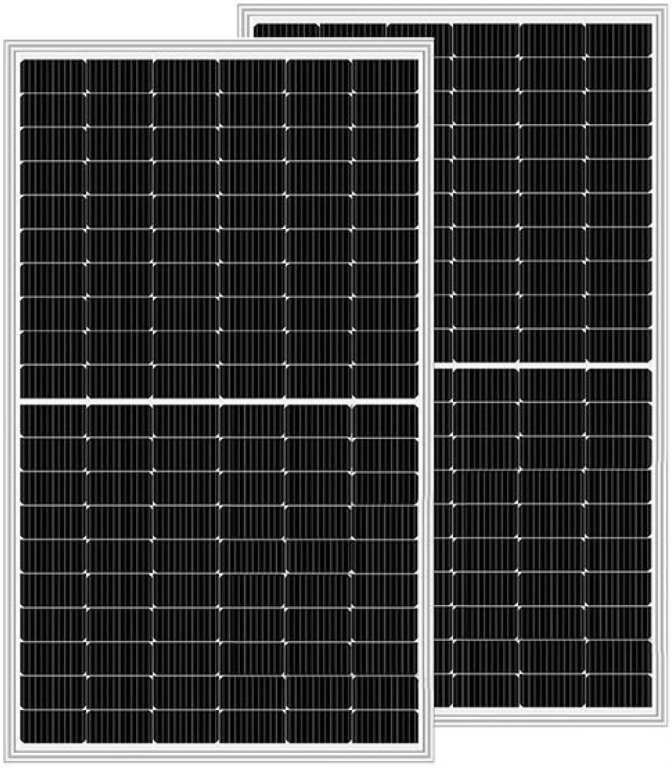
MBB TOPCON N-Type G12R Half Cut Cell

NS600B, 610 - 635/1500 V Series

Bi-Facial Glass-Glass

go:rewatt
energy of the future



POWER

- Module power from **610 W to 635 W**
- Comprehensive LID/Le TID mitigation technology, up to 50% lower degradation
- Cost effective product for utility power plant
- Less shading effect

RELIABILITY

- Heavy snow load up to 5400 Pa
  Heavy load up to 2400 Pa
- Low temperature coefficient

30 Years
LINEAR PERFORMANCE WARRANTY

12 Years
PRODUCT WARRANTY

Advanced Technology Features

Cylindrical Tabbing Wire reduces the shadow on active cells and increases the PV module's generation efficiency.

Higher Power Output
Enhanced module output 5-25% generally, bringing significantly lower LCOE and higher IRR.

Field Reliability
Improved due to multi-contacts in the cell, reducing cell stress.

Minimal Power Loss
Optimized through low Internal Resistance.

Industry Leading
30 Years linear performance warranty.

PID Resistance
Excellent Anti-PID performance guarantee via optimised mass-production process and materials control.

Bypass Diodes
Within split JB enable PV module to perform in partial shadow conditions.

Strong Quality
Check and Quality Assurance with Pre and Post EL tests.

Certifications

IEC 61215 2021, 61730 1-2 2016, 61701 (Sev 6 ed. 3), 62716	CE Certified
IEC 60068	LeTID
IEC TS 62804-1	UL 61730 2022
IEC 61853-1 & 2	
BIS IS 14286:2023, IS 61730-1:2016, IS 61730-2:2016	

TECHNICAL DATA

MBB TOPCON N-Type G12R Halfcut-cell

NS600B, 610 - 635/1500 V Series | Bi-Facial Glass-Glass

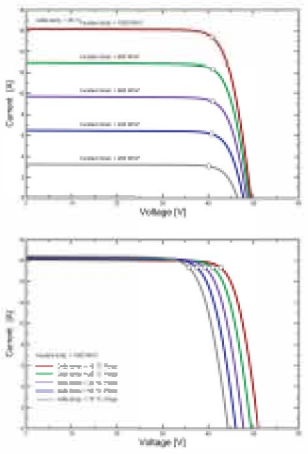
Electrical Parameters at STC

Model	Series NS-N16-132HG 610-635					
Module Type	UoM	NS-N16-132HG 610	NS-N16-132HG 620	NS-N16-132HG 625	NS-N16-132HG 630	NS-N16-132HG 635
Maximum Power (Pmax)	Wp	610	620	625	630	635
Maximum Voltage (Vmpp)	V	40.69	40.82	40.95	41.05	41.18
Maximum Current (Impp)	A	15.12	15.19	15.27	15.35	15.42
Open Circuit Voltage (Voc)	V	49.02	49.14	49.30	49.43	49.56
Short Circuit Current (Isc)	A	15.95	16.04	16.11	16.19	16.26
Module Efficiency	%	22.77	22.95	23.14	23.32	23.51

STC: Irradiance 1000 W/m², module temperature 25°C, air mass 1.5 g, spectrum according to EN 60904-3.
Power measurement tolerance is -0 ~+ 5Wp. Voc and Isc tolerance ±3%.
Maximum system voltage 1500 V, Maximum Fuse Rating 25A.

Typical I-V Curves

Cell Temperature 25°C



Electrical Parameters at NOCT

Model	Series NS-N16-132HG 610-635					
Module Type	UoM	NS-N16-132HG 610	NS-N16-132HG 620	NS-N16-132HG 625	NS-N16-132HG 630	NS-N16-132HG 635
Maximum Power (Pmax)	Wp	466.4	470.15	474	477.80	481.50
Maximum Voltage (Vmpp)	V	38.58	38.69	38.81	38.91	39.03
Maximum Current (Impp)	A	12.08	12.15	12.21	12.28	12.34
Open Circuit Voltage (Voc)	V	46.79	46.93	47.08	47.21	47.33
Short Circuit Current (Isc)	A	12.88	12.93	12.99	13.05	13.11
Module Efficiency	%	17.26	17.41	17.55	17.69	17.83

NOCT: Irradiance 800 W/m², ambient temperature 20°C, wind speed 1m/s, tolerance ±3%.

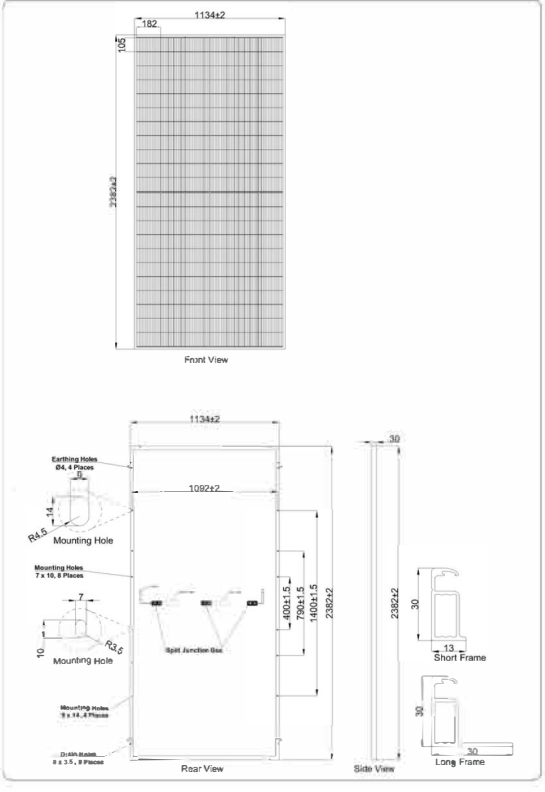
Gain		NS-N16-132HG 610	NS-N16-132HG 620	NS-N16-132HG 625	NS-N16-132HG 630	NS-N16-132HG 635
10%	Power (Pmax)	676	682	687.5	693	698.5
20%		729	744	750	756	762
30%		798	806	812.5	819	825.5

Bifacial gains depend on the power plant design and albedo of the installation site.
Power Bi facility + P max(Rear)/Pmax(Front) are tested under STC.

Packaging Information

Container	20'GP	32'HQ	40'HQ
Quantity per Pallet	36	36	36
Pallet/Container	8	16	20
Quantity/Container	288	576	720

Mechanical Diagrams



Mechanical Data

Length x Width x Height	2382 x 1134 x 30/35 mm
Weight	32.5 kgs
Junction Box	IP68, 3 Split Junction Box with Individual Bypass Diodes
Output Cable	Length: 500 mm / As Per Customer Requirement, Dia: 4 mm²
Connector	MC4 Compatible
Application Class	Class A (Safety Class II)
Glass Front/Rear	Semi-tempered - High Transmittance Glass 2 mm / High Transmittance Glass 2 mm
Solar PV Cells	132 Cells G12R N-Type TOPCon Bifacial
Cell Encapsulant	EVA/ EPE/ POE, UV Resistant & PID-free
Frame	Anodised (>15 □) Aluminium Frame,
Mechanical Load Test	Silver
Fire Performance	5400 Pa (Snow Load), 2400 Pa (Wind Load)
Country of Origin	Type 4 (UL 61730) or Class C (IEC 61730)
	India

Operating Conditions	
Temperature Coefficient Voc, β	-0.27%/°C
Temperature Coefficient Isc, α	0.04%/°C
Temperature Coefficient Pmax, γ	-0.30%/°C
NOCT	42°C±3°C
Temperature range	-40°C to 85°C

- 30-Year Linear Performance Warranty
- 12-Year Product Warranty

- <1.0% degradation for 1st year
- 0.40% from 2nd year onward to 30th year

Remark: Customized frame colour and length available upon request

Note: The specifications in this data sheet may deviate slightly from our actual products due to the ongoing innovation and product enhancement. We reserve the right to make necessary adjustments to the information described herein at any time without further notice.

***WARRANTY: Please refer the Warranty Card.**
***CAUTION: Please read safety and installation instructions before using the product.**

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