








MBB PERC BIFACIAL MODULE

600W-605W-610W



- **MBB PERC BIFACIAL MODULE**
High Performance Half-Cut Bifacial Cells With Transparent Backsheet Photovoltaic Modules

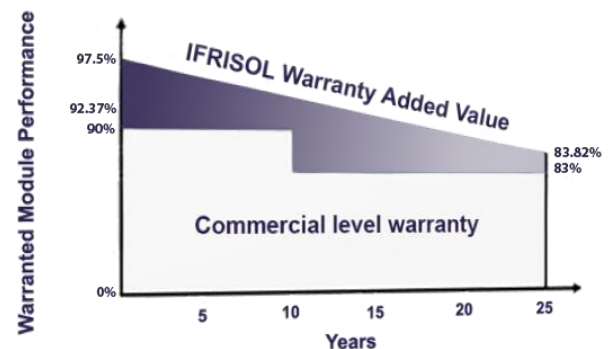
● KEY FEATURES

-  MBB 1/2 Cut Bifacial Cell Technology
-  Lower Risk Of HotSpot
-  Higher Power Output
-  High Snow (5400Pa) and Wind Loads (2400Pa)
-  Dual EI Inspection
-  Excellent Low Light Performance
-  Excellent PID Resistance

- **LINEAR HIGH PERFORMANCE GUARANTEED**

12 Years Product Warranty on **92.37%** of the Nominal Performance

25 Years Linear Power Output Warranty on **83.82%** of the Nominal Performance



According to 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



Electrical Specification

Module Type	Nominal Power P _{mp}	Nominal Voltage U _{mp}	Nominal Current I _{mp}	Open Circuit Voltage (U _{oc})	Short Circuit Current (I _{sc})	Module Conversion Efficiency
IF-HTM600-120	600 Wp	35.08 V	17.26 A	41.95 V	18.27 A	21.19 %
IF-HTM605-120	605 Wp	35.30 V	17.30 A	42.16 V	18.31 A	21.37 %
IF-HTM610-120	610 Wp	35.52 V	17.35 A	42.38 V	18.36 A	21.54 %

Electrical Data At STC (STANDARD TEST CONDITIONS): 1000W/m² Irradiance, 25°C Cell Temperature, AM1.5g Spectrum According to EN 60904-3. Manufacturing Tolerance (P_{max},V_{oc},I_{sc}) : ±3%

NMOT

Module Type	Nominal Power P _{mp}	Nominal Voltage U _{mp}	Nominal Current I _{mp}	Open Circuit Voltage (U _{oc})	Short Circuit Current (I _{sc})
IF-HTM600-120	458.71 Wp	32.53 V	14.11 A	38.93 V	14.98 A
IF-HTM605-120	462.85 Wp	32.72 V	14.14 A	39.13 V	15.01 A
IF-HTM610-120	467.43 Wp	32.93 V	14.19 A	39.34 V	15.05 A

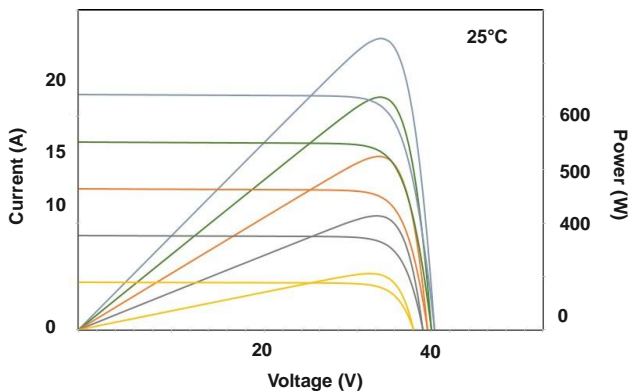
Electrical Data At NMOT: 800W/m² Irradiance, 20°C Ambient Temperature, 1m/s Wind Speed. Manufacturing Tolerance (P_{max},V_{oc},I_{sc}) : ±3%

Electrical Characteristics With Different Rear Side Power Gain (Reference to 610W front)

Irradiance Ration (Rear/Front)	5%	15%	25%
Rated Max Power (P _{max}) [W]	640.5	701.5	762.5
Open Circuit Voltage (U _{oc}) [V]	42.38	42.38	42.38
Max Power Voltage (U _{mp}) [V]	35.52	35.52	35.52
Short Circuit Current (I _{sc}) [A]	19.28	21.11	22.95
Max Power Current(I _{mp}) [A]	18.22	19.95	21.69

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting structure, height, tilt angle etc., and albedo of the ground.

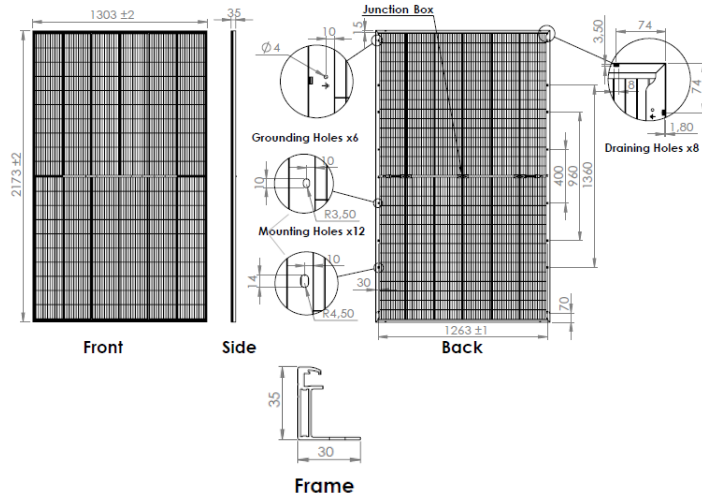
Current-Voltage/Power-Voltage Curves, IF-HTM610-120



Power Connection

Junction Box	3xIP68 Junction Box With Bypass Diodes
Solar Cable	Length 350mm, 4mm ² Prefabricated with Latching Type Connectors
Safety Class	Class II (According to IEC 61140)

Technical drawing



Temperature Coefficients

voltage U _{oc} (β)	-0.26%/°C
Current I _{sc} (α)	+0.04%/°C
Output Power(γ)	-0.35%/°C
NMOT	43±2°C

Operating conditions

Maximum System Voltage	1500 VDC
Maximum Series Fuse	30 A
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 Bifacial /210 mm X 105 mm -120 Pcs
Backside	Transparent Composite Film
Frame	35 mm Anodized Aluminum Alloy type 6005-2T6 (Silver/Black)

Mechanical Specification

Dimensions (LxWxH)	2173mm x 1303mm x 35mm (± 2 mm)
Weight	33.5 Kg

Packaging specification

Dimensions (LxWxH)	1150 mm x 1444 mm x 2197 mm	Modules Qty per Carton	31	Modules Qty per Container 40' HC	527
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CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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