



# Crystal **N10**

Mono-Crystalline  
**590~610W**

**0~+5W POWER TOLERANCE**

- High efficiency N - type Double glass module
- Stronger properties, PID resistance, reduced hot spot loss
- Higher module power, lower BOS costs
- Harsh environmental adaptation
- Bifacial module, more power generation

15 years material warranty 

30 years power linear warranty 

**A sound quality management  
system and product certification**

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality management system

ISO14001:2015: Environmental management system

ISO45001:2018: Occupational health and safety management system

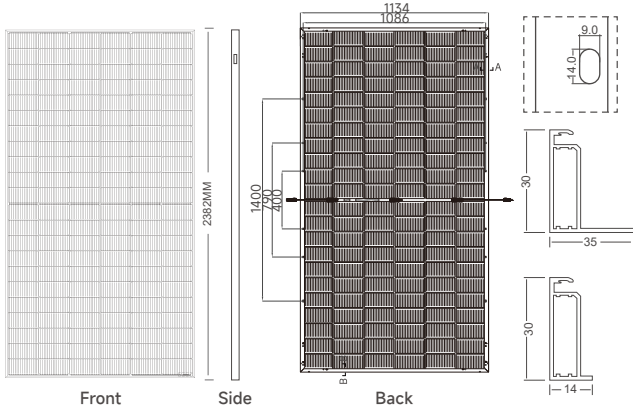
**22.6%**  
MAXIMUM CONVERSION

**0~+5W**  
POWER TOLERANCE

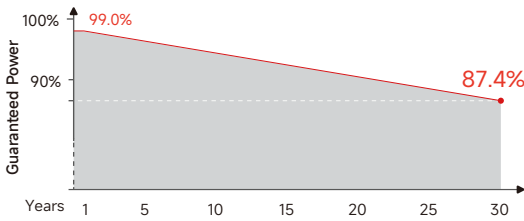
**0.4%**  
0.4% PER YEAR OVER 30 YEARS

**Half-Cut Module**  
LOWER TEMPERATURE COEFFICIENT

## Mechanical Diagrams



Length: ±2mm Width: ±2mm Thickness: ±1mm Hole pitch: ±2mm

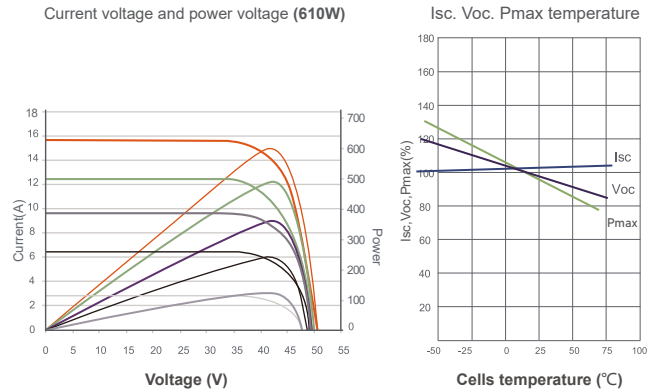


## Packing Standard

Container capacity(40GP)

Pallet size (mm) : 36pcs/pallet, 18pallets/ctns, 648pcs/ctn

## Curve Figure



## Specification

Cell Type	Mono Crystalline
No. of Cells	132 [2x(6x11)] pcs
Dimension	2382x1134x30mm
Weight	32.5kg
Front Glass	2.0mm
Back Glass	2.0mm
Junction Box	IP68
Cable Length	300mm, 1200mm (can be customized)

## Electrical Parameters

Module Type	QN-590HB-1		QN-595HB-1		QN-600HB-1		QN-605HB-1		QN-610HB-1	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	590	446	595	450	600	454	605	457	610	461
Open Circuit Voltage (Voc)	46.43	44.11	46.63	44.30	46.88	44.54	47.09	44.74	47.36	44.99
Short Circuit Current (Isc)	16.00	12.80	16.05	12.84	16.10	12.88	16.15	12.92	16.20	12.96
Maximum Power Voltage (Vmp)	38.97	36.83	39.17	37.02	39.37	37.20	39.57	37.39	39.76	37.58
Maximum Power Current (Imp)	15.14	12.11	15.19	12.15	15.24	12.19	15.29	12.23	15.34	12.27
Module Efficiency -ηm (%)	21.8		22.0		22.2		22.4		22.6	

## Load Capacity

Max Load Front	5400Pa
Max Load Back	2400Pa
Through Hail Testing	25mm Diameter, Impact Speed 23m/s

## Temperature Coefficient (STC Test)

Temperature Coefficient of Isc	+0.046%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Pmax	-0.32%/°C

## Operation Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC (IEC)
Maximum Series Fuse Rating	30A
Power Tolerance	0~+5W
Nominal Operating Cell Temperature (NOCT)	45±2°C
Safety Class	class I
Refer.Bifacial Factor	75±10%

**STC:** Irradiance:1000W/m<sup>2</sup> | Battery temperature: 25°C | Atmospheric=1.5

**NOCT:** Irradiance:800W/m<sup>2</sup> | Ambient temperature: 20°C | Atmospheric=1.5 | Wind speed 1m/s

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