

"N" TOPCON TECHNOLOGY



Up to 30% Additional Power Generation Gain

Additional power gain from rear side depending on albedo



ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally, can increase power generation



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

Higher power generation under working conditions, thanks to passivating contact cell technology



Wider Applicability

BIPV, vertical installation, snowfield, high-humid area, windy and dusty area

660 W
MAXIMUM
POWER OUTPUT

0~+5 W
POWER OUTPUT
TOLERANCE

23.20%
MAXIMUM
EFFICIENCY

Key Features

- ⊙ Excellent module conversion efficiency of up to 23.20%
- ⊙ Guaranteed positive tolerance to ensure power output reliability
- ⊙ More power output in weak light condition, such as haze, cloudy, and morning
- ⊙ 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
- ⊙ 30 years output warranty

AVN60G12G | N-type Bifacial Double Glass Topcon Module | 120 Cells | 660 Watt | Upto 23.20% Efficiency

Electrical Parameter at STC

Module Type	AVN60G12G **				
Capacity rating - Pmax (Wp)**	640	645	650	655	660
Rated voltage - Vmp(V)	36.58	36.73	36.88	37.03	37.18
Rated current - Imp(A)	17.49	17.56	17.62	17.69	17.76
Open circuit voltage - Voc(V)	43.00	43.17	43.35	43.53	43.70
Short circuit current - Isc(A)	18.38	18.44	18.50	18.56	18.62
Module efficiency (%)	22.6%	22.7%	22.9%	23.1%	23.2%

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

Electrical Parameter at NOCT

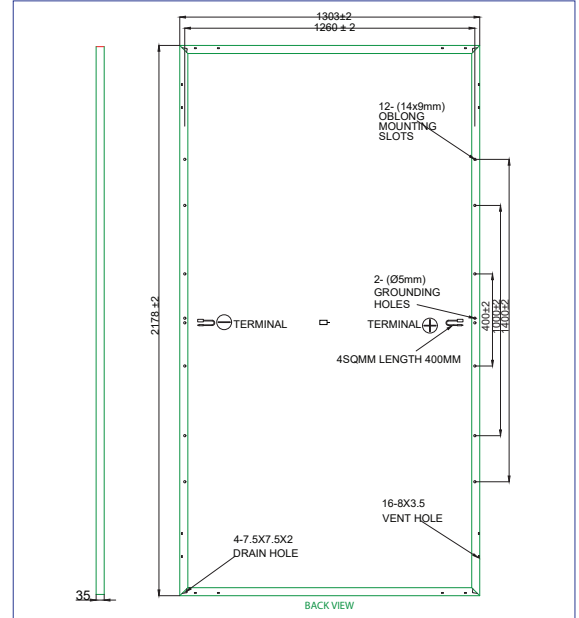
Capacity rating - Pmax (Wp)**	484	488	492	495	499
Rated voltage - Vmp(V)	34.33	34.47	34.61	34.74	34.88
Rated current - Imp(A)	14.10	14.16	14.21	14.26	14.32
Open circuit voltage - Voc(V)	41.10	41.27	41.43	41.60	41.77
Short circuit current - Isc(A)	14.82	14.87	14.92	14.96	15.01

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

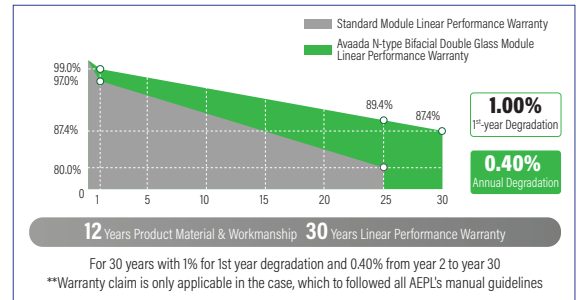
Mechanical Specification

Specification	Details
Solar cells	N type topcon, MBB 120 Cell
Encapsulation	POE/EPE/EVA
Back glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Front glass	2.0mm, Anti-Reflection Coated
Dimensions	(L) 2178 mm x (W) 1303 mm x (H) 35mm
Weight	36 kg
J-box	IP 68 certified, 3 diodes
Cable	Solar cable 4 mm ² , length 300 mm / customized
Connectors	MC4-compatible connectors

Dimensions in mm



Performance Warranty



Operating Properties

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

Temperature Coefficient

NOCT(Nominal Operating Cell Temperature)	42°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 | IEC 61583-1&2 (PAN file) | LID,LeTID | IEC 60068 (Sand & Dust) | CEC|CE

Packing Configuration

Container	40'HQ
Modules per Pallet	31
Pallets per Container	18
Modules per Container	558

IV-Curve

