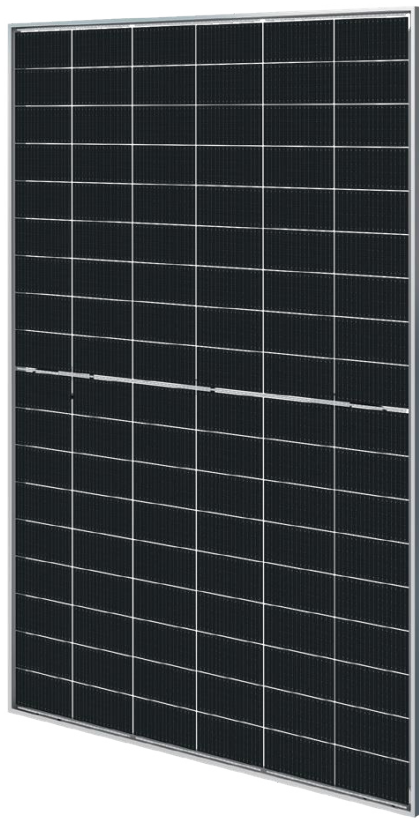


PHOTON 6N

HGN-54HC10B
Bifacial Module

430~450W



TOPCon / Half-cut / Bifacial



Low temperature coefficient



PID resistance



Low BOS cost & LCOE

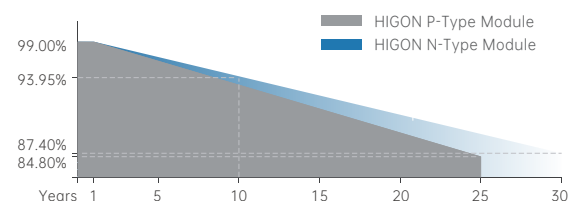
Higon Reliable Quality

- 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



Performance Warranty

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



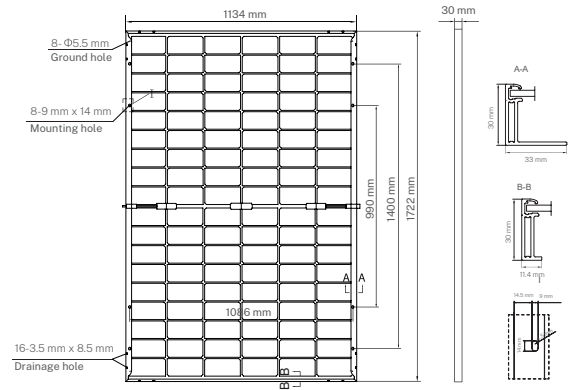
THE IDEAL SOLUTION FOR:



Commercial Rooftop
Residential Rooftop

Mechanical Characteristics

Solar Cell	N-Type mono-crystalline
No. of Cells	108 (6×18)
Dimensions	1722×1134×30mm
Weight	20.8kg
Frame	Silver or Black, Anodized Aluminum Alloy
Glass	1.6mm+1.6mm
Output Cables	4mm ² , 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	25A
Mechanical Load	5400Pa(Front)/ 2400Pa(Back)



Electrical Characteristics

POWER CLASS	430		435		440		445		450	
	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)	430	323.4	435	327.1	440	330.9	445	334.6	450	338.3
Operating Voltage(Vmp/V)	32.52	30.61	32.69	30.77	32.86	30.93	33.03	31.09	33.20	31.25
Operating Current(Imp/A)	13.22	10.56	13.31	10.63	13.39	10.70	13.48	10.77	13.56	10.83
Open-Circuit Voltage(Voc/V)	38.70	36.76	38.90	36.95	39.10	37.14	39.30	37.33	39.50	37.52
Short-Circuit Current(Isc/A)	14.01	11.31	14.10	11.38	14.19	11.45	14.28	11.52	14.37	11.59
Module Efficiency(%)	22.0		22.3		22.5		22.8		23.0	

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5;
 NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

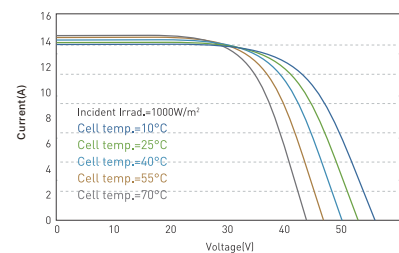
Different Rearside Power Gain

Reference to 440W Front

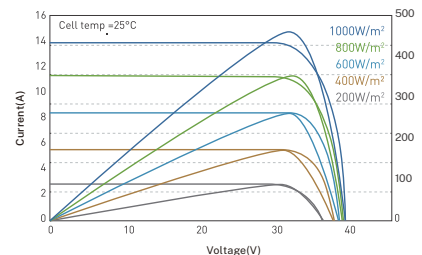
Rearside Power Gain	5%	15%	25%
Maximum Power(Pmax/W)	462	506	550
Operating Voltage(Vmp/V)	32.95	32.95	32.95
Operating Current(Imp/A)	14.02	15.36	16.70
Open-Circuit Voltage(Voc/V)	39.06	39.06	39.06
Short-Circuit Current(Isc/A)	14.86	16.28	17.70

Graphs

I-V Curve at different Temperature (440W)



I-V/P-V Curve at different Irradiation (440W)



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

