

166 QN3MxxxH72(H) | Multi Busbar Monocrystalline Half Cell PV Module

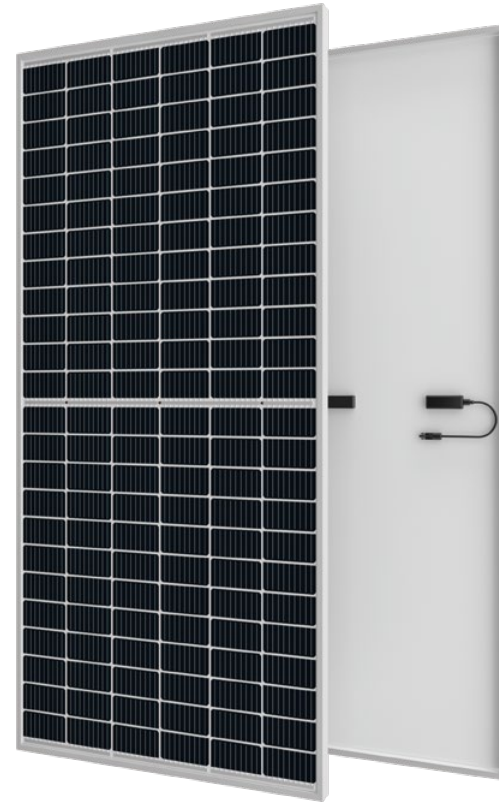
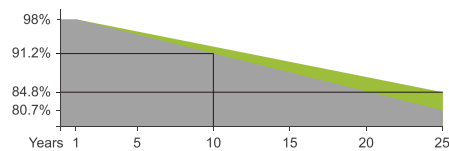
Power Output : 440W - 475W
 Power Tolerance : 0W ~ +5W
 Maximum Efficiency : 21.9%

Highlights

- Assembled with multi-busbar cells**, reduce shading effect on the energy generation, lower risk of hot spot
- Pass the test for weather resistance in harsh environments (salt mist, ammonia corrosion and sand).
- Process optimization of high efficiency PERC solar cell and strict control on raw materials to ensure highly resistance against PID of PV module.
- Better mechanical loading tolerance with the test front side 5400pa and back side 2400pa.
- Series and parallel design, reduce the series resistance RS of module, reduce the loss of internal electrical performance, and improve the power generation capacity of whole system.
- Cutting solar cell technology, which significantly reduces string current and module damage, it is good choice for projects in high temperature areas.

Offers Long-term Quality Assurance

- 12 years Product Warranty
- 25 years Linear Power Output Warranty
- The attenuation of the power output in the first year $\leq 2\%$
 The annual average attenuation after the first year $\leq 0.55\%$



Optional

- Connector Original MC4
- Cable length 1000mm 900mm
- Frame Black
- Solar Module Dimension 2094x1038x40mm
- Back sheet color Black Transparency

Packaging

- Number of modules per pallet 31 pcs
- 17.5*2.8m Flatbed loading 992 pcs
- 13.0*2.35m Flatbed loading 744 pcs
- 20GP Standard container 155 pcs
- 40HQ Standard container 682 pcs

Electrical performance parameters | STC

Power Output	Pmax(W)	440	445	450	455	460	465	470	475
Rated Power Maximum Voltage	Vmp(V)	41.50	41.70	42.00	42.20	42.40	42.60	42.80	43.00
Rated Power Maximum Current	Imp(A)	10.61	10.68	10.73	10.79	10.85	10.91	10.97	11.03
Open Circuit Voltage	Voc(V)	49.00	49.20	49.40	49.60	49.80	50.00	50.20	50.40
Short Circuit Current	Isc(A)	11.27	11.32	11.37	11.42	11.47	11.52	11.57	11.62
Module Efficiency	(%)	20.2	20.5	20.7	20.9	21.2	21.4	21.6	21.9
Power Tolerance	(W)	0~+5W							

* STC : 1000W/m2 irradiance, 25°C module temperature, AM1.5 spectrum.
 Power measurement error +/- 3%

Electrical performance parameters | NMOT

Power output	Pmax (W)	321.0	324.8	328.6	332.4	336.2	340.0	343.9	347.7
Rated Power Maximum Voltage	Vmp (V)	37.84	38.13	38.42	38.71	39.00	39.29	39.58	39.87
Rated Power Maximum Current	Imp (A)	8.48	8.52	8.55	8.59	8.62	8.65	8.69	8.72
Open Circuit Voltage	Voc (V)	45.56	45.82	46.08	46.34	46.60	46.80	47.12	47.38
Short Circuit Current	Isc (A)	9.12	9.14	9.17	9.19	9.22	9.25	9.27	9.30

* NMOT:800W/m2 irradiance, 20°C module temperature, 1m/s wind speed.
 Power measurement error +/- 3%

Structure Features

Solar Cell	166MONO(Half Cell)
Solar Cell Array	144 pcs(6×24)
Module Dimension	2094×1038×35mm
Weight	23.3 kg
Glass	3.2 mm (0.13 inches) highly transparent anti-reflection coating tempered glass
Back sheet	White
Frame	Anodized Aluminum Alloy
Junction Box	IP68 rated
Cable	4mm ² , L=300 mm, PV cable
Diode Quantity	3
Wind Pressure/Snow Pressure	2400pa / 5400pa
Connector	MC4 Compatible

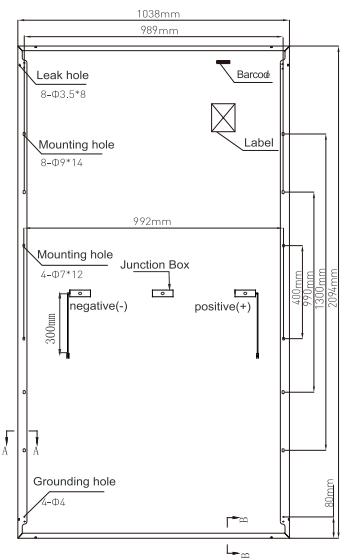
Temperature Characteristics

Solar Cells Rated Working Temperature	44±2°C
Temperature Coefficient (Isc)	+0.06%/°C
Temperature Coefficient (Voc)	-0.35%/°C
Temperature Coefficient (Pmax)	-0.38%/°C

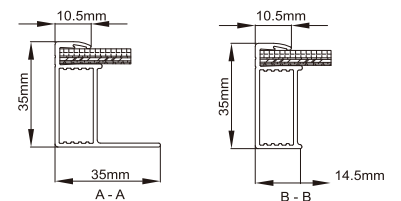
Maximum Ratings

Working Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Maximum Fuse Rated Current	20A

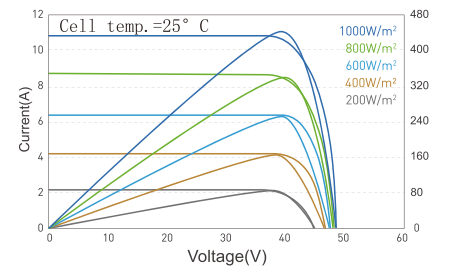
Module Dimension



Back View



I-V curves/P-V curves of module under different irradiation(465w)



I-V curves of module under different temperature(465w)

