

HIGON TOPCON

HGN-54HC10

420-440Wp **All Black Module**

BIFACIAL DOUBLE GLASS
HALF CELL MODULE



N Type technology: The N-type module has better reliability and lower LID/LETID



Aesthetic Design, All black design brings highly consistent appearance for rooftops



Lightweight double glass structure which effectively reduces the rate of module breakage. The ideal module size and weight make handling and installation easier



Regional value creation, made without lead and produced using 100% renewable energy.



More energy yield over the same area even on cloudy or hot days



Selected encapsulating material and stringent production process control ensure the product is highly PID resistant and snail trails free

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



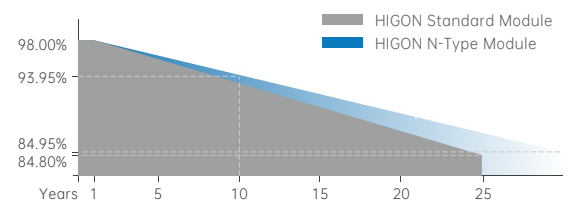
THE IDEAL SOLUTION FOR:



Commercial Rooftop
Residential Rooftop

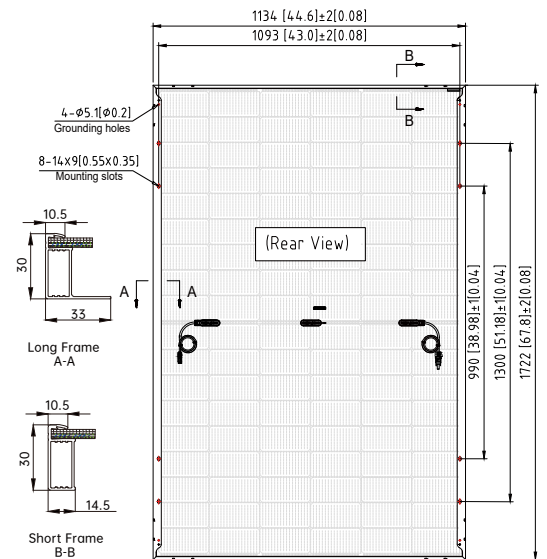
Performance Warranty

- 15 Years Product Warranty
- 30 Years Linear Power Warranty
- 2% Degradation in 1st year
- 4.5% Annual Degradation Over 30 Years



Mechanical Characteristics

Solar Cell	N-Type (M10)
No. of Cells	108 (6×18)
Dimensions	1722×1134×30mm
Weight	22.0 kg
Front Glass	High transparency solar glass 3.0mm
Back Glass	High transparency solar glass 2.0mm
Cable	4.0mm ² , 1200mm
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
Wind/ Snow Load	2400Pa/ 5400Pa



Electrical Characteristics

POWER CLASS	420		425		430		435		440	
	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)	420	315.7	425	319.5	430	323.6	435	327.9	440	331.7
Operating Voltage(Vmp/V)	32.04	30.12	32.25	30.31	32.46	30.53	32.66	30.73	32.86	30.91
Operating Current(Imp/A)	13.11	10.48	13.18	10.54	13.25	10.60	13.32	10.67	13.39	10.73
Open-Circuit Voltage(Voc/V)	38.40	36.43	38.54	36.56	38.70	36.71	38.85	36.85	38.99	37.00
Short-Circuit Current(Isc/A)	13.83	11.15	13.90	11.21	13.97	11.27	14.04	11.34	14.10	11.40
Module Efficiency(%)	21.5		21.8		22.0		22.3		22.5	

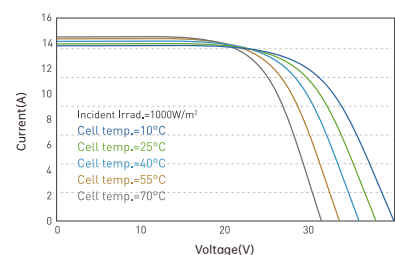
STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5;
 NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

Different Rearside Power Gain Referene to 440W Front

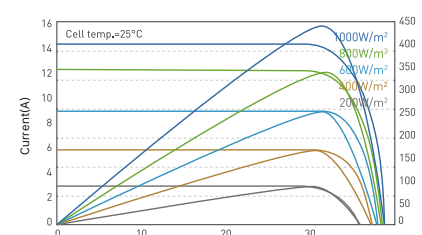
Rearside Power Gain	5%	10%	20%
Maxinum Power(Pmax/W)	462	484	528
Operating Voltage(Vmp/V)	32.9	32.9	33.1
Operating Current(Imp/A)	14.04	14.71	15.95
Open-Circuit Voltage(Voc/V)	38.9	38.9	39.2
Short-Circuit Current(Isc/A)	14.78	16.18	17.58
Module Efficiency(%)	23.6	24.8	27.0

Graphs

I-V Curve at different Temperature (440W)



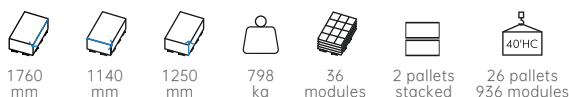
I-V/P-V Curve at different Irradiation (440W)



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	0.045%/°C

Packing Configuration



Notice: All data and specifications are preliminary and subject to change without notice.

Contact Us for More Information

web: www.higonsolar.com email: info@higonsolar.com