

Solar Modules ASI[®]-F

Framed Modules for 12 V-Applications



ASI[®]-F solar modules are available as power class 2 - 10, 16 and 32 Wp. The patented ASI[®]-technology with its special stacked-cell design on the basis of silicon thin film guarantees years of unflinching 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. Typical applications of a 12 V system are lighting, traffic systems, telecommunication, safety technology, mini solar home systems, consumer and leisure products.

ASI[®]-F modules are state-of-the-art products made by RWE Solar, a global market and technology leader for solar cells and modules, which is part of the RWE utility group.

The future-oriented ASI[®]-technology is the result of many years of experience, the latest know-how, and modern manufacturing processes. ASI[®]-F modules combine state-of-the-art solar module technology with proven encapsulation, offering decisive advantages:

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.

- More energy
- Excellent value for money
- Robust encapsulation
- Easy mounting
- 10 years power guarantee
- IEC 61646 certified

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 condi-



tions. The torsion-proof aluminium dished frame with integrated corner links offers optimal protection against mechanical wear or damage.

Simple mounting: All ASI[®]-F modules have a junction box for variable circuiting. 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:

- 10 years power guarantee
- IEC 61646 certified
- ISO 9001 and ISO 14001 certified production



Solar modules

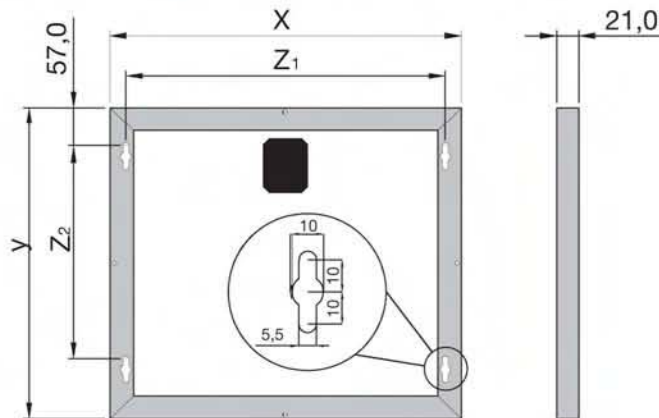
	ASI-F 2/12	ASI-F 4/12
Initial Nominal Power [Wp]	2.6	4.7
Nominal Power P_{mpp} [Wp]*	2.1	3.9
Voltage at nominal power U_{mpp} [V]*	16.8	16.8
Current at nominal power I_{mpp} [mA]*	125	232
Short-circuit current I_{sc} [mA]*	165	293
Open-circuit Voltage U_{oc} [V]*	22.8	22.8

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/m², spectrum AM 1.5, 25°C cell temperature). The nominal power may be initially approx. 18 % higher than the quoted stabilised power data.



Size [mm]	X	144	249
	Y	293	293
	Z ₁	114	219
	Z ₂	180	180
Weight [kg]		0.6	0.9



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



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



Qualification	IEC 61646 certified
	CE conformity

Specifications are subjected to change without notice.