

PERFORMER SERIES

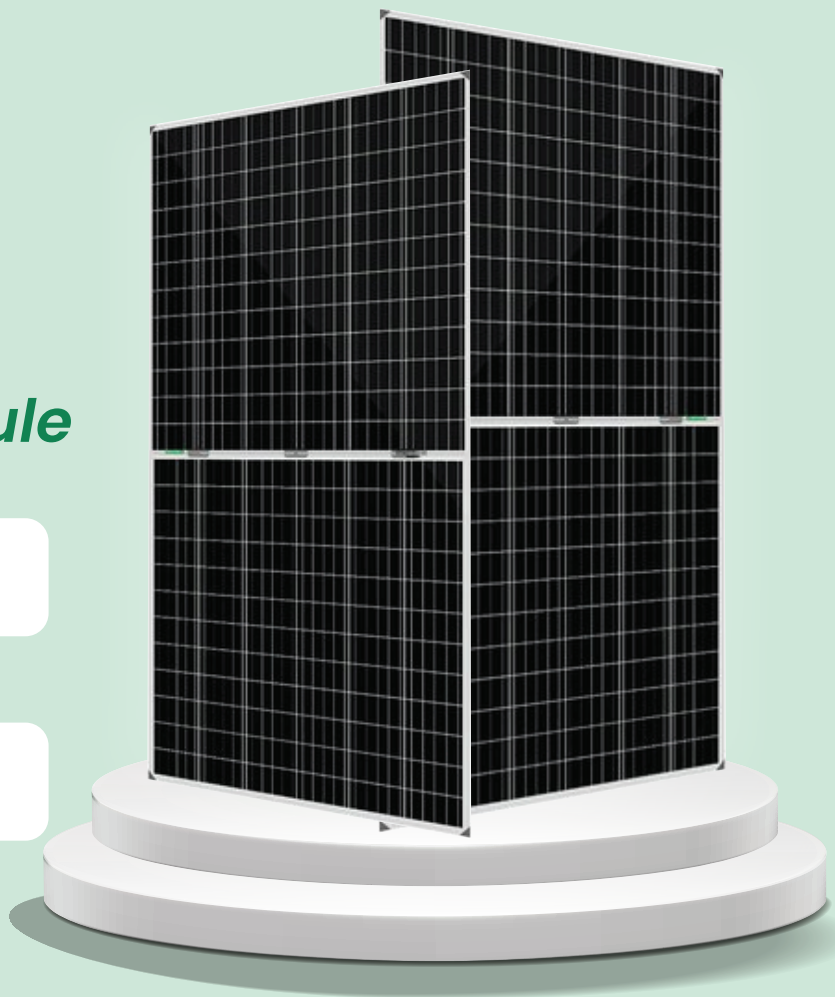
120 Cells Mono-Perc
Half cut Solar PV Module

10
YEARS

WARRANTY FOR MATERIALS
AND PROCESSING*

27
YEARS

WARRANTY FOR LINEAR
POWER OUTPUT*



Product certifications:

IS 14286:2010 | IEC 61215: 2005 IS | IEC 61730-2:2004 IS
| IEC 61730-1:2004 | IEC 62804 | IEC 61853 | IEC 61701

Salient features

- M10 cells for enhanced power generation
- Multi-busbar technology to minimize electrical losses
- Round ribbon connectors for improved light utilization
- Non-destructive cell cutting for improved reliability and lower chances of micro-cracks
- Half-cut cell technology for superior low-light performance.
- Also available in Bifacial technology enabling power generation from both the sides.

Mechanical Data

Specification	Data
Cell Type	Half cut Mono PERC
Cell Arrangement	20x6 Mono PERC Half Cut Cells
Dimensions	1908x1134x35mm
Weight	23.5 Kg
Front Cover	3.2 mm ARC Glass
Frame Material	Anodized Aluminium Alloy
Junction Box	IP68 Split JB
Cable	4mm ² (IEC) – 0.3 meter (Length)
Connectors	MC4 Compatible
By-Pass Diodes	3 Pcs

OPERATING PARAMETERS

DESIGN (MM)

Operational Temperature: -40⁰ C ~ +85⁰ C

Power Output Tolerance: 0 ~ +5 W

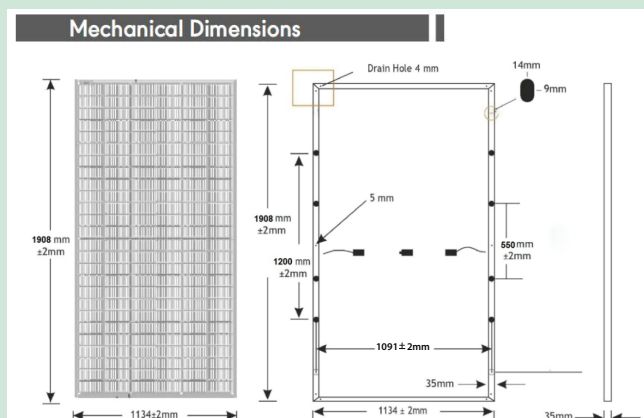
Voc and Isc Tolerance: 3%

Maximum System Voltage: DC1500V (IEC/UL)

Maximum Series Fuse Rating: 15A

Safety Protection Class: Class II

Fire Rating: UL type 3



ELECTRICAL data – All data measured to STC

Module No.	IBMPH-455	IBMPH450	IBMPH445	IBMPH440	IBMPH435
Peak Power Watts (Pmax)	455	450	445	440	435
Maximum Power Voltage (Vmp)	36.66	36.60	36.42	36.3	36.24
Maximum Power Current (Imp)	12.426	12.35	12.245	12.174	12.065
Open Circuit Voltage (Voc)	41.28	41.22	41.1	41.04	40.92
Short Circuit Current (Isc)	13.498	13.449	13.397	13.358	13.32
Module Efficiency STC (%)	21.04755	20.88117	20.60386	20.40975	20.13244

1) (1) STC : 1000W/m² irradiance, 250C cell temperature, AM1.5g spectrum according to EN 60904-3.

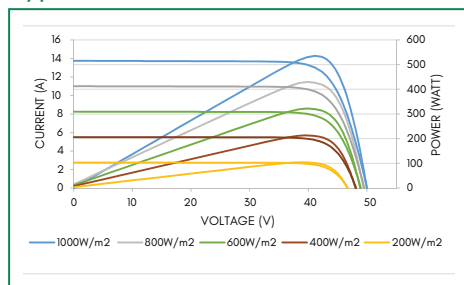
2) Average relative efficiency reduction of 5% at 200W/m² according to EN 60904-1.

TEMPERATURE RATINGS (STC)

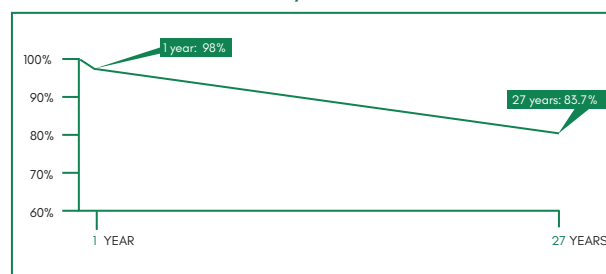
MECHANICAL LOADING

Parameter	Calculated Value		
Short circuit current α (%/ $^{\circ}\text{C}$).....	0.0213	Front Side Static Loading	5400Pa
Open circuit voltage β (%/ $^{\circ}\text{C}$).....	-0.0415	Rear Side Maximum Static Loading	2400Pa
Peak power δ (%/ $^{\circ}\text{C}$).....	-0.2111	Hailstone Test	25mm Hailstone at the speed of 23m/s

Typical I-V Curves



Performance Warranty



INDUSTRY LEADING PROTECTION



EXCELLENT
EFFICIENCY



LOW-LIGHT
PERFORMANCE



HIGH SAVING



PID
RESISTANCE



IP68
JUNCTION



REDUCED RISK



Ideal for Large
scale Installations



High Power



Better shading
tolerance



Lower LCOE &
system cost



Excellent
temperature
performance



Non-destructive
cutting

****Refer to IB Solar Warranty Document For Terms & Conditions**

CAUTION: READ SAFETY AND INSTALLATION MANUAL BEFORE USING THE PRODUCT. Specifications included in this datasheet are subject to change without notice. Electrical data without guarantee. Please confirm your exact requirement with the company representative while placing your order.