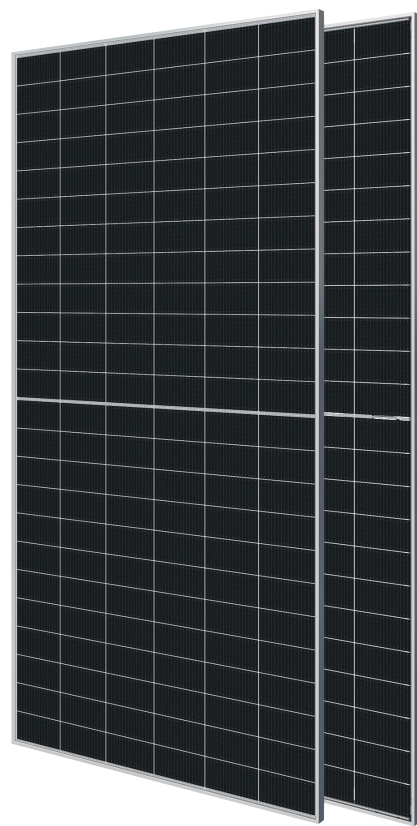


# PHOTON 6N

HGN-72HC10B  
Bifacial Module

580~600W



TOPCon / Half-cut / Bifacial



Low temperature coefficient



PID resistance



Low BOS cost & LCOE

## Higon Reliable Quality

- World-class manufacturer of crystalline silicon photovoltaic modules
- Fully automatic facility and world-class technology
- Rigorous quality control to meet the highest standard: ISO 9001, ISO 14001 and ISO 45001
- Long term reliability tests
- 3X100% EL inspection ensuring defect-free modules



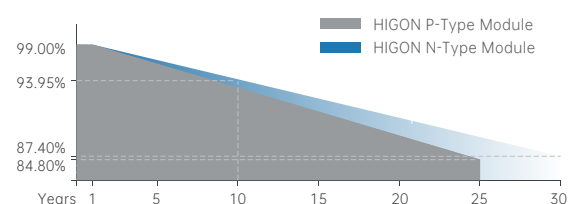
THE IDEAL SOLUTION FOR:



Ground-mounted solar plants

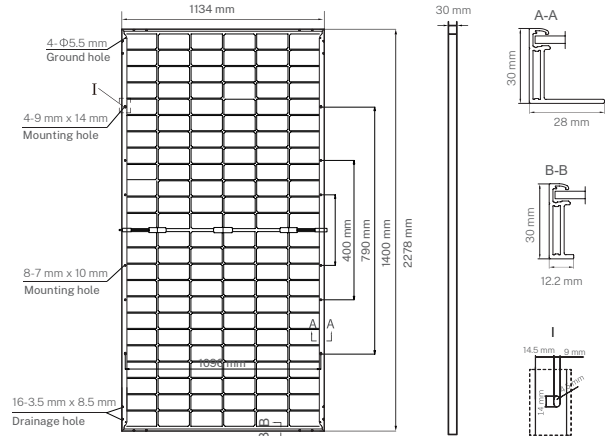
## Performance Warranty

- 15 Years Product Warranty
- 30 Years Linear Power Warranty
- 1% Degradation in 1st year
- 0.4% Annual Degradation Over 30 Years



**Mechanical Characteristics**

Solar Cell	N-Type mono-crystalline
No. of Cells	144 (6×24)
Dimensions	2278×1134×30mm
Weight	32.1kg
Frame	Silver, Anodized Aluminum Alloy
Front / Back Glass	2.0mm+2.0mm
Output Cables	4mm <sup>2</sup> , 300mm(including connector)
Junction Box	IP68 rated(3 bypass diodes)
Connector	MC Compatible
Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30A
Mechanical Load	5400Pa(Front)/ 2400Pa(Back)



**Electrical Characteristics**

POWER CLASS	580		585		590		595		600	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power(Pmax/W)	580	436.2	585	439.9	590	443.7	595	447.4	600	451.2
Operating Voltage(Vmp/V)	43.11	40.59	43.27	40.73	43.45	40.89	43.61	41.06	43.78	41.21
Operating Current(Imp/A)	13.45	10.75	13.52	10.80	13.58	10.85	13.64	10.90	13.70	10.95
Open-Circuit Voltage(Voc/V)	51.30	48.73	51.50	48.92	51.70	49.11	51.90	49.30	52.10	49.49
Short-Circuit Current(Isc/A)	14.28	11.53	14.36	11.59	14.45	11.66	14.53	11.73	14.61	11.80
Module Efficiency(%)	22.5		22.6		22.8		23.0		23.2	

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5;  
 NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

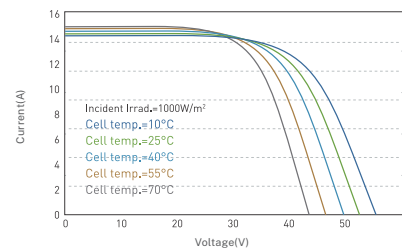
**Different Rearside Power Gain**

Reference to 590W Front

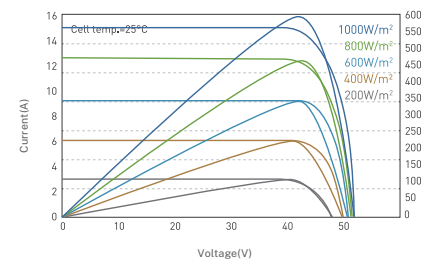
Rearside Power Gain	5%	15%	25%
Maximum Power(Pmax/W)	620	679	738
Operating Voltage(Vmp/V)	43.45	43.46	43.46
Operating Current(Imp/A)	14.26	14.62	16.98
Open-Circuit Voltage(Voc/V)	51.70	51.71	51.71
Short-Circuit Current(Isc/A)	15.17	16.61	18.06

**Graphs**

I-V Curve at different Temperature (590W)



I-V/P-V Curve at different Irradiation (590W)



**Temperature Characteristics**

Nominal Module Operating Temperature (NMOT)	45 ± 2 °C
Temperature Coefficient of Pmax	-0.25%/°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	+0.043%/°C

**Packing Configuration**

