

Mercury Series

Black Thru Mono-Crystalline

485~505W

0~+5W POWER TOLERANCE

High efficiency N - type Bifacial Double Glass Module ●

Stronger properties, PID resistance, reduced hot spot loss ●

Better temperature coefficient ●

Harsh environmental adaptation ●

Full black module, aesthetic appearance ●

15 years material warranty 

30 years power linear warranty 

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



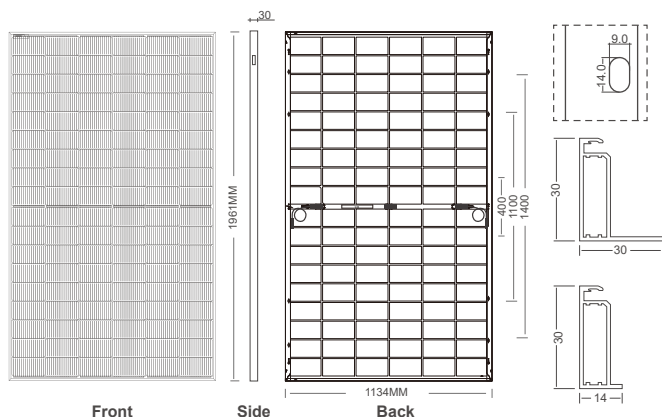
22.7%
MAXIMUM CONVERSION

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)	535	540	546	551	557
Open Circuit Voltage (Voc)	39.01	39.26	39.51	39.77	40.02
Short Circuit Current (Isc135)	17.36	17.42	17.48	17.55	17.61
Maximum Power Voltage (Vmp)	32.38	32.60	32.82	33.05	33.27
Maximum Power Current (Imp)	16.52	16.57	16.63	16.68	16.74
Short Circuit Current (Isc300)	19.33	19.40	19.47	19.54	19.61

Electrical Parameters

Module Type	QN-485HT-02		QN-490HT-02		QN-495HT-02		QN-500HT-02		QN-505HT-02	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	485	367	490	370	495	374	500	378	505	382
Open Circuit Voltage (Voc)	39.01	37.06	39.26	37.29	39.51	37.53	39.77	37.78	40.02	38.02
Short Circuit Current (Isc)	15.74	12.59	15.80	12.64	15.86	12.69	15.91	12.73	15.97	12.78
Maximum Power Voltage (Vmp)	32.38	30.60	32.60	30.81	32.82	31.01	33.05	31.23	33.27	31.44
Maximum Power Current (Imp)	14.98	11.98	15.03	12.02	15.08	12.06	15.13	12.10	15.18	12.14
Module Efficiency -ηm (%)	21.8		22.0		22.3		22.5		22.7	

Load Capacity

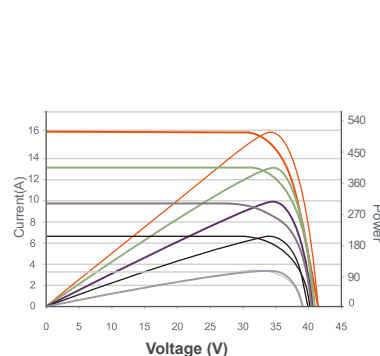
Max Load Front	5400Pa
Max Load Back	2400Pa
Through Hail Testing	25mm Diameter, Impact Speed 23m/s

Temperature Coefficient (STC Test)

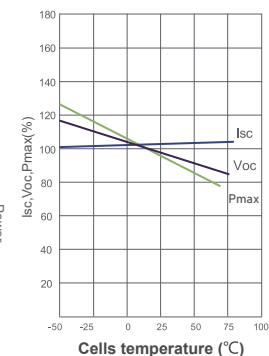
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.30%/°C

Curve Figure

Current voltage and power voltage (505W)

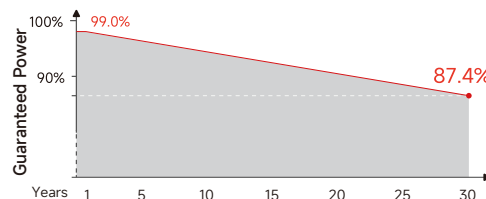


Isc, Voc, Pmax temperature



Specification

Cell Type	Mono Crystalline
No. of Cells	108 [2x(6x9)] pcs
Dimension	1961x1134x30mm
Weight	27.5kg
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	30A
Power Tolerance	0~+5W
Nominal Operating Cell Temperature (NOCT)	42±2°C
Safety Class	Class II
Fire Safety Class According	Class 1
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%

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

