



## High performance photovoltaic modules

5BB POLY CRYSTALLINE MODULE 270 - 280 WATT

### Key features:



10 years manufacturer's warranty



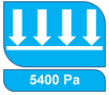
Positive power tolerance is Guaranteed (0 to 5 Wp)



Excellent low light performance



Excellent outstanding weather-resistance



Maximum 5400 Pa snow load



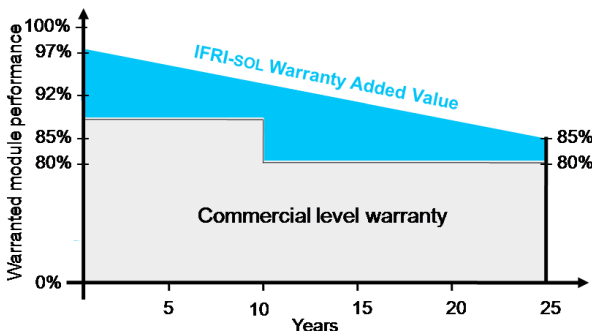
Maximum 2400 Pa wind load



### Linear high performance guarantee

10 years manufacturer's guarantee on 92 % of the nominal performance<sup>1</sup>

25 years manufacturer's guarantee on 85 % of the nominal performance<sup>1</sup>



IEC 61215  
IEC 61730  
**ID 000039715**

Management system TÜV-Certified  
DIN ISO 9001:2008  
**ID 9102077424**

<sup>1</sup>According to the IFRI-SOL Product and Performance Guarantee

**Electrical specification**

Module type	Nominal power P <sub>mpp</sub>	Nominal voltage U <sub>mpp</sub>	Nominal current I <sub>mpp</sub>	Open circuit voltage U <sub>oc</sub>	Short circuit current I <sub>sc</sub>	Module conversion efficiency
IFRI270-60	270 Wp	32.70V	8.35A	38.34V	8.81A	16.50%
IFRI275-60	275 Wp	32.71V	8.49 A	38.58 V	8.96A	16.81%
IFRI280-60	280 Wp	32.82V	8.54A	38.70V	8.99A	17.43%

Electrical data at STC (STANDARD TEST CONDITIONS): 1000W/m<sup>2</sup> irradiance, 25°C cell temperature, AM1.5g spectrum according to EN 60904-3,

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IFRI270-60	196.02Wp	29.88V	6.64A	35.08V	6.96A
IFRI275-60	199.65Wp	29.89V	6.75A	35.30V	7.08A
IFRI280-60	203.28Wp	29.99V	6.79A	35.41V	7.10A

Electrical data at NOCT : 800W/m<sup>2</sup> irradiance, 20°C ambient temperature, 1m/s power measurement tolerance : +/-3%,

**Design**

Front glass	3.2mm high transmittance and white glass
Encapsulant	E.V.A
Cell	60 polycrystalline high efficiency 156.75mm*156.75mm
Backside	Composite film (white, black, ...)
Frame	35mm anodized aluminum (Silver/Black)

**Limit values**

System voltage	1500VDC
NOCT	45±2°C
Rated current	16A
Operating temperature	From -40°C to 85°C
Maximum load	2400N/m <sup>2</sup>

**Mechanical specification**

Dimensions (H×W ×D)	1649mm × 992mm × 35mm
Weight	19Kg

**Temperature coefficients**

Voltage U <sub>oc</sub>	-0.320%/°C
Current I <sub>sc</sub>	+0.05%/°C
Output power	-0.410%/°C

**Power connection**

Junction box	IP67 junction box with 3 bypass diodes
Cable solar cable	Length 1000 mm , 4mm <sup>2</sup> Prefabricated with MC4-combined plug
Applicaton class	Class A (according to IEC 61730)

**Packaging specification**

Dimensions (H×W ×D)	1660mm × 1110mm × 1160mm
Modules Qty per carton	31
Modules Qty per container 20"	372
Modules Qty per container 40" HC	938

**Drawings**

