



TOPCon BIFACIAL DUAL GLASS G12R

N-TYPE 132 CELL HALF CUT

GTG12R66HXXX = 600-635Wp

23.51%

MODULE
CONVERSION
EFFICIENCY

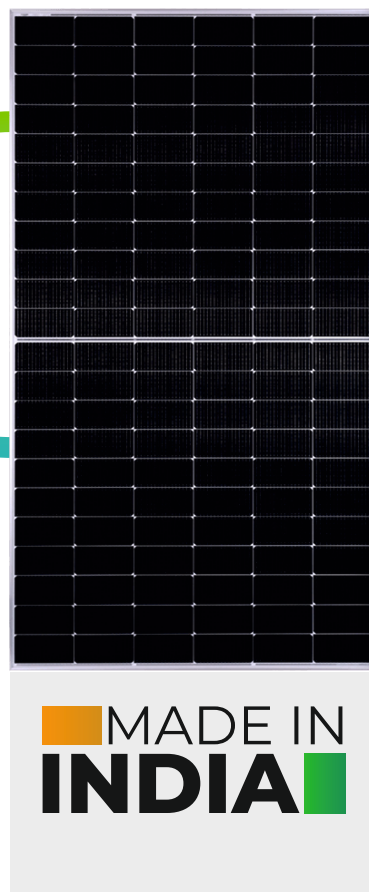
15
YEARS

PRODUCT
WARRANTY*

30
YEARS

LINEAR
PERFORMANCE
WARRANTY**

ASSURED
87.40%
POWER
OUTPUT
AT THE END OF
30TH YEAR



KEY FEATURES



Cutting Edge
Manufacturing
Technology



Higher Energy Yield in Hot Conditions
Due to Reduced Power Loss at
Elevated Temperatures



100% String Level
EL and Triple
Stage EL Testing



PID Resistance and Minimized LID and
LeTID by Adopting Advanced Cell
Technology



Excellent Performance
at Dawn, Dusk and
Low Light



Advance MBB Technology Enhances
Redundancy, Minimizes Performance
Loss from Micro Cracks & Ensures
Long-term Durability and Efficiency

QUALITY & RELIABILITY

1

Qualified Premium Quality Raw
Materials

2

Excellent anti-PID performance via
optimized process and materials control

5

Automation with multi-stage EL and digital inspection enables low defect rates and consistent quality.

3

IP-68 Junction Box for Long-Term
Weather Endurance

4

Reduces LCOE by optimising balance-of-
system costs and enhancing ROI.

CERTIFICATIONS

IEC 61730 | IEC 61215 | IEC 62804 | IEC 61701 | IEC 62716 | IEC 62782 | IEC 61853-1 & 2 | LID | LeTID |
IEC 60068 | IEC 62759 | IS 14286 | IS 61730 – 1 & 2 | UL 61730 – 1 & 2



• Manufactured in an ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 certified facility.

*Certifications in process

Technical Data for GTG12R66HXXX - TOPCon Module

Electrical Parameter at STC

Module Type	GTG12R66HXXX							
Peak Power Pmax (Wp)	600	605	610	615	620	625	630	635
Maximum Voltage Vmpp (V)	40.27	40.40	40.53	40.66	40.79	40.92	41.05	41.18
Maximum Current Impp (A)	14.91	14.99	15.07	15.14	15.21	15.28	15.35	15.42
Open Circuit Voltage Voc (V)	48.65	48.78	48.91	49.04	49.17	49.30	49.43	49.56
Short Circuit Current Isc (A)	15.77	15.84	15.91	15.98	16.05	16.12	16.19	16.26
Module Efficiency (%)	22.21	22.40	22.58	22.77	22.95	23.14	23.32	23.51

Under Standard Test Conditions (STC) of irradiance 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

Temperature Coefficient (TC)

Temperature Coefficient (Voc)	-0.2282% /°C
Temperature Coefficient (Isc)	0.0427% /°C
Temperature Coefficient (Pmax)	-0.2861% /°C
Temperature Range	-40°C to + 85°C
Maximum System Voltage	1500 VDC
NOCT	47± 2°C
Bifaciality	80 ± 5%

Electrical Parameters | NOCT³

Peak Power Pmax (Wp)	452	456	460	463	467	471	475	479
Maximum Voltage Vmpp (V)	37.77	37.90	38.02	38.14	38.26	38.38	38.50	38.63
Maximum Current Impp (A)	11.98	12.04	12.10	12.14	12.22	12.28	12.34	12.40
Open Circuit Voltage Voc (V)	45.73	45.85	45.98	46.10	46.22	46.34	46.46	46.59
Short Circuit Current Isc (A)	12.62	12.67	12.73	12.78	12.84	12.90	12.95	13.01

Electrical Parameters at BNPI

Maximum Power - Pmax (Wp)	674	680	685	691	696	702
Maximum Power Current - Imp (A)	16.64	16.72	16.77	16.83	16.87	16.92
Maximum Power Voltage - Vmp (V)	40.50	40.70	40.90	41.10	41.30	41.50
Short-Circuit Current - Isc (A)	17.50	17.58	17.66	17.73	17.81	17.89
Open - Circuit Voltage - Voc (V)	48.96	49.08	49.22	49.36	49.48	49.59

For STC and BNPI, except Pmax, all other parameters have a tolerance of ±3%.
Measurement uncertainty of ±3%.

BNPI: Irradiance front 1000W/m² and rear 135 W/m², cell temperature 25°C, AM=1.5.

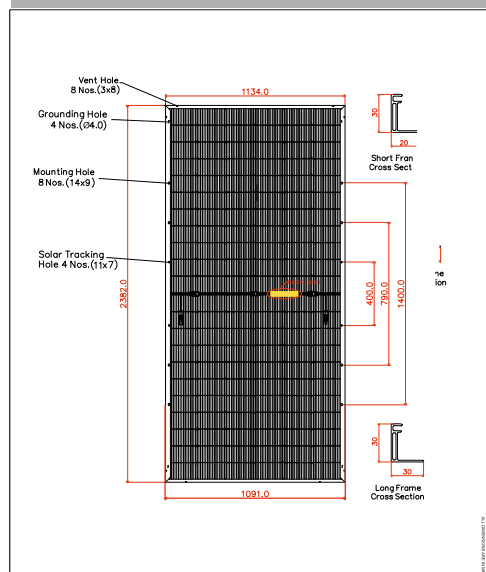
Mechanical Specification

Specification	Details
Solar Cells	N-Type Bifacial TOPCon, MBB, 132 Half-Cut
Superstrate	2 mm, High Transmission, ARC Heat Strengthened Glass
Encapsulation	Ultra - Clear PID Free
Backside	2mm High Transmission Mesh Pattern Glass
Frame	Anodized Aluminium Alloy (Silver Color)
Dimensions	(L) 2382 mm x (W) 1134 mm x (H) 30 mm
Weight	~33 kg±3%
J-Box	IP 68 Certified, 3 Diodes
Cable	Solar Cable 4mm ² 400mm length can be Customized
Connectors	MC4-Compatible Connectors
Application Class	Class A
Electrical Safety	Class II
Fire Safety	Class C (Type 38)
Surface Load	Snow Load - 5400 Pa Wind Load - 2400 Pa
Overcurrent Protection Rating	35A

Packing Configuration Export Market

Container	40'FT
Modules/Pallet	36
Pallets/Container	20
Quantity/Container	720

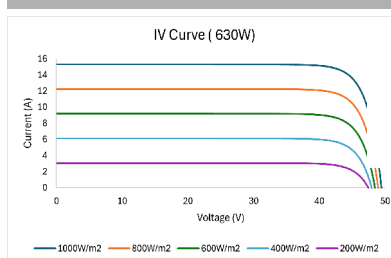
Mechanical Drawing



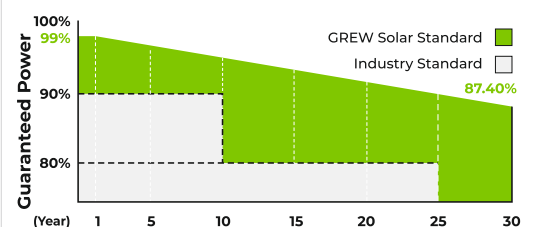
- All measurements are in mm
- Mechanical Tolerance for ≤40mm is ±0.5mm
- Mechanical Tolerance for >40mm is ±2mm

GREW Solar reserves the right to modify the specifications and features outlined in this datasheet at any time without prior notice.

IV Curve



Linear Performance Warranty



*Warranty claims are applicable as per GEPL's manual guidelines.

**Linear Performance Warranty with 1% degradation in the 1st year and only 0.4% from year 2 to 30.

- When unpacking and installing this product, it is crucial to diligently consult the guidelines outlined in the company manual. Doing so will enable you to handle and install the product accurately and mitigate any potential risk of damage.
- Ensure proper disposal of the product as E-waste when it reaches the end of its operational lifespan, to safeguard the environment.

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