



High Performance Three-Cut Cell Photovoltaic Modules

**MBB PERC MONO CRYSTALLINE MODULE
495W-500W-505W**

Key Features:



MBB 1/3 Cut Cell Technology



Lower The Risk Of Hot Spot



Higher Power Output



High Snow (5400Pa) and Wind
Loads (2400Pa)



Dual EL Inspection



Excellent Low Light Performance

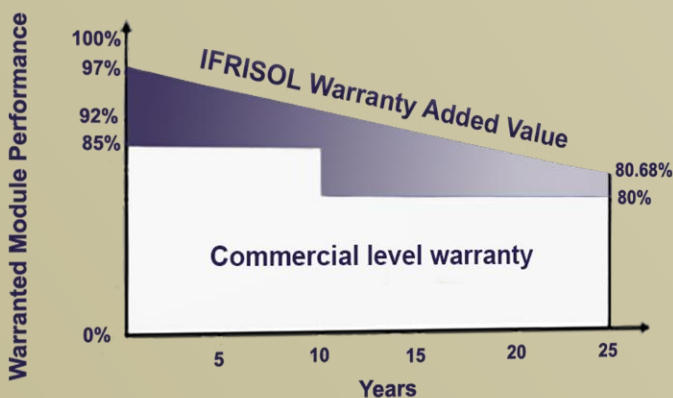


Excellent PID Resistance

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

- Management system TÜV-Certified
ISO 9001:2015: **ID 011001317684**
- ISO 14001: 2015: **ID 011041317684**
- ISO 45001:2018: **ID 011131815622**



Precisely Right.



IF-3TBM495-150
IF-3TBM500-150
IF-3TBM505-150

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-3TBM495-150	495Wp	43.50V	11.38A	52.30V	11.95A	20.64%
IF-3TBM500-150	500Wp	43.73V	11.44A	52.53V	12.02A	20.85%
IF-3TBM505-150	505Wp	43.95V	11.50A	52.76V	12.09A	21.06%

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

Temperature Coefficients

Voltage Uoc (β)	-0.26%/°C
Current Isc (α)	+0.04%/°C
Output Power (γ)	-0.36%/°C
NMOT	45±2°C

NMOT

Module Type	Nominal Power Pmpp	Nominal Voltage Umpp	Nominal Current Impp	Open Circuit Voltage (Uoc)	Short Circuit Current (Isc)
IF-3TBM495-150	375.00Wp	41.13V	9.12A	49.40V	9.61A
IF-3TBM500-150	379.00Wp	41.33V	9.17A	49.60V	9.68A
IF-3TBM505-150	383.00Wp	41.53V	9.22A	46.80V	9.75A

Electrical Data At NMOT: 800W/m² Irradiance, 20°C Ambient Temperature, 1m/s Wind Speed.
Manufacturing Tolerance (Pmax,Voc,Isc) : ±3%

Operating conditions

Maximum System Voltage	1500VDC
Maximum Series Fuse	20A
Operating Temperature Range	From -40°C to 85°C
Mechanical Load Test (Front/back)	5400Pa/2400Pa

Design

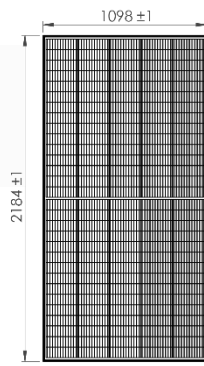
Front Glass	3.2mm High Transmission Low Iron Tempered Glass, AR Coated
Encapsulant	Ethylene Vinyl Acetate (E.V.A)
Cell	MBB PERC Mono-Crystalline /210×70mm/ 150 Pcs
Backside	Composite Film (White, Black, ...)
Frame	35mm Anodized Aluminum (Silver/Black)

Power Connection

Junction Box	3×IP68 Junction Box With Bypass Diodes
Solar Cable	Length 300 mm , 4mm ² Prefabricated with (Latching/locking)Type Connectors
Safety Class	Class II (According to IEC 61140)

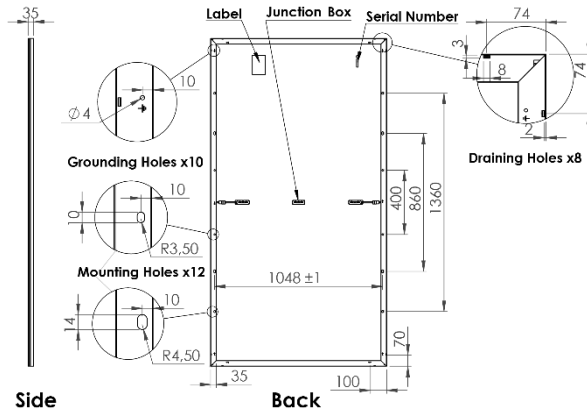
Packaging specification

Dimensions (H×W ×D)	2209mm ×1150mm×1235mm
Modules Qty per Carton	31
Modules Qty per Container 20"	310
Modules Qty per Container 40" HC	620



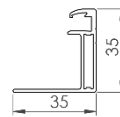
Front

Drawings



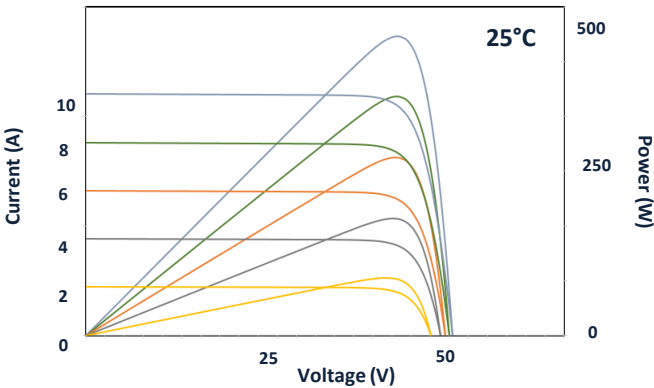
Side

Back



Frame

Current-Voltage/Power-Voltage Curves, IF-3TBM495-150



Mechanical Specification

Dimensions (H×W ×D)	2184mm×1098mm ×35mm (±1mm)
Weight	27.7Kg



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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