

MERCURY Series

Mono-Crystalline 440~460W

0~+5W POWER TOLERANCE

High efficiency N - type double glass solar 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 

120

HALF-CUT CELLS

182
x182
mm

RECTANGULAR CELLS

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



N type**440~460W****22.5%**
MAXIMUM CONVERSION**0~+5W**
POWER TOLERANCE**0.4%**
0.4% PER YEAR OVER 30 YEARS**Half-Cut Module**
LOWER TEMPERATURE COEFFICIENT

Specification

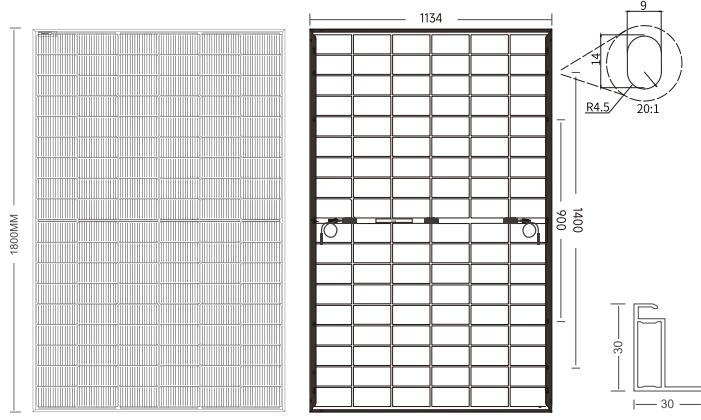
Cell Type	Mono Crystalline 16BB
No. of Cells	108 [2x(6x9)] pcs
Dimension	1800×1134×30mm
Weight	25.3kg±3%
Front Glass	2.0mm
Back Glass	2.0mm
Frame	Anodized Aluminum Alloy
Junction Box	IP68
Cable Length	300mm,1200mm(can be customized)

Packing Standard

37pcs/pallet

40HQ: 24 pallets/container, 888pcs/container

Mechanical Diagrams



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

Electrical Parameters

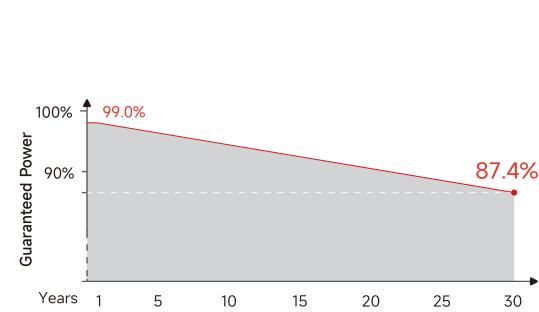
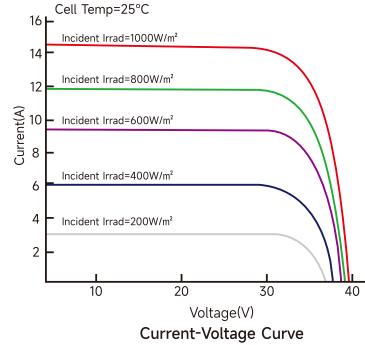
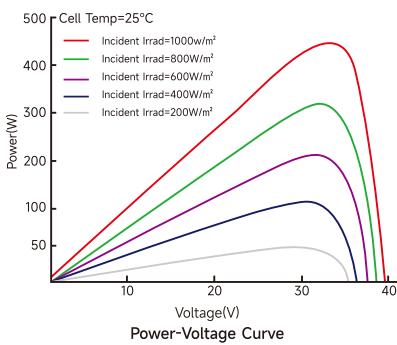
Module Type	QN-440HT-4		QN-445HT-4		QN-450HT-4		QN-455HT-4		QN-460HT-4	
	STC	NOCT								
Peak Power-Pmax (W)	440	333	445	336	450	340	455	344	460	348
Open Circuit Voltage-Voc (V)	38.83	36.89	39.12	37.16	39.41	37.44	39.68	37.70	39.96	37.96
Short Circuit Current-Isc (A)	14.34	11.47	14.40	11.52	14.46	11.56	14.51	11.61	14.57	11.66
Maximum Power Voltage-Vmp(V)	32.23	30.46	32.48	30.69	32.73	30.93	32.97	31.16	33.21	31.38
Maximum Power Current-mp(A)	13.65	10.92	13.70	10.96	13.75	11.00	13.80	11.04	13.85	11.08
Module Efficiency - nm(%)	21.6		21.8		22.0		22.3		22.5	

Electrical Parameters At NOCT

Maximum Power-Pmax(W)	485	491	496	502	507
Open Circuit Voltage-Voc (V)	38.83	39.12	39.41	39.68	39.96
Short Circuit Current-Isc135 (A)	15.81	15.88	15.94	16.00	16.07
Short Circuit Current-Isc300 (A)	17.61	17.68	17.75	17.82	17.89
Maximum Power Voltage-Vmp (V)	32.23	32.48	32.73	32.97	33.21
Maximum Power Current-mp (A)	15.05	15.77	15.16	15.22	15.27

Temperature Coefficient (STC Test)

Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.30%/°C

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

All data contained in this specification is subject to change without prior notice, and the final interpretation rights belong to Q-SUNSOLAR (20240423V2)

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