



Mercury Series

Mono-Crystalline 470~490W

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
x183.75
mm

RECTANGULAR
CELLS

Comprehensive 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



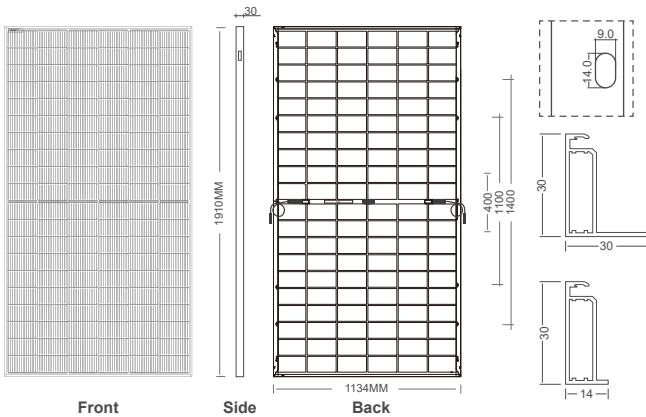
22.6%
MAXIMUM CONVERSION

0~+5W
POWER TOLERANCE

0.4%
0.4% PER YEAR OVER 30 YEARS

Half-Cut Module
LOWER TEMPERATURE COEFFICIENT

Mechanical Diagrams



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

Packing Standard

Container capacity(40HQ)

Pallet size (mm) : 37pcs/pallet, 24pallets/ctns, 888pcs/ctn

Electrical Parameters At BNPI

Maximum Power (Pmax)	518	524	529	535	540
Open Circuit Voltage (Voc)	43.00	43.27	43.54	43.81	44.08
Short Circuit Current (Isc135)	15.26	15.32	15.38	15.45	16.05
Maximum Power Voltage (Vmp)	35.88	36.12	36.36	36.60	36.84
Maximum Power Current (Imp)	14.44	14.50	14.55	14.61	14.67
Short Circuit Current (Isc300)	16.99	17.06	17.13	17.21	17.28

Electrical Parameters

Module Type	QN-470HT-06		QN-475HT-06		QN-480HT-06		QN-485HT-06		QN-490HT-06	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	470	355	475	359	480	363	485	367	490	371
Open Circuit Voltage (Voc)	43.00	40.85	43.27	41.11	43.54	41.36	43.81	41.62	44.07	41.88
Short Circuit Current (Isc)	13.84	11.07	13.90	11.12	13.95	11.16	14.01	11.21	14.07	11.26
Maximum Power Voltage (Vmp)	35.88	33.91	36.12	34.13	36.36	34.36	36.60	34.59	36.84	34.82
Maximum Power Current (Imp)	13.10	10.48	13.15	10.52	13.20	10.56	13.25	10.60	13.30	10.64
Module Efficiency -ηm (%)	21.7		22.0		22.2		22.4		22.6	

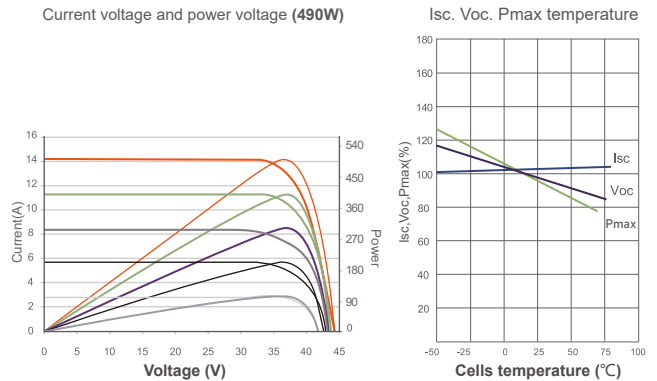
Load Capacity

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

Temperature Coefficient (STC Test)

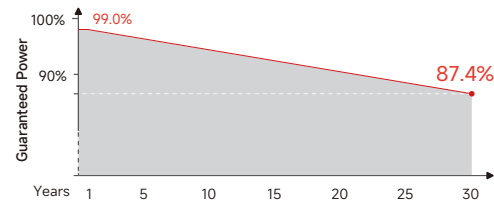
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.30%/°C

Curve Figure



Specification

Cell Type	Mono Crystalline
No. of Cells	120 [2x(6x10)] pcs
Dimension	1910x1134x30mm
Weight	26.5kg
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	25A
Power Tolerance	0~+5W
Nominal Operating Cell Temperature (NOCT)	42±2°C
Safety Class	Class I
Fire Safety Class According	Class C
Refer.Bifacial Factor	80±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%±5%

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