

Qrystal 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 

96

HALF-CUT
CELLS

182
x210
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

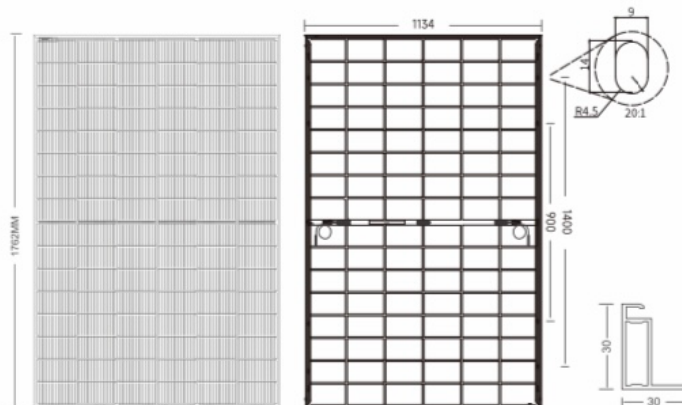
Cell Type	Mono Crystalline 16BB
No. of Cells	96 [2x(6x8)] pcs
Dimension	1762×1134×30mm
Weight	25kg±3%
Front Glass	2.0 mm
Back Glass	2.0 mm
Frame	Black Anodized Aluminum Alloy
Junction Box	IP68
Cable Length	300mm,1200mm(can be customized)

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-430HD-01		QN-435HD-01		QN-440HD-01		QN-445HD-01		QN-450HD-01	
	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Peak Power-Pmax (W)	430	325	435	329	440	333	445	336	450	340
Open Circuit Voltage-Voc (V)	34.93	33.18	35.20	33.44	35.47	33.70	35.75	33.96	36.02	34.22
Short Circuit Current-Isc (A)	15.58	12.47	15.64	12.51	15.70	12.56	15.76	12.61	15.82	12.65
Maximum Power Voltage-Vmp(V)	28.84	27.25	29.08	27.48	29.31	27.70	29.55	27.92	29.78	28.14
Maximum Power Current-mp(A)	14.91	11.93	14.96	11.97	15.01	12.01	15.06	12.05	15.11	12.09
Module Efficiency - nm(%)	21.5		21.8		22.0		22.3		22.5	

Electrical Parameters At BNPI

Maximum Power-Pmax(W)	474	480	485	491	496
Open Circuit Voltage-Voc (V)	34.93	35.20	35.47	35.75	36.02
Short Circuit Current-Isc135 (A)	17.18	17.25	17.31	17.38	17.44
Maximum Power Voltage-Vmp (V)	28.84	29.08	29.31	29.55	29.78
Maximum Power Current-Imp (A)	16.44	16.49	16.55	16.61	16.66
Short Circuit Current-Isc300 (A)	19.14	19.21	19.28	19.35	19.42

Operating Parameters

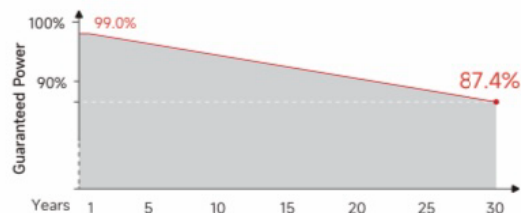
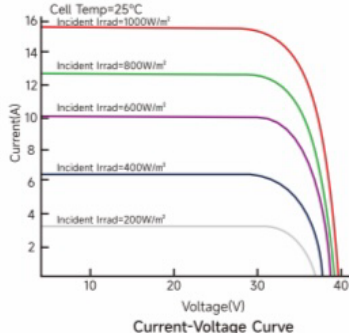
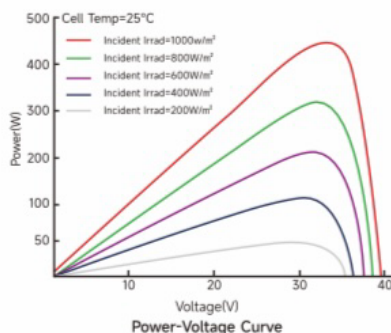
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	42±2°C
Operational Temperature	-45°C~+85°C
Safety Class	Class II
Refer.Bifacial Factor	80%±10%

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%

D5 Greenland Window Building
Nonghua Road
Yuhuatai District, Nanjing, China
www.q-sunsolar.com



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