

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



22.5%
MAXIMUM CONVERSION

0~+5W
POWER TOLERANCE

0.4%
0.4% PER YEAR OVER 30 YEARS

Half-Cut Module
LOWER TEMPERATURE COEFFICIENT

Specification

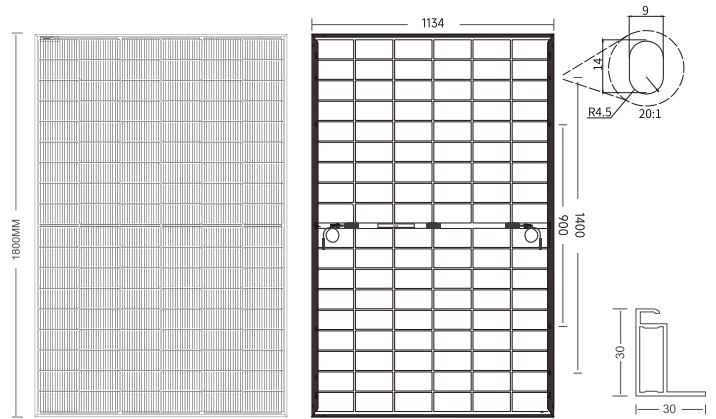
Cell Type	Mono Crystalline 16BB
No. of Cells	108 [2x(6×9)] pcs
Dimension	1800×1134×30mm
Weight	25.3kg±3%
Front Glass	2.0mm
Back Glass	2.0mm
Frame	Anodized Aluminum Alloy
Junction Box	IP68
Cable Length	300mm,1200mm(can be customized)

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	STC	NOCT	STC	NOCT	STC	NOCT	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-Imp (A)	15.05	15.77	15.16	15.22	15.27

Operating Parameters

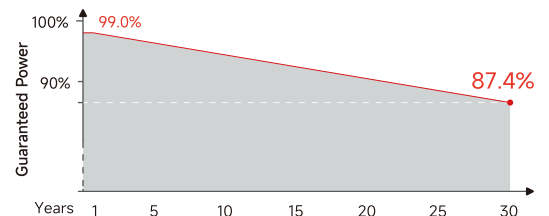
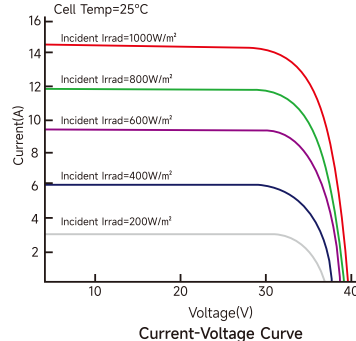
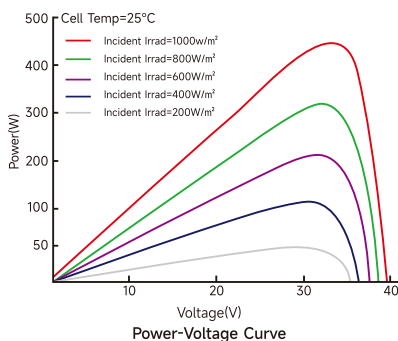
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	42±2°C
Operational Temperature	-45°C~+85°C
Safety Class	Class II
Refer.Bifacial Factor	80±10%

Temperature Coefficient (STC Test)

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