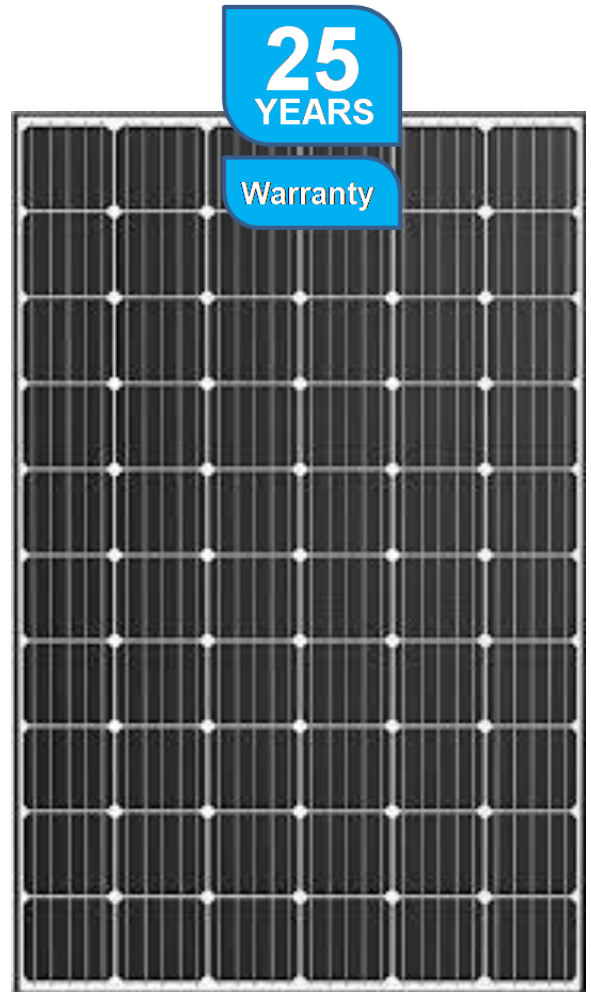






## High performance dual-Glass photovoltaic modules


5BB PERC BIFACIAL MONO CRYSTALLINE MODULE 310 - 320 WATT




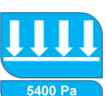
### Key features:


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10 years manufacturer's warranty
- 

Positive power tolerance is Guaranteed (up to 15%)
- 

Excellent low light performance
- 

Excellent outstanding weather-resistance
- 

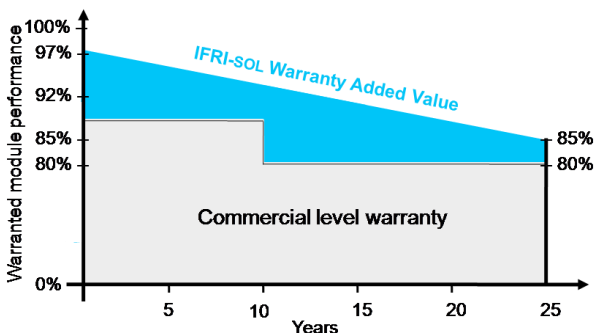
Maximum 5400 Pa snow load
- 

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>



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
IF-BGM310-60	310 Wp	33.26V	9.32A	40.62V	9.80A	18.69%
IF-BGM315-60	315 Wp	33.53V	9.40A	40.90V	9.87A	18.99%
IF-BGM320-60	320 Wp	33.82V	9.45A	41.20V	9.92A	19.29%

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,

## NOCT

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>
IF-GM310-60	229.59 Wp	30.18V	7.56A	37.14V	7.94A
IF-GM315-60	233.29 Wp	30.51V	7.63A	37.40V	8.00A
IF-GM320-60	237.11Wp	30.77V	7.67A	37.67V	8.04A

Electrical under nominal operation cell temperature, 800W/m<sup>2</sup> irradiance, 20°C cell temperature, AM1.5g spectrum according to EN 60904-3, wind speed 1 m/s

## Design

Front glass	2 mm High transmission, Anti-Reflection coating, semi-tempered glass
Encapsulant	Ethylene Vinyl Acetate (E.V.A)
Cell	5BB PERC monocrystalline high efficiency / 60 pcs
Back Glass	2 mm Semi-tempered glass

## 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)	1670mm × 993mm × 6mm (1670mm×993mm×22mm with junction box)
Weight	23Kg

## Temperature coefficients

Voltage U <sub>oc</sub>	-0.30%/°C
Current I <sub>sc</sub>	+0.06%/°C
Output power	-0.38%/°C

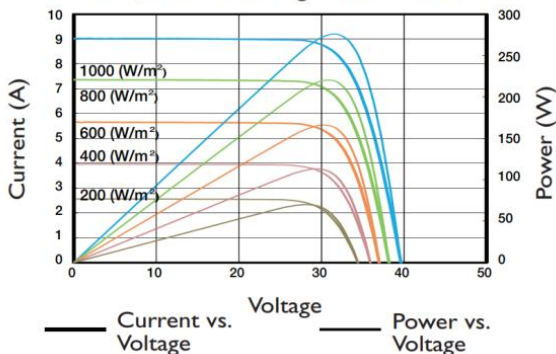
## Power connection

Junction box	3 * IP67 junction box / 3 bypass diodes
Cable solar cable	Length 500 mm , 4mm <sup>2</sup> Prefabricated with MC4-combined plug
Applicaton class	Class A (according to IEC 61730)

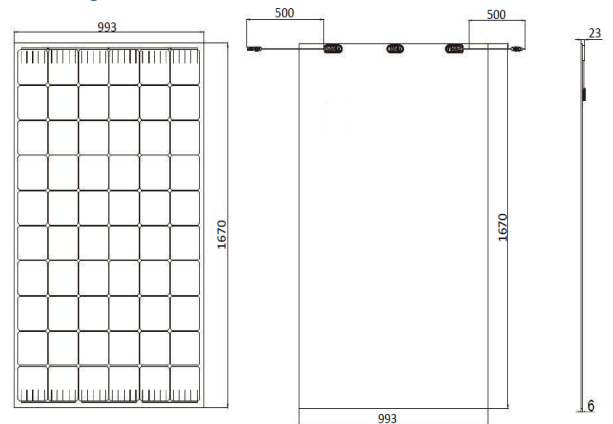
## Packaging specification

Dimensions (H×W×D)	1700mm × 1110mm × 1160mm
Modules Qty per carton	33
Modules Qty per container 20"	330
Modules Qty per container 40" HC	858

Current, Power vs. Voltage Characteristics



## Drawings



Dimensions are in mm