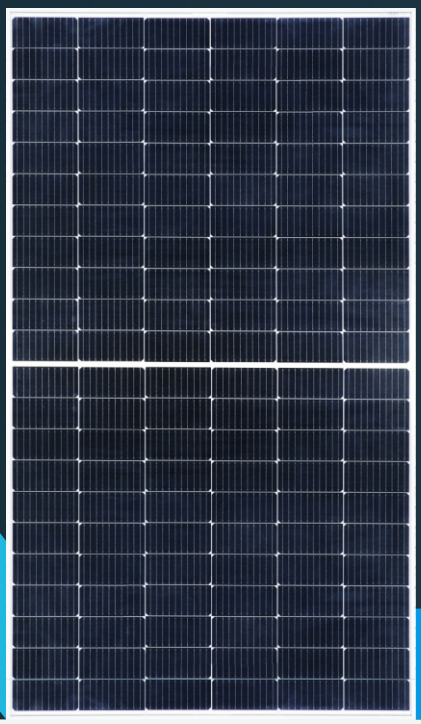
BSE SME
STOCK CODE : 543620

INA SOLAR
TOGETHERWESHINE



PLATINUM SERIES

High Efficiency N-type TOPCon Bifacial G12R Glass to Glass Module

600 - 635 Wp

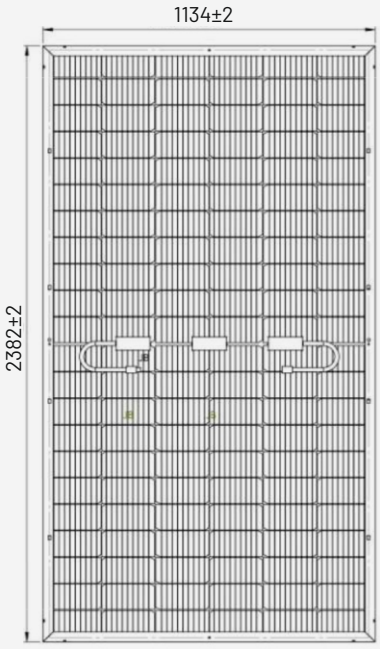
APPROVED BIS | IEC APPROVED

600 Wp | 605Wp | 610 Wp | 615 Wp
620 Wp | 625 Wp | 630 Wp | 635 Wp
INA132T210RGGFXXX (XXX = 600-635 Wp)

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

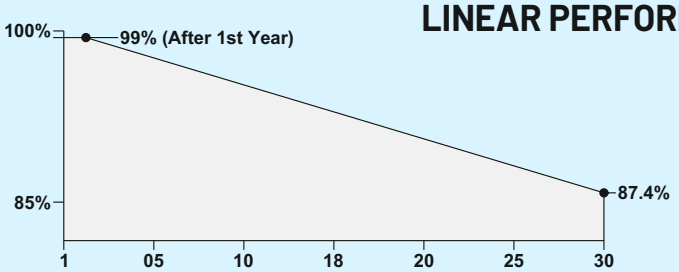
KEY FEATURES

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.
10. Higher Efficiency.
11. Lower Temperature Coefficient.
12. Low Attenuation, Long Warranty.
13. Higher Bifaciality.



Rear View

LINEAR PERFORMANCE WARRANTY



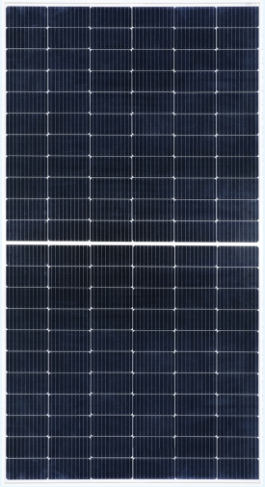
- 12-Year Product Warranty on Materials and Workmanship*
- 30-Year Warranty for Linear Performance*

CERTIFICATIONS & STANDARDS:

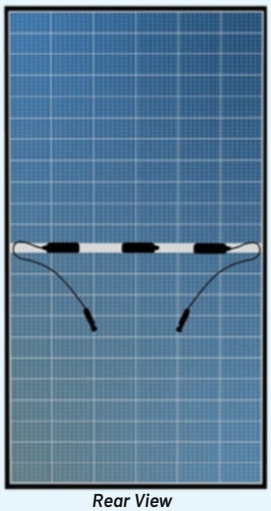
IS: 14286/IEC 61215, IEC 61730-1 and IEC 61730-2,
IEC 62716, IEC 62804, IEC 60068-2-68, IEC 61853, IEC 61701

IS 14286: 2023/IEC 61215: 2021
IS/IEC 61730 (PART 1): 2016
IS/IEC 61730 (PART 2): 2016
www.bis.gov.in

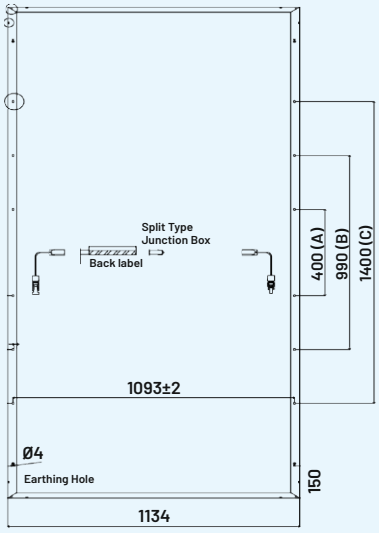
Caution: Please read safety and installation instructions before using the product. *Warranty: Linear performance warranty for 30 years, with degradation up to 1% in 1st year and 0.4%/year from year 2 to year 30. Please read Insolation Energy Ltd. warranty documents thoroughly.



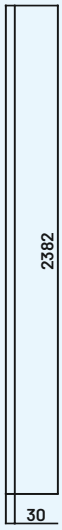
Front View



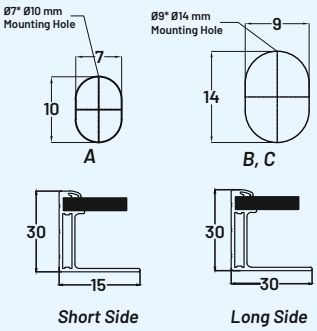
Rear View



Mechanical Drawing



Side View



(All Dimensions in mm & Tolerance 2 mm)

TECHNICAL DATA

***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 reduction of 4.5% at 200 W/m² as per IEC 60904-1. Measuring Uncertainty 0~3%**

Module Type	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power - Pmax (Wp)	600	449	605	453	610	457	615	461	620	464	625	468	630	472	635	476
Maximum voltage (Vmpp) (V)	40.44	37.88	40.52	38.04	40.60	38.2	40.68	38.36	40.75	38.52	40.84	38.69	40.92	38.86	41.00	39.03
Maximum current (Impp) (A)	14.84	11.87	14.93	11.92	15.03	11.97	15.12	12.02	15.21	12.07	15.3	12.12	15.40	12.17	15.49	12.22
Open circuit voltage (Voc) (V)	46.81	45.06	46.93	45.24	47.05	45.42	47.06	45.6	47.25	45.78	47.36	45.96	47.47	46.14	47.59	46.32
Short circuit current (Isc) (A)	15.55	12.61	15.61	12.66	15.65	12.71	15.69	12.76	15.73	12.82	15.76	12.87	15.79	12.92	15.82	12.97
Module Efficiency (%)	**22.14**		**22.33**		**22.60**		**22.79**		**22.97**		**23.16**		**23.25**		**23.44**	

Operating Temperature range (°C)	-40 to +85°C	Power Tolerance	Positive Power Tolerance
Maximum system voltage	DC1500V (IEC)	Nominal operating cell temperature (NOCT)	42 ± 2 °C
Maximum series fuse rating	30A	Application	Class - A
Temperature coefficients of Isc (α)	0.0265%/°C	Safety Class	Class - II
Temperature coefficients of Pmax (γ)	-0.2909%/°C	Application Rating	Class - A
Temperature coefficients of Voc (β)	-0.2261%/°C		

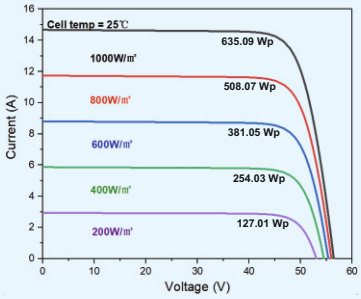
***BIFACIAL OUTPUT – BACKSIDE POWER GAIN @STC* [Bifaciality Factor: 80% ± 10%]**
[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual Bifacial gain at site (module currents indicated below)]
****Power gain from rear side depends upon the ground reflectance (Albedo) 8 Bifaciality factor.**

Bifacial Gain	Measurement	Unit	600	605	610	615	620	625	630	635
5%	Maximum Power (Pmax)	Wp	630	635	641	646	651	656	662	667
	Module Efficiency	%	23.26	23.45	23.64	23.84	24.03	24.22	24.42	24.61
10%	Maximum Power (Pmax)	WP	660	666	671	677	682	688	693	699
	Module Efficiency	%	24.36	24.57	24.77	24.97	25.18	25.38	25.58	25.78
15%	Maximum Power (Pmax)	WP	690	696	702	707	713	719	725	730
	Module Efficiency	%	25.47	25.68	25.90	26.11	26.32	26.53	26.74	26.96

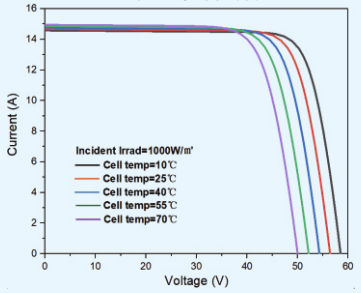
MECHANICAL SPECIFICATIONS

Cell type / No Of Cell	132 Half-cut N-type TOPCon Bifacial G12R Solar cells
Dimensions	2382×1134×30mm (LxWxH)
Weight (Kg)	33.5±0.5 Kg
Front Glass	2.0mm AR-coated heat-strengthened glass
Encapsulate	PID resistant and UV resistant polymeric film
Rear Glass	2.0mm heat-strengthened glass
Junction Box	30A Split Junction Box (3 nos. with individual Bypass Diode) – Weatherproof (IP68)
Solar Cable	4 sqmm, 300 mm length x 2 Nos.
Connectors	MC4 Compatible Connector IEC/UL Certified
Frame Material	Anodized aluminum alloy, silver color
Mechanical Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)
Hail Test	Max. diameter of 25 mm with velocity 23 m/s
Standard Packaging	37 Pieces/Pallet

I-V CHARACTERISTICS AT DIFFERENT IRRIDANCE
INA132T210RGGF635



I-V CHARACTERISTICS AT DIFFERENT TEMPERATURES
INA132T210RGGF635



⚠ **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.

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