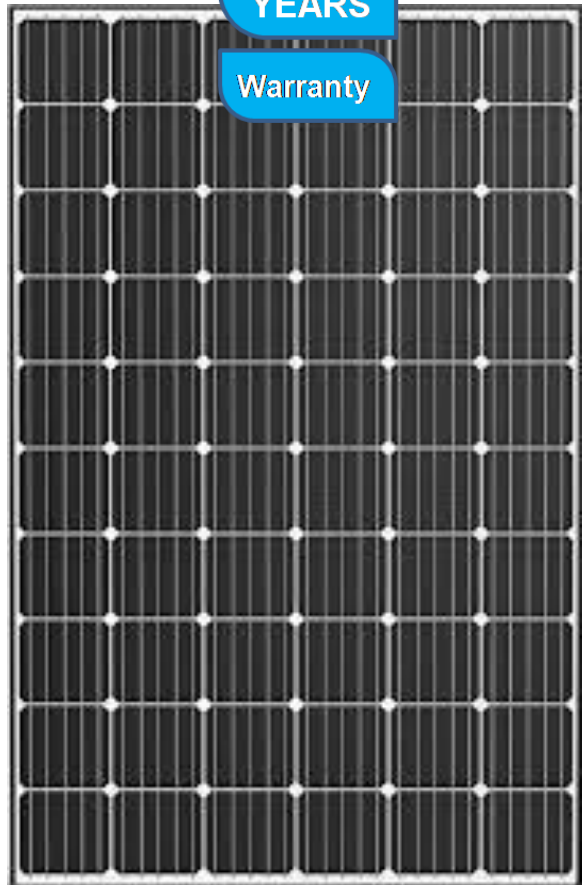





High performance dual-Glass photovoltaic modules


5BB PERC MONO CRYSTALLINE MODULE 310 - 320 WATT


25
YEARS
Warranty




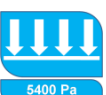
Key features:


- 

10 years manufacturer's warranty
- 

Positive power tolerance is Guaranteed (0 to 5 Wp)
- 

Excellent low light performance
- 

Excellent outstanding weather-resistance
- 

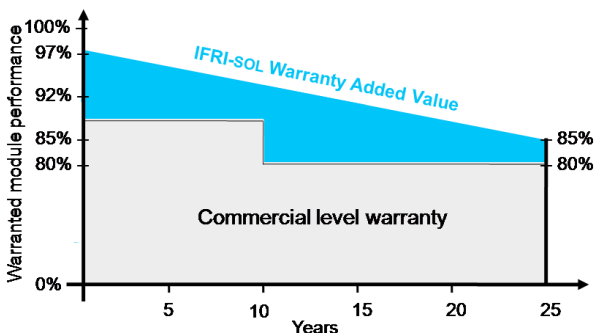
Maximum 5400 Pa snow load
- 

Maximum 2400 Pa wind load

Linear high performance guarantee

10 years manufacturer's guarantee on 92 % of the nominal performance¹

25 years manufacturer's guarantee on 85 % of the nominal performance¹



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

¹According to the IFRI-SOL Product and Performance Guarantee

Electrical specification

Module type	Nominal power P _{mpp}	Nominal voltage U _{mpp}	Nominal current I _{mpp}	Open circuit voltage U _{oc}	Short circuit current I _{sc}	Module conversion efficiency
IF-GM310-60	310 Wp	33.26V	9.32A	40.62V	9.80A	18.69%
IF-GM315-60	315 Wp	33.53V	9.40A	40.90V	9.87A	18.99%
IF-GM320-60	320 Wp	33.82V	9.45A	41.20V	9.92A	19.29%

Electrical data at STC (STANDARD TEST CONDITIONS): 1000W/m² irradiance, 25°C cell temperature, AM1.5g spectrum according to EN 60904-3,

NOCT

Module type	Nominal power P _{mpp}	Nominal voltage U _{mpp}	Nominal current I _{mpp}	Open circuit voltage U _{oc}	Short circuit current I _{sc}
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/m² 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 ²

Mechanical specification

Dimensions (H×W×D)	1670mm × 993mm × 6mm (1670mm×993mm×22mm with junction box)
Weight	23Kg

Temperature coefficients

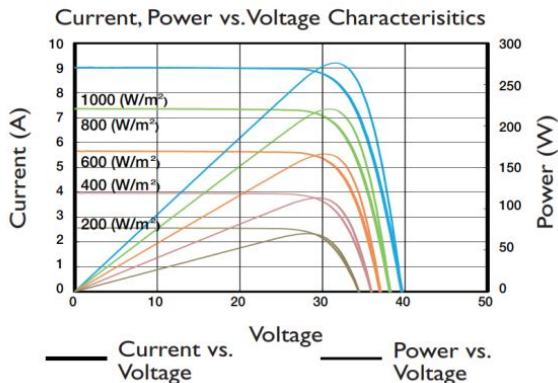
Voltage U _{oc}	-0.30%/°C
Current I _{sc}	+0.06%/°C
Output power	-0.38%/°C

Power connection

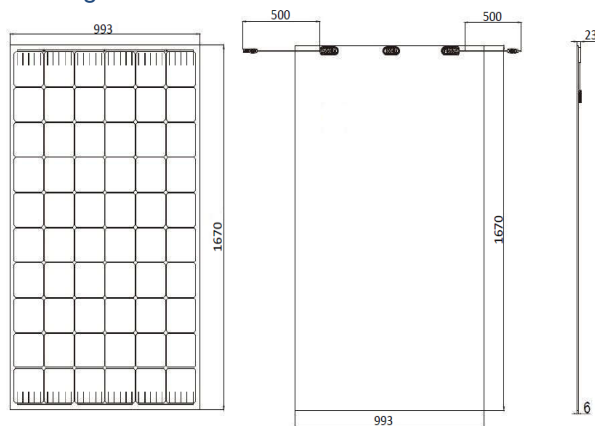
Junction box	3 * IP67 junction box / 3 bypass diodes
Cable solar cable	Length 500 mm , 4mm ² Prefabricated with MC4-combined plug
Applicaton class	Class A (according to IEC 61730)

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



Drawings



Dimensions are in mm