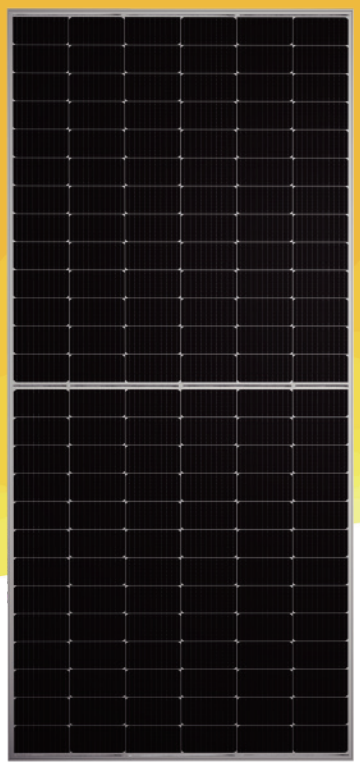
QNM182-HG-78

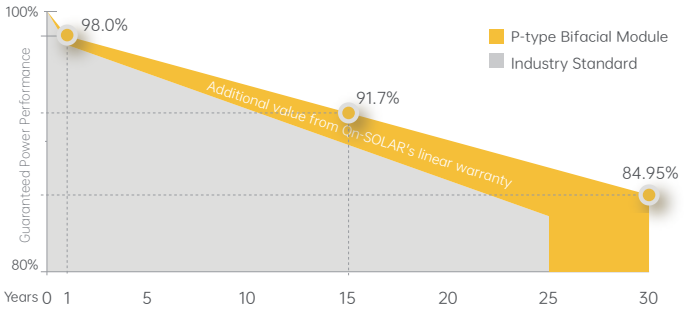
585-610W

Bifacial PERC Half-Cell Module

Max Efficiency 21.82%



LINEAR PERFORMANCE WARRANTY



Linear power guarantee over 84.95% power output after 30 years

12~30 years
Product materials and process warranty

30 years
Linear power warranty

< 2%
First year power degradation

< 0.45%
Year 2~30 power degradation

COMPREHENSIVE CERTIFICATES

TÜV Rheinland · ISO · CE (Europe) · INMETRO (Brazil) · CSA (NA) · CQC (China) · RETIE (Colombia) · MCS (UK) · Double Insulation

TÜV SÜD · PVEL (USA) · JPEA (Japan) · SEC (Chile) · PV-CYCLE (Global) · ADQCC (Abu Dhabi) · CEC (Australia) · Fire Class 1 (Italy)

• IEC 61215, IEC 61730 • UNI9177 • ISO 9001:2015 • ISO 14001:2015 • ISO 45001:2018

* Different markets have different certification requirements. Also, the products are under rapid innovation. Please confirm the certification status with regional sales representatives.

Ultrahigh bifaciality, 25% maximum rear side power gain.

0/+5 — 0~+5W positive power tolerance peak power output ensures the reliability of the module.

2% — Effectively reduces the loss of up to 2% caused by mismatch and maximizes the output power of the system.

Weak Light — The module shows excellent weak light performance in the morning, evening and cloudy days.

Anti-PID — Improved cell technology and selected materials make the module has good PID resistance.

2400Pa 5400Pa — The module can withstand wind load of up to 2400Pa and snow load of 5400Pa.

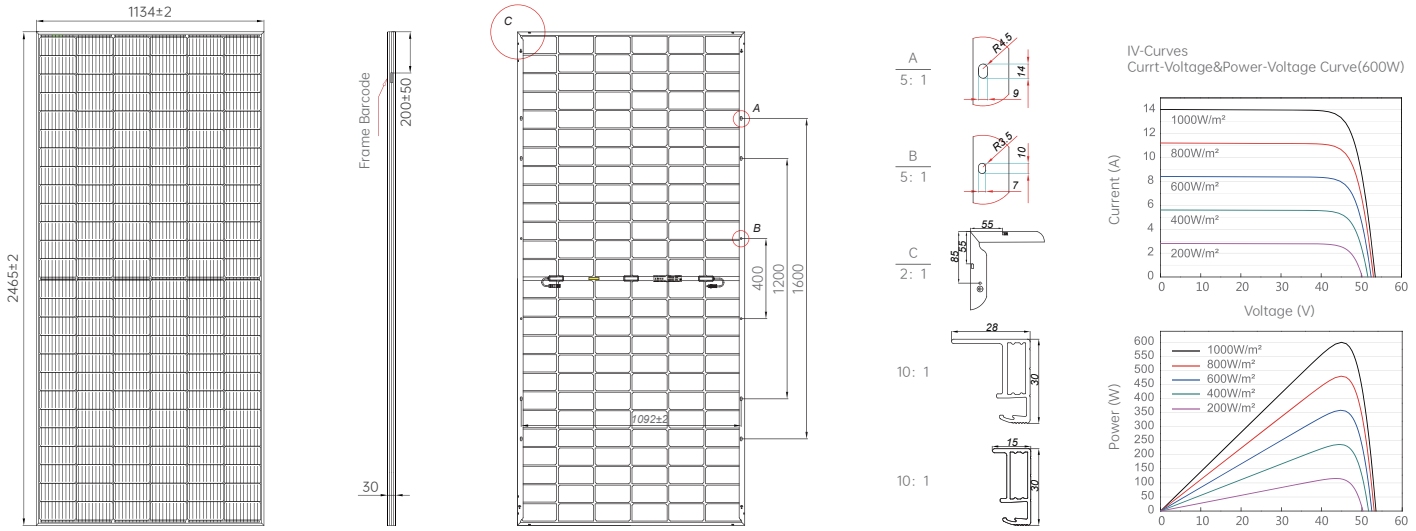
PERFORMANCE INSURANCE

Ariel Re · LLOYD'S Underwriters

Guardians of human health and the natural environment.

MODULE DIMENSIONS (mm)

156 cells



ELECTRIC CHARACTERISTICS (STC)

Module Type	QNM182-HG585-78	QNM182-HG590-78	QNM182-HG595-78	QNM182-HG600-78	QNM182-HG605-78	QNM182-HG610-78
STC Peak Power - **Pmax(Wp)**	585	590	595	600	605	610
Optimum Working Voltage - **Vmp(V)**	44.93	45.14	45.35	45.56	45.77	45.97
Optimum Working Current - **Imp(A)**	13.02	13.07	13.12	13.17	13.22	13.27
Open Circuit Voltage - **Voc(V)**	53.79	54.01	54.27	54.52	54.78	55.06
Short Circuit Current - **Isc(A)**	13.51	13.57	13.62	13.67	13.72	13.76
Module Efficiency (%)	20.93	21.11	21.29	21.46	21.64	21.82

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 ℃ , Spectra at AM1.5.

ELECTRICAL CHARACTERISTICS WITH 10% REAR SIDE POWER GAIN

Total Equivalent power - **Pmax (Wp)**	644	649	655	660	666	671
Maximum Power Voltage - **Vmp(V)**	44.93	45.14	45.35	45.56	45.77	45.97
Maximum Power Current - **Imp(A)**	14.32	14.38	14.43	14.49	14.54	14.60
Open Circuit Voltage - **Voc(V)**	53.79	54.01	54.27	54.52	54.78	55.06
Short Circuit Current - **Isc(A)**	14.86	14.93	14.98	15.04	15.09	15.14

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standardtest condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

MECHANICAL PARAMETERS

Cell Type	P-type PERC Monocrystalline
Number of Half Cells	156 (2×78)
Module Size	2465±2mm × 1134±2mm × 30mm (35mm)
Weight	33.8 kg (30mm Frame) / 34 kg (35mm Frame)
Glass	Dual,2.0mm Coated tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 standard (3 bypass diode)
Output Cable	TUV (2pfg1169:2007) 4mm²/1400mm
Connector	MC4 or (Compatible with MC4)
Hailstone Test	25mm Hailstone at the speed of 23m/s
Mechanical Load	Max. Snow load 5400 Pa, Max. Wind load 2400 Pa

NOCT: Irradiance 800W/m², Ambient Temperature 20℃ , Spectra at AM1.5, Wind at 1m/s.

TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45±2 ℃
Temperature Coefficient of **Pmax**	-0.31 %/℃
Temperature Coefficient of **Voc**	-0.28 %/℃
Temperature Coefficient of **Isc**	0.054 %/℃
Power Tolerance (W)	0~+5
Maximum Series Fuse Rating	25 A
Maximum System Voltage	DC 1500V
Operating Module Temperature	-40 ℃ ~ +85 ℃

PACKING CONFIGURATION (40'HC)

576 pcs / container , 16 pallets , 36 pcs / pallet (30mm Frame)
496 pcs / container , 16 pallets , 31 pcs / pallet (35mm Frame)

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