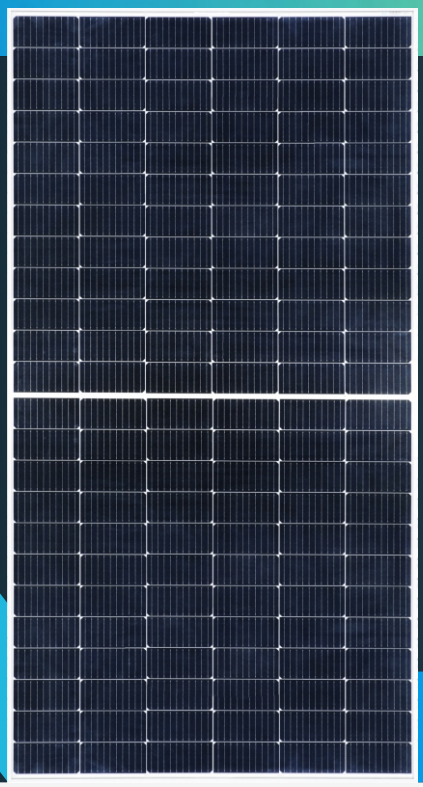
BSE SME
STOCK CODE : 543620



DIAMOND SERIES

132 Half Cut MonoPERC

500 Wp

MONOFACIAL & BIFACIAL

INA SOLAR
TOGETHERWESHINE

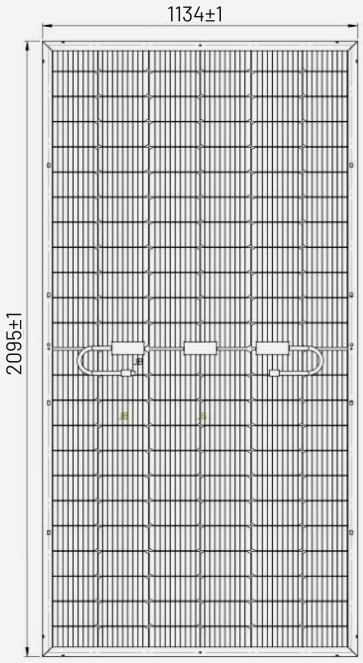
APPROVED ALMM | BIS | IEC APPROVED

INA-132MHC-WF-500
INA-132MHC-TF-500

APPLICATION : RESIDENTIAL | COMMERCIAL | INDUSTRIAL
SOLAR PUMP | SOLAR PARK

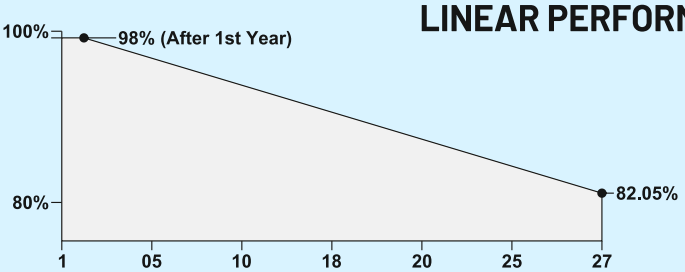
KEY FEATURES

1. LCOE is reduced with lower BOS costs, improving the product's value proposition and ensuring a competitive ROI.
2. Two peak performance periods for the optimal utilization of bifacial generation.
3. Hassle-free installation with the ability to be mounted vertically in the East-West direction, offering improved resistance to soiling.
4. Lower internal resistance boosts module power, helping to minimize power loss.
5. Excellent PID performance guarantees limited power degradation.
6. Reliable quality ensures better sustainability even in harsh environments such as deserts, farms, and coastlines with ammonia exposure.
7. Cylindrical tabbing wire is used to minimize shading on the cell's active area.
8. A higher number of busbars makes PV modules less prone to efficiency loss and increases tolerance to microcracks.
9. Positive Power Tolerance.



Rear View

LINEAR PERFORMANCE WARRANTY



- 12-Year Product Warranty on Materials and Workmanship*
- 30-Year Warranty for Linear Performance*

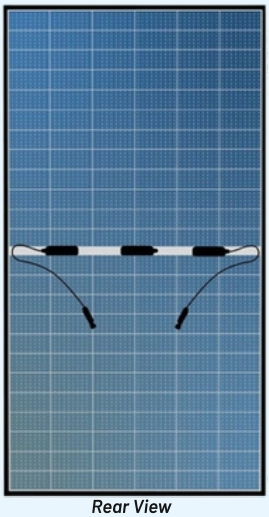
CERTIFICATIONS & STANDARDS:

IEC 61215-1:2021,IEC 61215-2:2021, IEC 61215-1-1:2021,
IEC 61730-1: 2023, IEC 61730-2: 2023, IEC: 61853, IEC: 62804,
IEC: 62716, IEC: 680068-2-68, IEC: 61701

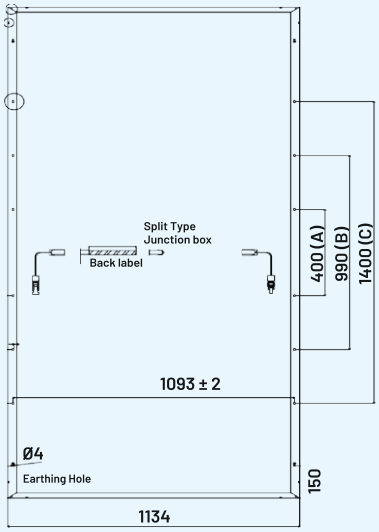
IS 14286: 2010/IEC 61215: 2005
IS/IEC 61730 (PART 1): 2004
IS/IEC 61730 (PART 2): 2004
R-84003549

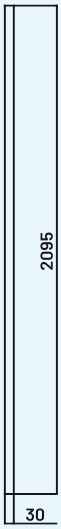
Caution: Please read safety and installation instructions before using the product. *Warranty: Linear performance warranty for 30 years, with degradation up to 2% in 1st year and 0.6 %/year from year 2 to year 30. Please read Insolation Energy Ltd. warranty documents thoroughly.

Front View

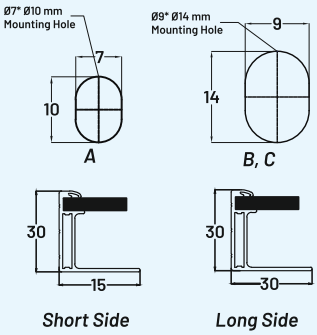


Rear View





Side View



(All Dimensions in mm & Tolerance 1.5mm)

ELECTRICAL DATA PERFORMANCE

Module Type	Unit	INA-132MHC-WF-500 / INA-132MHC-TF-500	
		STC	NOCT
Peak Power - Pmax	Wp	500	376.45
Maximum voltage (Vmpp)	V	38.39	35.99
Maximum current (Impp)	A	13.04	10.46
Open circuit voltage (Voc)	V	45.60	43.32
Short circuit current (Isc)	A	13.89	10.98
Module Efficiency	**%**	**21.05**	

STC: Irradiance 1000 W/m² module temperature 25°C, Am=1.5;*NOCT: Irradiance 800 W/m², ambient teperature 20°C, Am=1.5, Wind speed 1m/sec.
Average power reducon of 4.5% at 200 W/m² as per IEC 60904-1. Measuring Uncertainty 0~3%

Operating Temperature range (°C)	-40 ~+85°C	Power Tolerance	Positive Power Tolerance
Maximum system voltage	1500 VDC	Nominal operating cell temperature (NOCT)	45 ± 2 °C
Maximum series fuse rating	25A	Fire Safety	Class - C (Type 1)
Temperature coefficients of Isc (α)	0.028%/°C± 0.01	Application	Class - A
Temperature coefficients of Pmax (γ)	-0.32%/°C± 0.02	Safety Class	Class - II
Temperature coefficients of Voc (β)	-0.024%/°C±0.02		

Bifacial Gain	Measurement	Unit	500
5%	Maximum Power (Pmax)	Wp	525
	Module Efficiency	%	22.09
10%	Maximum Power (Pmax)	WP	550
	Module Efficiency	%	23.15
15%	Maximum Power (Pmax)	WP	575
	Module Efficiency	%	24.20

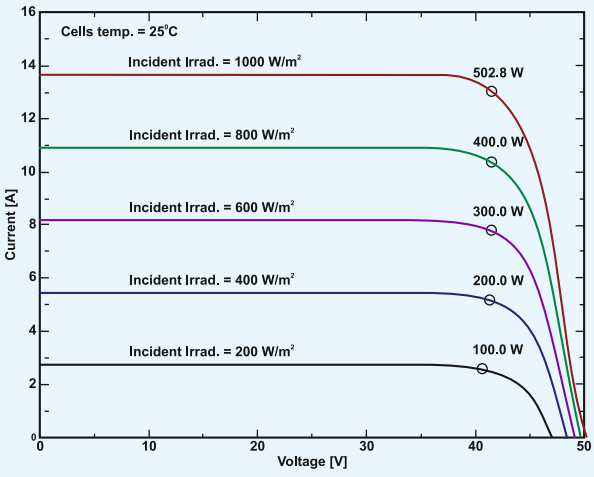
- Bifaciality Factor - 70±5%

**Power gain from rear side depends upon the ground reflectance (Albedo) 8 Bifaciality factor.

MODULE MECHANICAL DATA

SPECIFICATION	DATA
Length x Width x Height (in mm)	2095 x 1134 x 30 (±2mm)
Weight	25.5 Kg ± 0.5 Kg
Split Type Junction Box	IP68 rated with 3 Bypass diodes
Cable & Connectors	4sqmm (12AWG) solar cable 300mm x 2nos black MC4 compatible connectors
Application Class	Class A (Safety class II)
Substrate (Glass)	High transmission, low iron, tempered glass, AR coated
Solar cells & Orientation	Half Cut Mono PERC 132 solar cells
Cells Encapsulant	EVA (Ethylene Vinyl Acetate)
Back Sheet	Composite film-White/Transparant
Frame	Silver Anodized aluminum frame with twin wall profile
Mechanical Load Test	Sustain Heavy wind & snow loads (2400Pa & 5400Pa or 550Kg/m² Maximum diameter of 24mm with Hail impact of 83Km/h

I-V CHARACTERISTICS AT DIFFERENT IRRIDANCE
PV MODULE MODEL : INA-132MHC-WF-500



⚠ **CAUTION: READ SAFETY AND DETAIL INSTALLATION MANUAL BEFORE USING THE PRODUCT (Refer Our Website).**

Note:
- The specifications included in this datasheet are subject to change without notice.
- The electrical data given here is for reference purpose only.
- Please confirm your exact requirements with the sales representative while placing your order. All models sold will betas per INA QAP.

** **Warranty:** Please read INA solar warranty documents thoroughly.

INSOLATION ENERGY LTD.

Corporate Office: Fluidcon House, C-02, New Aatish Market Extension, Jaipur - 302020 (Raj.)
For Sales Enquiries Call: +91 7240 444 666
web: www.insolationenergy.in | E-mail: enquiry@insolationenergy.in | Follow Us: