

## ASI®-F 32/12

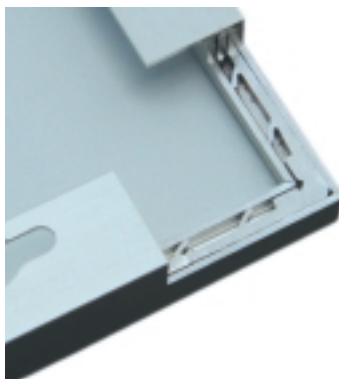
### Solar Module for 12 V-Applications and Grid-Connection



ASI®-F 32/12

ASI®-F solar modules are available in power class 2 - 32 Wp. The ASI®-Technology with its special stacked-cell design on the basis of silicon thin film guarantees years of unfaltering high performance. Each type of module is ready for mounting, and all parts, from the frame to the junction box, are designed for easy and inexpensive system integration. The typical uses of this module include 12 V stand-alone applications such as lighting systems, solar home systems, displays, light and guidance systems, telecommunications, driving systems (e.g. water-pump plants, gates), robots, and mobile applications (e.g. campers). Through the connection of higher system voltages, the modules are also excellently suited for the implementation of grid-connected photovoltaic systems. ASI®-F modules combine state-of-the-art solar module technology with proven encapsulation, offering decisive advantages:

- More energy
- Excellent value for money
- Robust encapsulation
- Easy mounting / interconnection
- IEC 61646 certified
- Safety Class II certified



Robust encapsulation



Optional connection kit

**More energy:** Independent surveys have shown that - under realistic conditions such as unfavourable lighting situation or high temperature - our ASI®-Technology produces approximately 20% more energy per rated Wp than crystalline modules.

**Excellent value for money:** The optimal use of raw materials and automated manufacturing processes ensures favourable prices, high performance and environmental viability for all ASI®-F modules.

**Robust encapsulation:** The proven ASI®-F encapsulation ensures high resistance against UV, temperature and weather, even in the most extreme conditions. The thermal hardened glass reliably protects the module from impacts and increased static stress. The torsion-proof aluminium dish frame with integrated corner links offers optimal protection against mechanical wear of damage.

**Simple mounting:** All ASI®-F modules have a junction box for variable circuiting. An optional connection kit according to Safety Class II (max. system voltage of 600 VDC ) consisting of a solar cables with plug-in connectors and screw connections for the junction box enables fast, easy interconnection of the module without the use of special tools. The oblong holes in the aluminium frame allow easy and universal mounting.

**Top quality and safety:** The proven ASI®-F modules "Made in Germany" stand for high, stable performance and longevity:

- 20 years power guarantee
- IEC 61646 certified
- Safety Class II certified
- ISO 9001 and ISO 14001 certified

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# Technical Data

## Electrical data



Initial Nominal Power [Wp]	39.3
Nominal Power $P_{nom}$ [Wp]*	32.2
Voltage at nominal power $U_{mpp}$ [V]*	16.8
Current at nominal power $I_{mpp}$ [A]*	1.92
Short-circuit current $I_{sc}$ [A]*	2.50
Open-circuit voltage $U_{oc}$ [V]	22.8
Max. DC system voltage [V]**	600
Weight [kg]	6.2

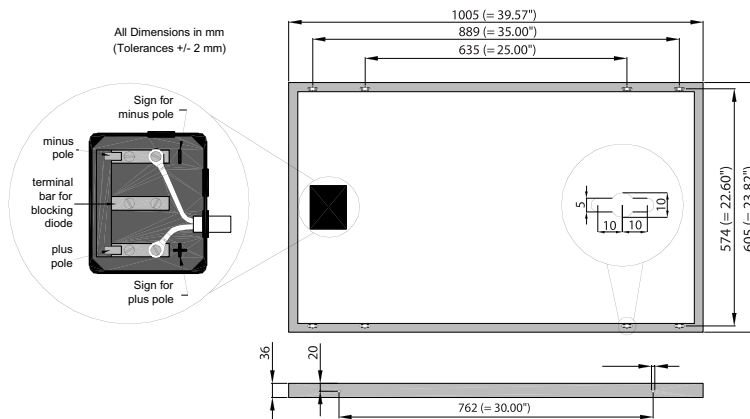
The quoted figures are subject to a production tolerance of  $\pm 10\%$ .

\* These data represent stabilized electrical module performance at standard test conditions (STC – 1000 W/m<sup>2</sup>, spectrum AM 1.5, 25 °C cell temperature). The nominal power may be initially approx. 18 % higher than the quoted stabilised power data.

\*\* Available as an accessory: Safety Class II connection kit consisting of two screw connections with lock nut for junction box and two solar cables, 1 m for each polarity, assembled with plug-in connectors and ring cable lugs for terminal connection.



## Dimensions and weights



## Temperature coefficients



Temperature coefficient [% / K]	$P_n$ : -0.2 ; $U_{oc}$ : -0.33 ; $I_{sc}$ : 0.08
	The temperature dependence of the nominal power rating is especially low

## Limits



Permissible module temperature [°C]	-40 °C to +85 °C
Typical operation temperature [°C]	approx. 20 °C to 25 °C above ambient temperature

Specifications are subjected to change without notice.

## Qualifications



Qualification	IEC 61646 certified
	CE conformity
	Safety class II (with optional connection kit)



**SCHOTT Solar GmbH**  
 Phototronics  
 Herrmann-Oberth-Strasse 11  
 85640 Putzbrunn  
 Germany  
 Phone: +49 (0) 89/ 46264 - 100  
 Fax: +49 (0) 89/ 46264 - 111  
 E-Mail: asi.solar@schott.com  
 www.schott.com/solar

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