



ULTIMATE SERIES

MONO – PERC – 108 HC

395 – 415W

21.55% 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.



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

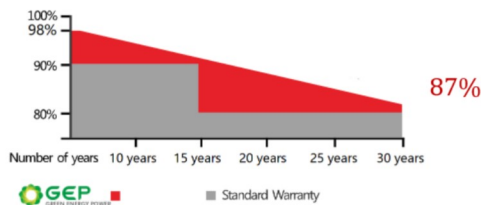
Reduce hot-spot risk with optimized electrical design and lower operating current.

Reduce crack risk by MBB solar cell design.

Product Intro

Our **PERC 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.

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	Mate 395 MH		Mate 400 MH		Mate 405 MH		Mate 410 MH		Mate 415 MH	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax)	395	290	400	295	405	298	410	302	415	307
Maximum Power Voltage (Vmp)	30.62	28.58	30.82	28.78	31.02	28.98	31.22	29.18	31.43	29.28
Maximum Power Current (Imp)	12.88	10.18	12.94	10.25	13.00	10.28	13.06	10.35	13.21	10.49
Open-circuit Voltage (Voc)	36.74	34.29	36.94	34.49	37.14	34.69	37.34	34.89	37.54	35.09
Short-circuit Current (Isc)	13.55	10.65	13.60	10.70	13.65	10.75	13.70	10.80	13.85	11.15
Module Efficiency(%)	20.22%		20.48%		20.74%		20.99%		21.25%	

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.

Mechanical Parameters

Solar Cells	Monocrystalline (182mm)
No. of Cells	108 [2x (9 x 6)]
Module Dimensions	1722*1134*30mm
Weight	21.5kg
Glass	3.2mm, High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA/POE
Backsheet	White
Frame	Anodized Aluminium Alloy
J-Box	IP68
Output Cable	4.0mm ²
(Including Connector)	Length Portrait:300/300mm (can be customized)
Connector	MC4 Compatible

Temperature Ratings

NMOT (Nominal operating cell temperature)	45°C(±2°C)
Temperature Coefficient of Pmax	-0.350%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	+0.045%/°C

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

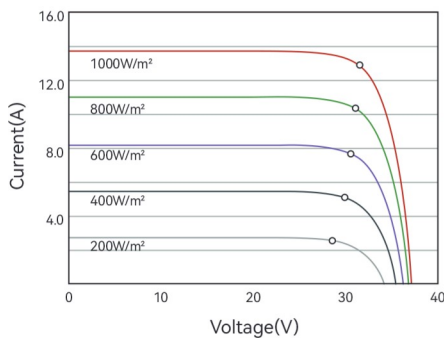
Packaging

Pcs per Pallet: 36
Pcs per 40' HC: 936

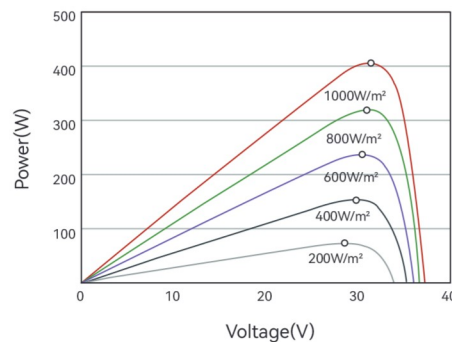
Operating Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse Rating	25A
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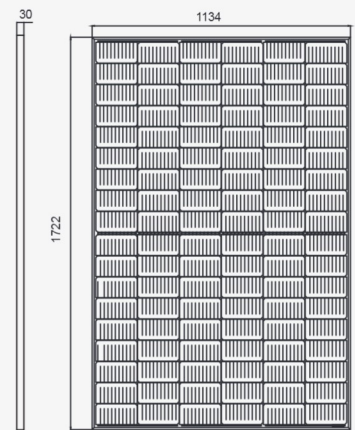
I-V Curves of PV Module (405W)



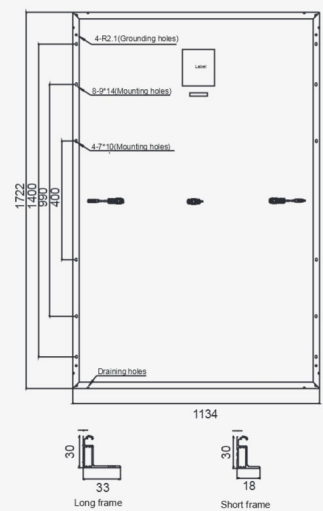
P-V Curves of PV Module (405W)



Dimensions (Unit: mm)



Front View



Back View