

G12R 132 SERIES

600Wp-635Wp

(Framed Dual Glass Bifacial Module)

N-TYPE TOPCon



FEATURES:

-  Highest Reliability & Enhanced Crack Tolerance MBB Module
-  Sustain Heavy Snow & Wind Loads (5400 Pa & 2400 Pa)
-  Best in Class Thermal Coefficients
-  Highest Commercial Gains, Lower LCOE
-  Better Weak Light Performance
-  Excellent PID Resistance
-  Zero LID
-  Excellent Bifacial Gain 10% - 30%

*We have applied for below certification.



ALMM UNDER PROCESS, BIS UNDER PROCESS, IS 14286,
IEC: 61215, IEC: 61730, IEC TS: 62804-1, IEC: 61853, IEC: 61701,
IEC: 62716, Quality Management System: ISO 9001:2015,
Environment Management System: ISO 14001: 2015,
Occupational Health and Safety Management System: ISO 45001:2018



ELECTRICAL CHARACTERISTICS: (ATAL-TG-132G-600 TO ATAL-TG-132G-635)

Models	Pmax(W)		Vmp (V)		Imp (A)		Isc (A)		Voc (V)		Module Eff. (%)
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
ATAL-TG-132G-635	635	474	43.69	39.99	14.54	11.84	15.46	12.63	48.38	45.00	23.52%
ATAL-TG-132G-630	630	470	43.30	39.63	14.55	11.85	15.40	12.58	48.31	44.93	23.32%
ATAL-TG-132G-625	625	466	42.90	39.26	14.57	11.87	15.37	12.55	48.18	44.81	23.14%
ATAL-TG-132G-620	620	462	42.57	38.96	14.56	11.86	15.32	12.51	48.05	44.69	22.95%
ATAL-TG-132G-615	615	459	42.37	38.78	14.51	11.82	15.28	12.48	47.92	44.57	22.76%
ATAL-TG-132G-610	610	455	42.04	38.48	14.50	11.81	15.25	12.46	47.72	44.38	22.58%
ATAL-TG-132G-605	605	451	41.75	38.21	14.49	11.80	15.22	12.43	47.52	44.20	22.39%
ATAL-TG-132G-600	600	448	41.42	37.91	14.48	11.79	15.19	12.41	47.32	44.01	22.21%

*Standard Test Conditions (STC) - 1000W/m2 irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature(NOCT)-800W/m2 irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1m/s. Average power reduction of 4.5% at 200W/m2 as per IEC 60904-1. Measurement Uncertainty ±3%.

System Voltage 1500 V | Series Fuse Rating 30A

BI-FACIAL OUTPUT - BACKSIDE POWER GAIN:

		ATAL-TG-132G-635	ATAL-TG-132G-630	ATAL-TG-132G-625	ATAL-TG-132G-620	ATAL-TG-132G-615	ATAL-TG-132G-610	ATAL-TG-132G-605	ATAL-TG-132G-600
10%	Power Output (W)	698.50	693	687.50	682	676.50	671	665	660
	Module Efficiency (%)	25.89	25.69	25.48	25.28	25.08	24.87	24.65	24.47
15%	Power Output (W)	730.25	724.50	718.75	713	707.25	701.50	695.75	690
	Module Efficiency (%)	27.07	26.86	26.64	26.43	26.22	26.00	25.79	25.58
20%	Power Output (W)	762	756	750	744	738	732	726	720
	Module Efficiency (%)	28.25	28.02	27.80	27.58	27.36	27.13	26.91	26.69
25%	Power Output (W)	793.75	787.50	781.25	775	768.75	762.50	756.25	750
	Module Efficiency (%)	29.42	29.19	28.96	28.73	28.50	28.27	28.03	27.80
30%	Power Output (W)	825.50	819	812.50	806	799.50	793	786.50	780
	Module Efficiency (%)	30.60	30.36	30.12	29.88	29.64	29.40	29.15	28.91

*The bifacial gains are dependent on the power plant design and location.

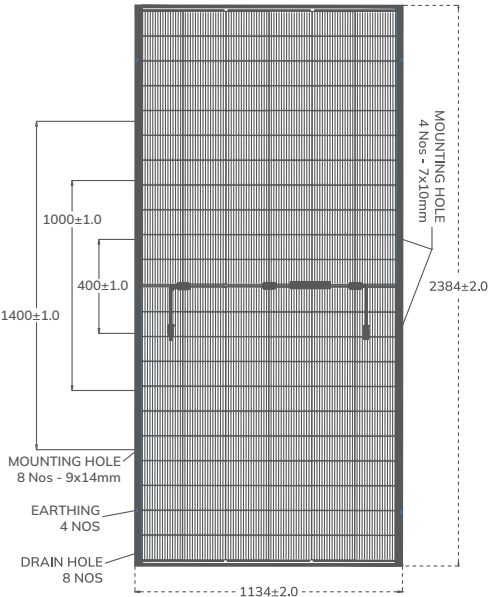
THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), α (%/°C)	0.046
Temperature coefficient of Voltage (Voc), β (%/°C)	-0.26
Temperature coefficient of Power (Pm), γ (%/°C)	-0.30
NOCT (°C)	45 ± 2
Operating temperature range (°C)	-40 to 85
Bifaciality Factor (%)	80 ± 10

MECHANICAL CHARACTERISTICS

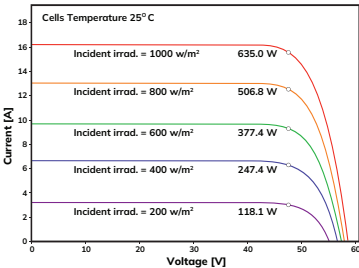
Dimensions	2384 mm (L) x 1134 mm (W) x 35 mm (T)
Weight*	34 kg Approx
Solar Cells per Module (Units) / Arrangement	132 Half-Cut Cells / (11x6 11x6)
Solar Cell Type & Size	G12R N-type TOPCon Bifacial & 182.2 x 210 mm
Front Glass (Material / Thickness)	2 mm Low Iron HTAR semi-tempered glass
Back Glass (Material / Thickness)	2 mm Low Iron Printed semi-tempered glass
Encapsulate	PID Free & UV Resistant
Junction Box (Protection degree / Material)	IP68 / Weatherproof PPO
Cable & Connector (Protection degree / Type)	IP68 rated / MC4 compatible
Cable cross - section & Length	4mm² & 400mm (Customised cable length available)
Frame	Anodized Aluminium Alloy
Application Class Rating	Class A
Safety Class Rating	Class II
Fire Safety	Class C (Type 1)

DESIGN SPECIFICATIONS

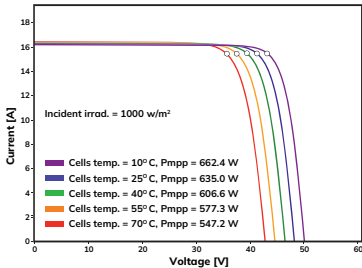


- The electrical data given here is for reference purpose only.
- Please confirm your exact requirements with the sales representative while placing your order.
- Refer installation Manual instructions & Atal warranty statement for terms & conditions.
- Due to constant product modifications, ATAL reserves the right to amend the above specifications without prior notice.

I-V VARIATION WITH IRRADIANCE (GRAPH)



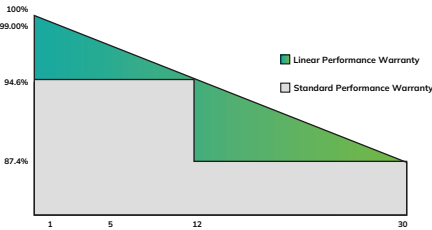
I-V VARIATION WITH TEMPERATURE (GRAPH)



The Graphs are for reference purpose only. Please consult Atal technical team for further clarifications.

Product Warranty**12 years of product warranty Performance Warranty** Power degradation <1.0% in the first year and <0.40%/year in 2 to 30 years.

LINEAR PERFORMANCE WARRANTY (GRAPH)



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