

WISER SERIES

BIFACIAL - TOPCON - N-108 HC

415 – 435W-MH

22.72% Max. Efficiency

30 Years Product Warranty

~ 5Wp Max. Tolerance



Less Hot Spot Shading Effects



Anti-PID Low LID Performance



Half Cut Cell Technology



Lower BOS & LCOE

About GEP-Solar

GEP-Solar, legal name Jiangsu Green Energy Power Technology Co., Ltd is a subsidiary of Sun Group Corporation (Stock Code: 835967) specializing in the production of Photovoltaic Modules covering an annual capacity of 4.7GW spread over three production units in China and two in Vietnam.

Product Intro

Our **TOPcon** Modules Range offers 30 years Product Workmanship Warranty, 30 years Linear Power Output Warranty. The power degradation for the first year will be less than 1%. From the 2nd year and onwards, the annual degradation will be less than 0.4%. Guaranteed performance ratio of 87.4% after 30 years.



Higher Power Output

Higher module conversion efficiency benefit from bigger wafer and half-cell structure. MBB technology enhances current collection with lower series resistance.



Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output



Long-Term Reliability

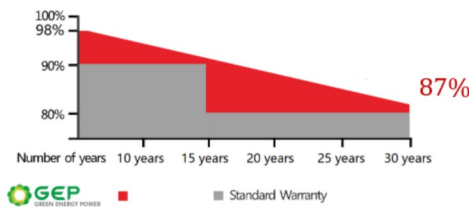
Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal). Excellent anti-PID performance to guarantee a better sustainability in harsh environment.



Lower Hot Spot and Crack Risk

Reduce hot-spot risk with optimized electrical design and lower operating current. Reduce crack risk by MBB solar cell design.

Power Warranty



Standard Warranty



30 Years Workmanship



30 Years Linear Power Output

Insurance



Munich RE



太平洋保险 CPIC

Certificates



Electrical Characteristics

Module Type	Wiser-415 MH		Wiser-420 MH		Wiser-425 MH		Wiser-430 MH		Wiser-435 MH	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax)	415	315	420	318	425	322	430	326	435	330
Maximum Power Voltage (Vmp)	31.70	29.80	31.90	30.00	32.10	30.20	32.30	30.30	32.50	30.50
Maximum Power Current (Imp)	13.10	10.56	13.17	10.62	13.24	10.67	13.32	10.74	13.39	10.80
Open-circuit Voltage (Voc)	37.70	36.00	37.90	36.20	38.10	36.40	38.30	36.60	38.50	36.80
Short-circuit Current (Isc)	13.91	11.22	13.98	11.27	14.05	11.33	14.12	11.38	14.19	11.44
Module Efficiency(%)	21.25%		21.50%		21.76%		22.02%		22.27%	

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
*Measuring tolerance: 0 ~ +5W

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

Electrical Characteristics with 10% Solar Irradiation Ratio

Module Type	Wiser-415 MH	Wiser-415 MH	Wiser-415 MH	Wiser-415 MH	Wiser-415 MH
Maximum Power (Pmax)	455	461	466	472	478
Maximum Power Voltage (Vmp)	31.70	31.90	32.10	32.30	32.50
Maximum Power Current (Imp)	14.38	14.48	14.54	14.64	14.70
Open-circuit Voltage (Voc)	37.70	37.90	38.10	38.30	38.50
Short-circuit Current (Isc)	15.30	15.37	15.45	15.53	15.61

Mechanical Parameters

Solar Cells	Monocrystalline (182mm)
Module Dimensions	1722*1134*30mm
Glass	2mm~2mm
Frame	Anodized Aluminium Alloy
Output Cable	4.0mm ² , 300/300mm

No. of Cells	108 [2 x (9 x 6)]
Weight	24.5kg
Encapsulant Material	EVA/POE
J-Box	IP68
Connector	MC4 Compatible

Temperature Ratings

NMOT (Nominal operating cell temperature)	42°C(±2°C)
Temperature Coefficient of Pmax	-0.310%/°C
Temperature Coefficient of Voc	-0.260%/°C
Temperature Coefficient of Isc	+0.046%/°C

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

Packaging

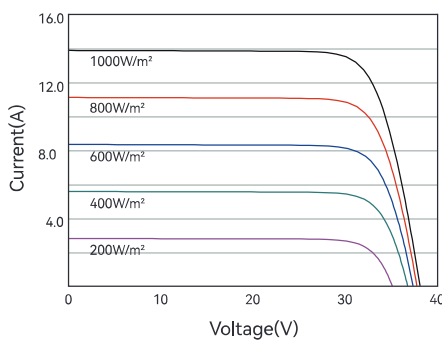
Pcs per Pallet: 36

Operating Parameters

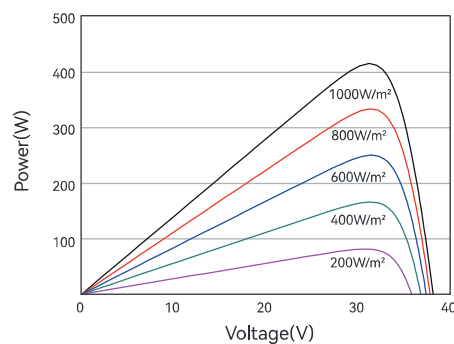
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse Rating	30A
Bifacility	80%~85%

Pcs per 40' HC: 936

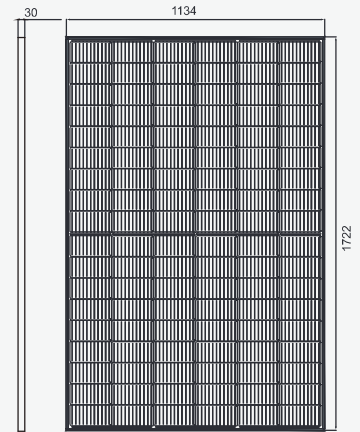
I-V Curves of PV Module (415W)



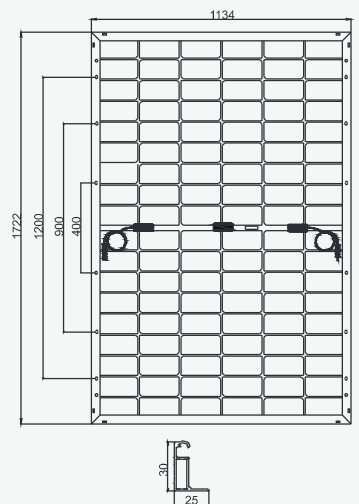
P-V Curves of PV Module (415W)



Dimensions (Unit: mm)



Front View



Back View

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