the highest level of confidence, the ASE-300-DG/17 is independently IEEE 1262 and IEC 1215 certified. It is UL (Underwriters Laboratories) listed with the only Class A fire rating in the industry.

Available Versions

The standard power rating is 285 watts at STC with versions at 300 watts and 265 watts also available. We offer a variety of wiring/connector options. Modules without frames are also available.

ASE Core Advantage

ASE's patented EFG process (Edge-defined Film-fed Growth) produces silicon octagons of correct thickness and width. Energy, hazardous waste and material intensive wafer sawing is replaced by highly efficient advanced laser cutting.

ASE - 300 - DGF / 17

Designation:

DG = Double Glass

F = Frame

/17 = Nominal Voltage at STC

ASE-300-DGF/17

Electrical data

The electrical data applies 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.

Power (max.)	P _p (watts)	285.0 W	300.0 W	265.0 W
Voltage at maximum-power point	V _p (volts)	17.0 V	17.2 V	16.8 V
Current at maximum-power point	I _p (amps)	16.8 A	17.4 A	15.8 A
Open-circuit voltage	V _{oc} (volts)	20.0 V	20.0 V	20.0 V
Short-circuit current	I _{sc} (amps)	18.4 A	19.1 A	17.3 A

The quoted technical data refer to the usual series cell configuration.

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

NOCT-value (800 W/m², 20° C, 1m/sec.): 45° C.

Dimensions and weights

Length mm (in)	1,892.3 (74.5")
Width mm (in)	1,282.7 (50.5")
Weight kg (lbs)	46.6 ± 2 kg (107 ± 5 lbs)
Area	2.43 sq meters (26.13 ft sq)

Characteristic data

Solar cells per module	216
Type of solar cell	Multi-crystalline solar cells (EFG process), 10x10 cm ²
Connections	10 AWG with Pig-Tails or Quick-Connects Modules come with 2 integrated bypass diodes

Cell temperature coefficients

Power	T _K (P _p)	- 0.47 % / °C
Open-circuit voltage	T _K (V _{oc})	- 0.38 % / °C
Short-circuit current	T _K (I _{sc})	+ 0.10 % / °C

Limits

Max. system voltage	600 V _{DC} U.S.
Operating module temperature	-40...+90° C
Tested wind resistance	Wind speed of 192 km/h (120 mph)

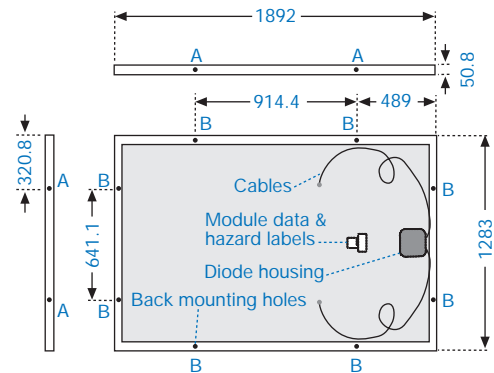
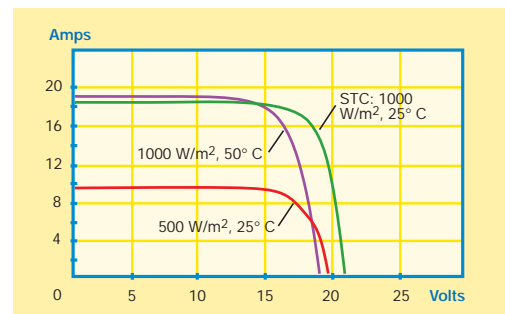
The right is reserved to make technical modifications.

For detailed product drawings and specifications please contact your distributor or our office.

Certifications and Warranty

The ASE-300-DGF/17 has been independently certified to IEC 1215 and IEEE 1262, UL 1703 (Class A Fire rating).
The ASE-300-DGF/17 comes with a 20 year power warranty (see terms and conditions for details).

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



A = Side mounting holes $\varnothing = 10.5$
B = Back mounting holes $\varnothing = 10.5$
(all dimensions in mm)



ASE Americas, Inc.
4 Suburban Park Drive
Billerica, MA 01821-3980 USA
Phone 800-977-0777
978-667-5900
Fax 978-663-2868
www.asepv.com e-mail: sales@asepv.com

Photovoltaics from your specialist dealer: