

Nebula

Series HJT

Mono-Crystalline
640~670W

0~+5W POWER TOLERANCE

High efficiency H - type double glass HJT solar module

HJT 210mm solar cell

-0.24%/°C temperature coefficient, SMBB technology

Up to 90% bifaciality, PIB sealant, Higher reliability

Harsh environmental adaptation

Bifacial module, Suitable for utility-scale power stations

15 years material warranty

15

30 years power linear warranty

30

120

HALF-CUT
CELLS

210
x210
mm

SQUARE
CELLS

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

IEC 61215-1:2021, EN IEC 61215-1:2021/AC:2021

IEC 61215-1-1:2021, EN IEC 61215-1-1:2021

IEC 61215-2:2021, EN IEC 61215-2:2021, IEC 61730-1:2023, IEC 61730-2:2023

ISO9001:2015: Quality management system

ISO14001:2015: Environmental management system

ISO45001:2018: Occupational health and safety management system



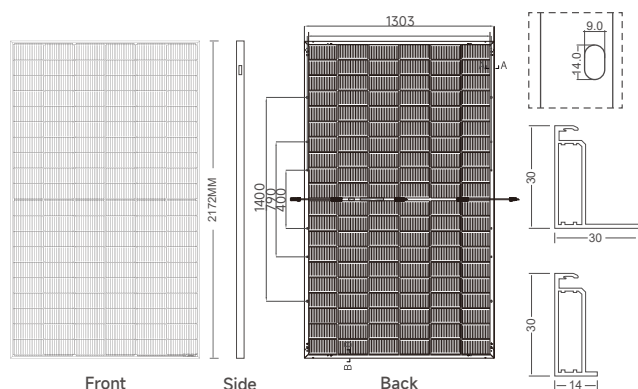
23.7%
MAXIMUM CONVERSION

0~+5W
POWER TOLERANCE

0.36%
0.4% PER YEAR OVER 30 YEARS

Half-Cut Module
LOWER TEMPERATURE COEFFICIENT

Mechanical Diagrams



Length: $\pm 2\text{mm}$ Width: $\pm 2\text{mm}$ Thickness: $\pm 1\text{mm}$ Hole pitch: $\pm 2\text{mm}$

Packing Standard

Container capacity(40HQ)

Pallet size (mm) : 37pcs/pallet, 18pallets/ctns, 666pcs/ctn

Electrical Parameters At BNPI

Maximum Power (Pmax)	705	710	715	720	725	730	735
Open Circuit Voltage (Voc)	46.09	46.16	46.23	46.30	46.36	46.43	46.50
Short Circuit Current (Isc)	19.11	19.21	19.34	19.47	19.60	19.73	19.86
Maximum Power Voltage (Vmp)	38.60	38.74	38.88	39.01	39.15	39.28	39.41
Maximum Power Current (Imp)	18.26	18.33	18.39	18.46	18.52	18.58	18.65

Electrical Parameters

Module Type	QN-640HJT-01	QN-645HJT-01	QN-650HJT-01	QN-655HJT-01	QN-660HJT-01	QN-665HJT-01	QN-670HJT-01
	STC	STC	STC	STC	STC	STC	STC
Maximum Power (Pmax)	640	645	650	655	660	665	670
Open Circuit Voltage (Voc)	46.09	46.16	46.23	46.30	46.36	46.43	46.50
Short Circuit Current (Isc)	17.33	17.42	17.53	17.64	17.75	17.86	17.97
Maximum Power Voltage (Vmp)	38.60	38.74	38.88	39.01	39.15	39.28	39.41
Maximum Power Current (Imp)	16.58	16.65	16.72	16.79	16.85	16.93	17.00
Module Efficiency - η_m (%)	22.6	23.0	22.8	23.1	23.3	23.5	23.7

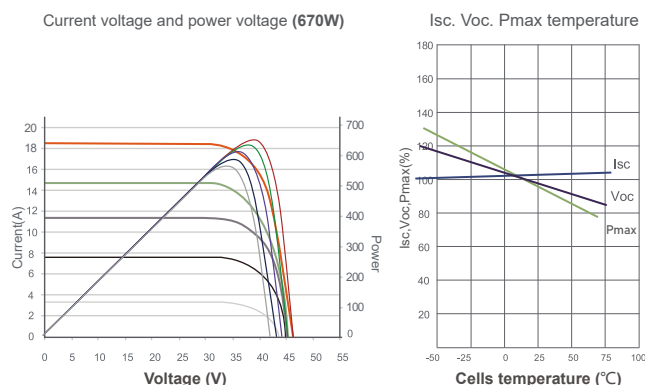
Load Capacity

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

Temperature Coefficient (STC Test)

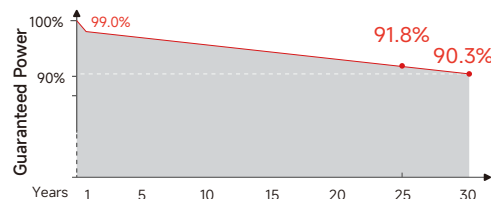
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Pmax	-0.24%/°C

Curve Figure



Specification

Cell Type	Mono Crystalline
No. of Cells	120 [2x(6x10)] pcs
Dimension	2172x1303x30mm
Weight	35kg
Front Glass	2.0mm
Back Glass	2.0mm
Junction Box	IP68
Cable Length	300mm, 1200mm (can be customized)



Operation Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC (IEC)
Maximum Series Fuse Rating	35A
Power Tolerance	0~+5W
Nominal Operating Cell Temperature (NOCT)	42 $\pm$ 2°C
Safety Class	class II
Refer. Bifacial Factor	80 $\pm$ 10%

STC : Irradiance: 1000W/m² | Battery temperature: 25°C | Atmospheric=1.5

NOCT : Irradiance: 800W/m² | Ambient temperature: 20°C | Atmospheric=1.5 | Wind speed 1m/s

BNPI : Rear Irradiance 135W/m² | Bifaciality coefficient 80% $\pm$ 5%

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