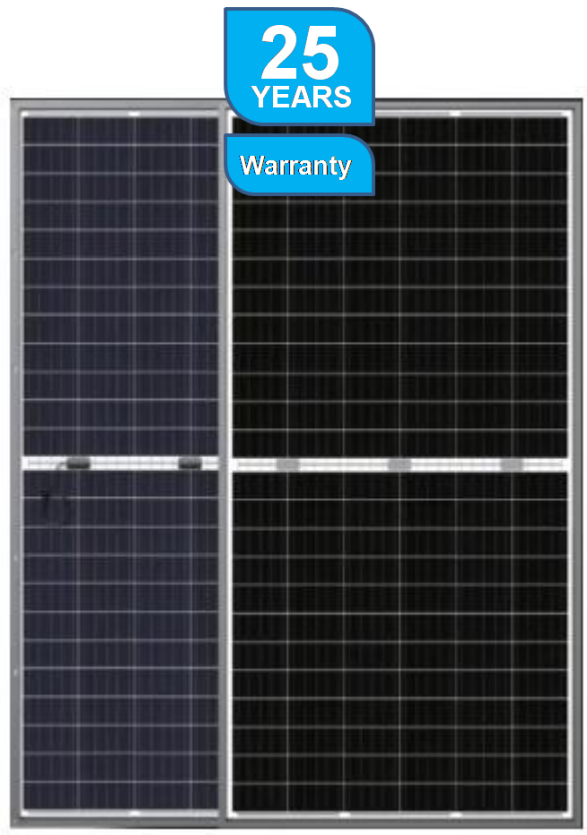
IFRI-SOL
customized electricity
www.ifrisol.solar

High Performance Bifacial Half-Cut Cell With Transparent Backsheet Photovoltaic Modules

5BB BIFACIAL MONO PERC CRYSTALLINE MODULE
395W–400W–405W

Key Features:

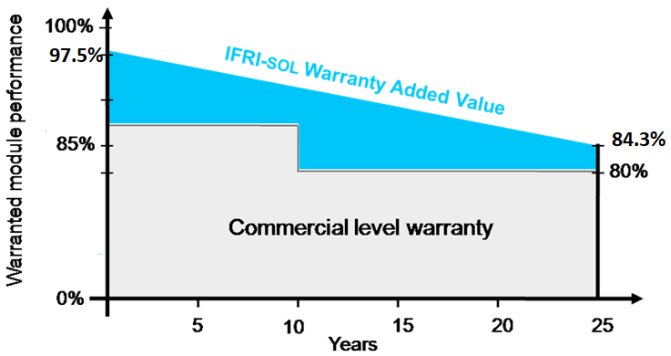
- Half Cell Technology
- Lower The Risk Of Hot Spot
- Higher Power Output
- Excellent Loading Capability
- Dual EL Inspection
- Excellent Low Light Performance



Linear High Performance Guarantee

10 Years Product Warranty On 92.55 % Of The Nominal Performance[1]

25 Years Linear Power Output Warranty on 84.30% of the Nominal Performance[1]



Certifications

- Management system TÜV-Certified
  ISO 9001:2015: **ID 011001317684**
- ISO 14001: 2015: **ID 011041317684**
- BS OHSAS 18001:2007: **ID 011131317684**

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

IF-BTHM395-144
IF-BTHM400-144
IF-BTHM405-144

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Electrical Specification

Module Type	Nominal Power Pmpp	Nominal Voltage Umpp	Nominal Current Impp	Open Circuit Voltage Uoc	Short Circuit Current Isc	Module Conversion Efficiency
IF-BTHM395-144	395Wp	40.26V	9.83A	48.98V	10.19A	19.07%
IF-BTHM400-144	400Wp	40.50V	9.90A	49.88V	10.28A	19.32%
IF-BTHM405-144	405Wp	40.68V	9.98A	50.78V	10.38A	19.56%

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

Electrical Characteristics With Different Rear Side Power Gain (*Reference to 400 Front*)

Backside Power Gain	5%	10%	15%	20%	25%
Rated Max Power (Pmax) [W]	420	440	460	480	500
Open Circuit Voltage (Uoc)[V]	49.88	49.88	49.88	49.98	49.98
Max Power Voltage (Umpp) [V]	40.50	40.50	40.51	40.51	40.51
Short Circuit Current (Isc) [A]	10.80	11.32	11.84	12.36	12.88
Max Power Current (Impp) [A]	10.49	11.01	11.53	12.05	12.57

Remark: Substantial gains in energy yield can be achieved by using a high Albedo for surface below and around the modules.

Design

Front Glass	3.2mm High Transmission Low Iron Tempered Glass, AR Coated
Encapsulant	Ethylene Vinyl Acetate (E.V.A)
Cell	5BB PERC Mono-Crystalline /158.75 ×79.375mm/ 144 Pcs
Backside	Composite Film (White, Black, …)
Frame	35mm Anodized Aluminum (Silver/Black)

Mechanical Specification

Dimensions (H×W ×D)	2048mm×1011mm ×35mm
Weight	24Kg

Power Connection

Junction Box	3×IP68 Junction Box With Bypass Diodes
Solar Cable	Length 300 mm , 4mm² Prefabricated with MC4-combined plug
PV Module Classification	Class II (According to IEC 61730)

Limit Values

Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	16A
Limiting Reverse Current	16A
NMOT	45±2°C
Operating Temperature	From -40°C to 85°C
Maximum Load	2400N/m²
Bifaciality*	70% ± 5%

*Bifaciality= Pmax,rear/Rated Pmax,front

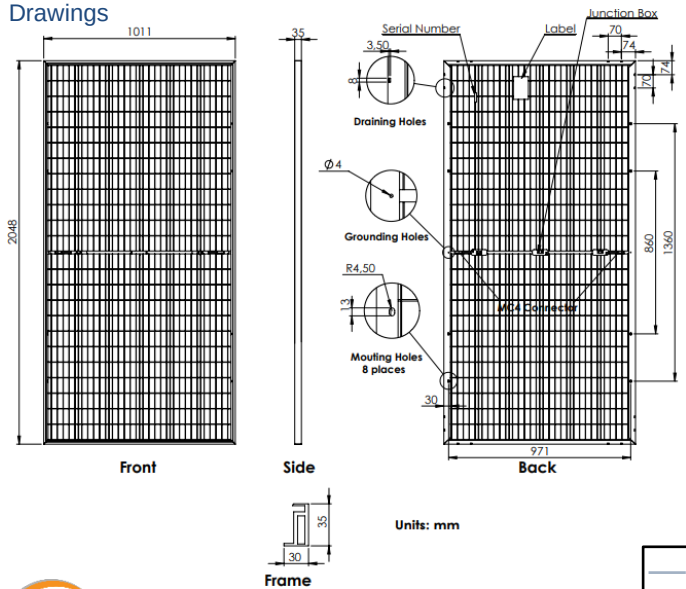
Temperature Coefficients

Voltage Uoc	-0.31%/°C
Current Isc	+0.06%/°C
Output power	-0.38%/°C

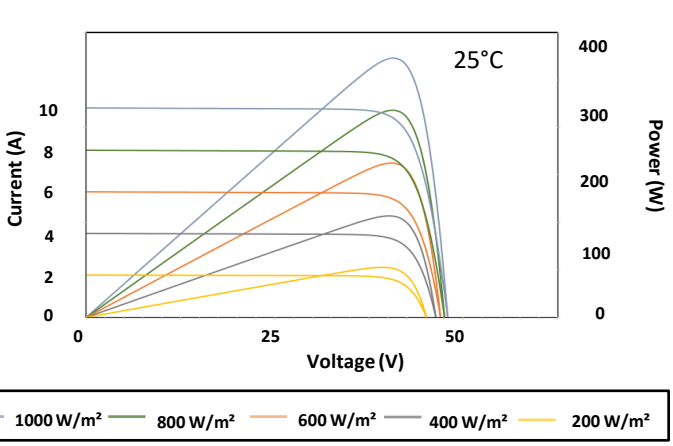
Packaging specification

Dimensions (H×W ×D)	2075mm×1120mm×1175mm
Modules Qty Per Carton	31
Modules Qty Per Container 20"	310
Modules Qty Per Container 40" HC	737

Drawings



Current-Voltage/Power-Voltage Curves,IF-BTHM395-144



Technical data are subject to change without prior notice, errors excepted.

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For more information on IFRI-SOL products please visit www.ifrisol.solar
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