


Q-SUN solar


Crystal **N8**

Full Black Mono-Crystalline
430~450W

0~+5W POWER TOLERANCE

- High efficiency N - type Double glass black grid solar module
- Stronger properties, PID resistance, reduced hot spot loss
- Better temperature coefficient
- Harsh environmental adaptation
- Full black module, aesthetic appearance
- Bifacial module, more power generation

25 years material warranty 

30 years power linear warranty 

108

HALF-CUT
CELLS

182
x188
mm

RECTANGULAR
CELLS



*Subject to the terms and conditions contained in the applicable Q-SUN solar Limited Warranty Statement.
25-year limited product warranty is available only for products installed and operating on rooftops in certain regions.

22.5%
MAXIMUM CONVERSION

0~+5W
POWER TOLERANCE

0.4%
0.4% PER YEAR OVER 30 YEARS

Half-Cut Module
LOWER TEMPERATURE COEFFICIENT

Specification

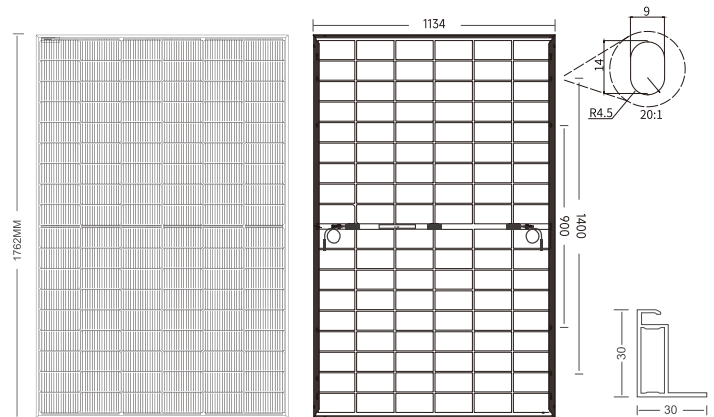
Cell Type	Mono Crystalline 16BB
No. of Cells	108 [2x(6x9)] pcs
Dimension	1762×1134×30mm
Weight	25.0kg±3%
Front Glass	2.0mm
Back Glass	2.0mm
Frame	Black Anodized Aluminum Alloy
Junction Box	IP68
Cable Length	300mm,1200mm(can be customized)

Packing Standard

36pcs/pallet

40HQ: 26 pallets/container, 936pcs/container

Mechanical Diagrams



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

Electrical Parameters

Module Type	QN-430HT-05		QN-435HT-05		QN-440HT-05		QN-445HT-05		QN-450HT-05	
	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOCT
Peak Power-Pmax (W)	430	325	435	329	440	333	445	336	450	340
Open Circuit Voltage-Voc (V)	38.83	36.89	39.13	37.17	39.42	37.45	39.7	37.72	39.98	37.98
Short Circuit Current-Isc (A)	14.01	11.21	14.07	11.26	14.13	11.30	14.19	11.35	14.25	11.40
Maximum Power Voltage-Vmp(V)	32.23	30.46	32.49	30.70	32.74	30.94	32.99	31.18	33.23	31.40
Maximum Power Current-mp(A)	13.34	10.67	13.39	10.71	13.44	10.75	13.49	10.79	13.54	10.83
Module Efficiency - nm(%)	21.5		21.8		22.0		22.3		22.5	

Electrical Parameters At BNPI

Parameter	474	480	485	491	496
Maximum Power-Pmax(W)	474	480	485	491	496
Open Circuit Voltage-Voc (V)	38.83	39.13	39.42	39.70	39.98
Short Circuit Current-Isc135 (A)	15.45	15.52	15.58	15.64	15.71
Maximum Power Voltage-Vmp (V)	32.23	32.49	32.74	32.99	33.23
Maximum Power Current-Imp (A)	14.71	14.76	14.82	14.87	14.93
Short Circuit Current-Isc300 (A)	17.21	17.28	17.35	17.42	17.49

Operating Parameters

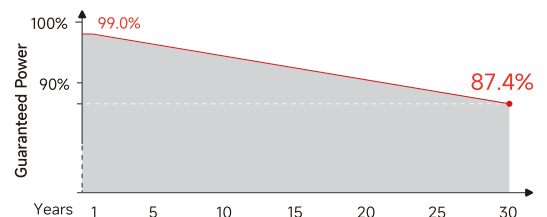
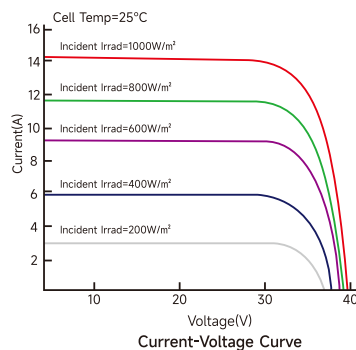
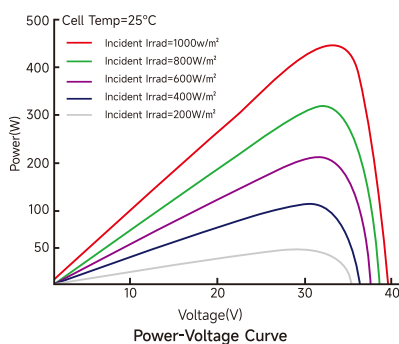
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	42±2°C
Operational Temperature	-45°C~+85°C
Safety Class	Class II
Refer.Bifacial Factor	80%±10%

Temperature Coefficient (STC Test)

Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Pmax	-0.30%/°C

Load Capacity

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



STC : Irradiance:1000W/m² | Battery temperature: 25°C | Atmospheric=1.5
NOCT: Irradiance:800W/m² | Ambien temperature: 20°C | Atmospheric=1.5 | Wind speed 1m/s
BNPI: Rear Irradiance 135W/m² | Bifaciality coefficient 80%±5%

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