



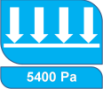



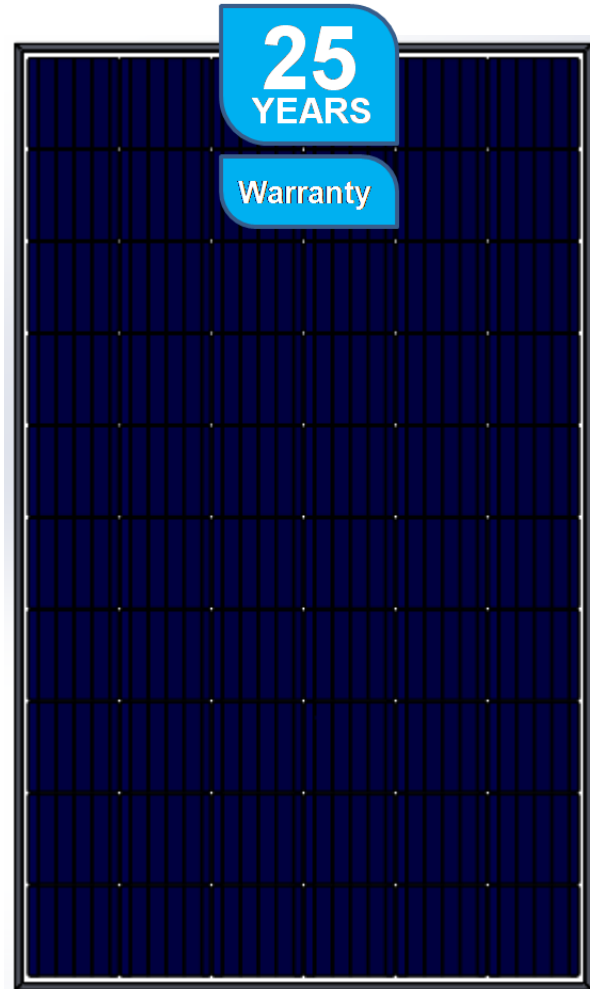


High Performance Full Black Photovoltaic Modules

5BB PERC MONO CRYSTALLINE MODULE
320W-325W-330W

Key Features:

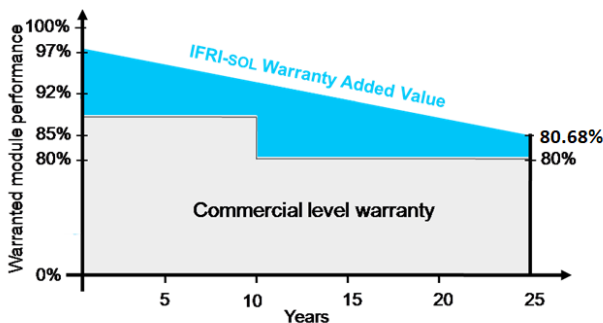
- 
10 YEARS
Warranty
10 Years Manufacturer's Warranty
- 
Wp
Positive Power tolerance is Guaranteed (0 to 5 Wp)
- 
Performance
Excellent Low Light Performance
- 
IP68
Excellent Outstanding Weather-Resistance
- 
5400 Pa
Maximum 5400 Pa Snow Load
- 
2400 Pa
Maximum 2400 Pa Wind Load



Linear High Performance Guaranteed

10 Years Product Warranty on 90.88 % of the Nominal Performance¹

25 Years Linear Power Output Warranty on 80.68% of the Nominal Performance¹



¹According to the IFRI-SOL Product and Performance Warranty.

Certifications

- IEC 61215, IEC 61730: **ID 1111220240**
- IEC 61701:2011, EN 61701:2012: **ID 1111223964**
- IEC 62716:2013, EN 62716:2013: **ID 1111223965**
- Management system TÜV-Certified
ISO 9001:2015: **ID 011001317684**
- ISO 14001: 2015: **ID 011041317684**
- BS OHSAS 18001:2007: **ID 011131317684**
- IS 14286 / IEC 61215, IS/IEC 61730 - 1&2: **R- 41151432**



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-MB320-60	320Wp	33.38V	9.60A	39.91V	10.15A	18.95%
IF-MB325-60	325Wp	33.92V	9.63A	40.03V	10.18A	19.25%
IF-MB330-60	330Wp	33.88V	9.74A	40.09V	10.27A	19.55%

Electrical Data at STC (STANDARD TEST CONDITIONS): 1000W/m² Irradiance, 25°C Cell Temperature, AM1.5g Spectrum According to EN 60904-3.

NMOT

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-MB320-60	238.57Wp	31.14V	7.66A	37.48V	8.18A
IF-MB325-60	242.48Wp	31.32V	7.74A	37.68V	8.26A
IF-MB330-60	246.17Wp	31.60V	7.81A	37.89V	8.34A

Electrical data at NMOT: 800W/m² Irradiance, 20°C Ambient Temperature, 1m/s Wind Speed.

Design

Front Glass	3.2 mm High Transmission, Anti-Reflection Coating, Tempered Glass
Encapsulant	Ethylene Vinyl Acetate (E.V.A)
Cell	5BB Monocrystalline High Efficiency / 60 pcs (158.75mm*158.75mm)
Backside	Composite Film (White, Black, ...)
Frame	35mm Anodized Aluminum (Silver/Black)

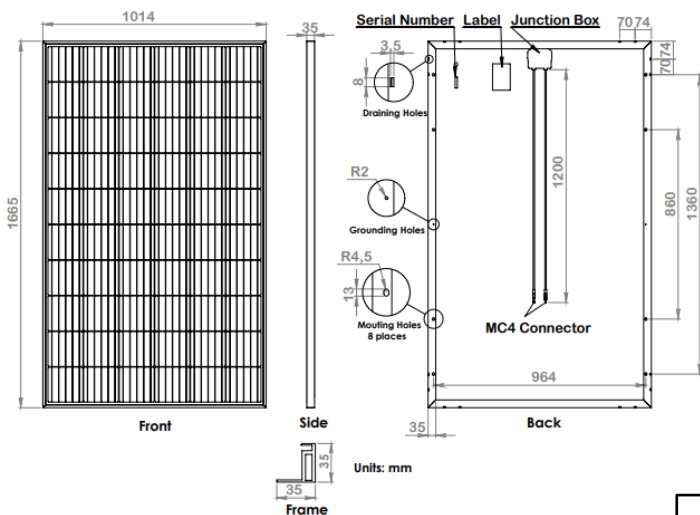
Mechanical Specification

Dimensions (H×W×D)	1665mm × 1014mm × 35mm
Weight	19.5 Kg

Power Connection

Junction box	IP68 Junction Box with 3 Bypass Diodes
Cable solar cable	Length (1000/1200) mm , 4mm ² Prefabricated with MC4-Combined Plug
PV Module Classification	Class II (According to IEC 61730)

Drawings



Limit Values

System Voltage	1500VDC
NMOT	45±2°C
Rated Current	16A
Limiting Reverse Current	16A
Operating Temperature	From -40°C to 85°C
Maximum Load	2400N/m ²

Temperature Coefficients

Voltage U _{oc}	-0.2586%/°C
Current I _{sc}	+0.0031%/°C
Output power	-0.3755%/°C

Packaging Specification

Dimensions (H×W×D)	1690mm × 1120mm × 1175mm
Modules Qty per Carton	31
Modules Qty per Container 20°	372
Modules Qty per Container 40° HC	938

Current-Voltage/Power-Voltage Curves, IF-MB330-60

