

"N" TOPCON TECHNOLOGY

585 - 610 WATT



Up to 30% Additional Power Generation Gain

Additional power gain from rear side depending on albedo



LOW LID (Light Induced Degradation)

TOPCon cells have low LID, because of its N-Type silicon substrate



Lower LCOE

High bifaciality, high power output, saving BOS cost



Better Weak Illumination Response

Wide spectral response, higher power output even under low-light settings like smog or cloudy days



Better Temperature Coefficient

TOPCon cell has a better temperature coefficient which help in better performance in hot climate



Wider Applicability

Vertical installation, snowfield, high-humid area

610 W
MAXIMUM
POWER OUTPUT

0~+5 W
POWER OUTPUT
TOLERANCE

16 BB
MULTI
BUSBAR

Key Features

- Fully automatic facility with cutting-edge technology
- Guaranteed positive tolerance to ensure power output reliability
- Split junction boxes reduce module temperature resulting increased module reliability

Quality & Reliability

- IP68 rated junction box for long-term weather endurance
- Made with high-graded raw material to achieve Quality, Durability, Efficiency, and through output
- 12 Years Workmanship & 30 Years Linear Performance Warranty

Disclaimer: As part of continuous innovation and R&D improvements, the specifications and key features outlined in this datasheet may be subject to minor changes and are not guaranteed. Avaada Electro Pvt. Ltd. reserves the right to update the information provided at any time without prior notice. To ensure accuracy, please always refer to the latest version of the datasheet, which will be considered a part of the binding contract governing all transactions related to the purchase and sale of the products described herein.

TECHNICAL DATA

INTEGLOW



AVN72M10LG | N-type Bifacial - Glass to Glass | 144 Cells | 610 Watt | > 23.60% Efficiency

Electrical Parameter at STC

Module Type	AVN72M10LG					
Capacity rating - Pmax (Wp*)	585	590	595	600	605	610
Rated voltage - Vmp(V)	44.16	44.46	44.76	45.06	45.36	45.56
Rated current - Imp(A)	13.247	13.272	13.290	13.312	13.33	13.4
Open circuit voltage - Voc(V)	51.13	51.35	51.57	51.79	52	52.23
Short circuit current - Isc(A)	14.164	14.210	14.261	14.300	14.34	14.38
Module efficiency (%)	22.6%	22.8%	23.0%	23.2%	23.4%	23.6%

*STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

Electrical Parameter at NOCT

Capacity rating - Pmax (Wp*)	443	447	451	455	459	463
Rated voltage - Vmp(V)	41.43	41.70	41.97	42.24	42.51	42.78
Rated current - Imp(A)	10.681	10.700	10.722	10.741	10.76	10.78
Open circuit voltage - Voc(V)	48.87	49.08	49.29	49.50	49.71	49.92
Short circuit current - Isc(A)	11.420	11.471	11.520	11.572	11.621	11.672

*NOCT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s. *Power Bifaciality: 80±5%

Mechanical Specification

Specification	Details
Solar cells	N type TOPCon, MBB 144 Cell
Encapsulation	POE/EPE/EVA
Back glass	2.0mm, Semi Tempered Glass
Front glass	2.0mm, Anti-Reflection Coated
Frame	Anodized Aluminum Alloy
Dimensions	(L) 2278 mm x (W) 1134 mm x (H) 35mm
Weight	32 kg
J-box	IP 68 certified, 3 diodes
Cable	Solar cable 4 mm ² , length 300 mm / customized
Connectors	MC4-compatible connectors

Operating Properties

Temperature range	-40°C to + 85°C
Maximum system voltage	1500 VDC
Power Tolerance	0 ~ +5 W
Bifaciality factor (As per Lab)	80± 5%

Temperature Coefficient

NOCT(Nominal Operating Cell Temperature)	45°C (±2°C)
Temperature Coefficient of Pmax	- 0.30%/°C
Temperature Coefficient of Voc	- 0.25%/°C
Temperature Coefficient of Isc	0.04%/°C

Certificates[†]

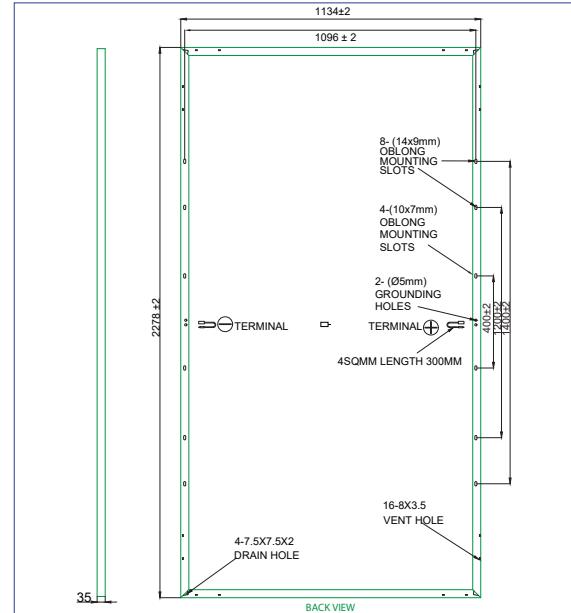
BIS | IEC 61730 | IEC 61215 | UL 61730 | IEC 62804(PID) | IEC 61701 (Salt Mist) | IEC 61716(Ammonia) | IEC 62782 | LID, LeTID | IEC 60068(Sand & Dust) | CEC | CE

[†] Few Certifications in process

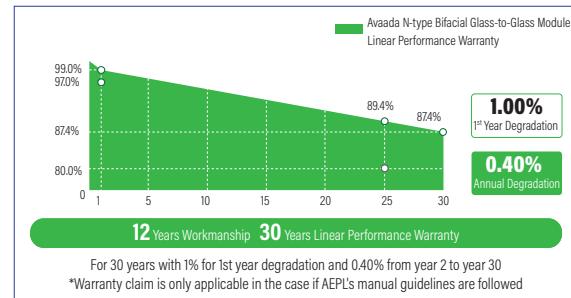
Packing Configuration

Container	40'HQ
Modules per Pallet	31
Pallets per Container	20
Modules per Container	620

Dimensions in mm



Performance Warranty



IV-Curve

