

Mercury Series

Black Frame Mono-Crystalline

580~600W

0~+5W POWER TOLERANCE

High efficiency N - type Double glass 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

15

30 years power linear warranty

30

144

HALF-CUT
CELLS

182
x182
mm

SQUARE
CELLS

Comprehensive quality management system
and product certification

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality management system

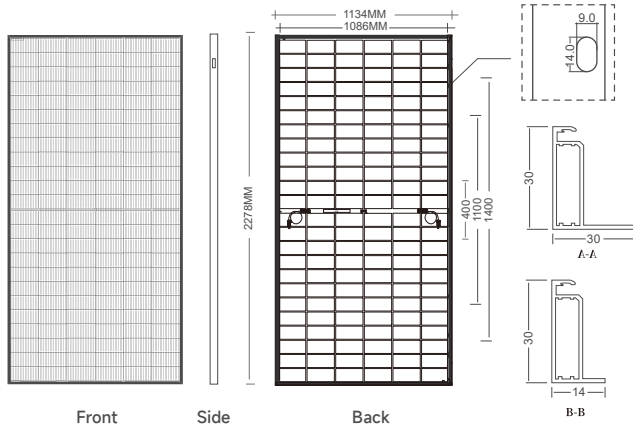
ISO14001:2015: Environmental management system

ISO45001:2018: Occupational health and safety management system



23.2%
MAXIMUM CONVERSION0~+5W
POWER TOLERANCE0.4%
0.4% PER YEAR OVER 30 YEARSHalf-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, 20pallets/ctns, 740pcs/ctn

Electrical Parameters At BNPI

Maximum Power (Pmax)	639	645	651	656	662
Open Circuit Voltage (Voc)	51.86	52.10	52.31	52.40	52.55
Short Circuit Current (Isc135)	15.56	15.62	15.69	15.75	15.81
Short Circuit Current (Isc300)	17.33	17.40	17.47	17.54	17.61
Maximum Power Voltage (Vmp)	43.91	44.15	44.36	44.57	44.78
Maximum Power Current (Imp)	14.55	14.61	14.66	14.72	14.77

Electrical Parameters

Module Type	QN-580HT-06		QN-585HT-06		QN-590HT-06		QN-595HT-06		QN-600HT-06	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	580	438	585	442	590	446	595	450	600	454
Open Circuit Voltage (Voc)	51.86	49.26	52.10	49.50	52.31	49.69	52.40	49.78	52.55	49.92
Short Circuit Current (Isc)	14.13	11.29	14.17	11.33	14.23	11.38	14.28	11.43	14.34	11.47
Maximum Power Voltage (Vmp)	43.9	41.49	44.15	41.72	44.36	41.92	44.57	42.12	44.78	42.31
Maximum Power Current (Imp)	13.20	10.56	13.25	10.60	13.30	10.64	13.35	10.68	13.40	10.72
Module Efficiency - η_m (%)	22.5		22.6		22.8		23.0		23.2	

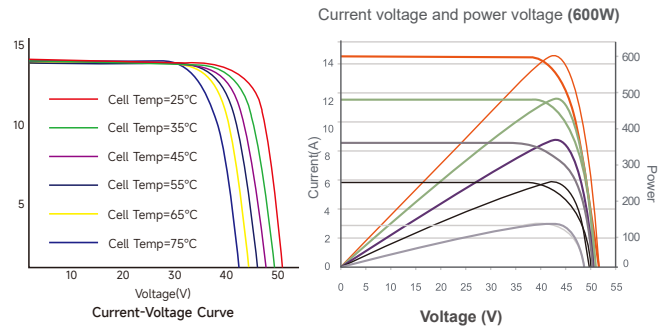
Load Capacity

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

Temperature Coefficient (STC Test)

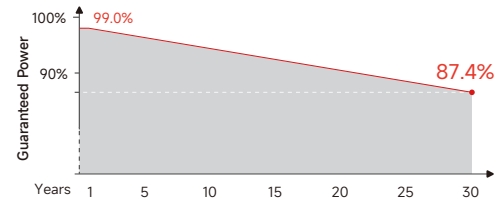
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.30%/°C

Curve Figure



Specification

Cell Type	mono crystalline 16BB
No. of Cells	144 [2x(6x12)] pcs
Dimension	2278x1134x30mm
Weight	31.2kg
Front Glass	2.0 mm
Back Glass	2.0 mm
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 I
Refer.Bifacial Factor	80±10%

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%D5 Greenland Window Building
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