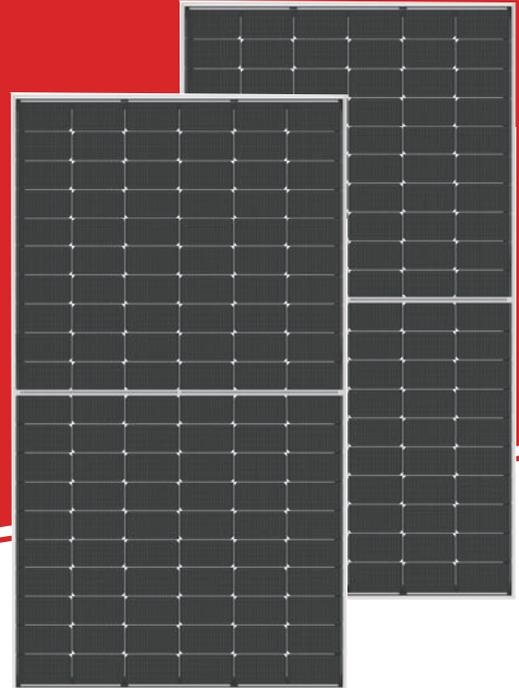




GPNE-S120/M10H-xxx 182mm Half Cell Series 435-455W

120-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE



Product Advantages



10BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss
Ga doped wafer, attenuation < 2% (1st year) / ≤ 0.55% (Linear)



Significantly lower the risk of hot spot

Special circuit design with much lower hot spot temperature



Lower LCOE

2% more power generation, lower LCOE



Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD



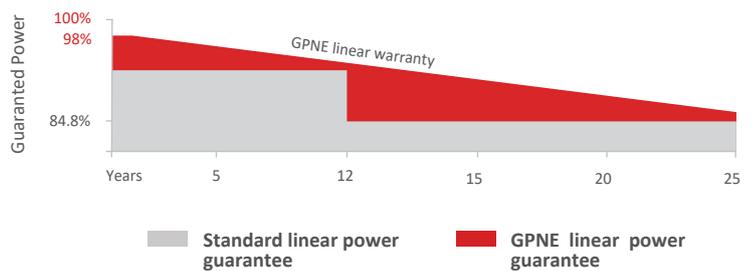
IP68 junction box

High waterproof level

21.0%
Module efficiency

455W
Highest power output

Performance Warranty



-2.00%
First year power degradation

-0.55%
Annual degradation

12
Years
Materials and workmanship warranty

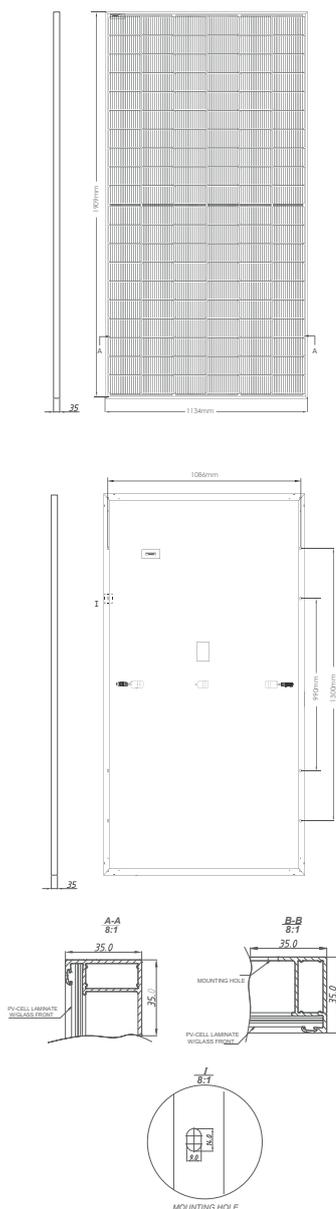
25
Years
Linear power warranty

Product Certification



GPNE-S120/M10H-xxx

TECHNICAL DRAWINGS



ELECTRICAL PARAMETERS

	435	440	445	450	455
Maximum Power (Pmax/W)*	435	440	445	450	455
Operating Voltage (Vmp/V)	33.7	33.9	34.1	34.3	34.5
Operating Current (Imp/A)	12.91	12.98	13.06	13.14	13.20
Open-Circuit Voltage (Voc/V)	40.8	41.0	41.2	41.4	41.6
Short-Circuit Current (Isc/A)	13.34	13.41	13.49	13.60	13.69
Module Efficiency ηm(%)	20.1	20.3	20.6	20.8	21.0
Power Tolerance(W)	0~+5				

STC: Irradiance 1000W/m², module temperature 25 °C, AM=1.5, *Measuring tolerance: ±3%

Performance at NMOT

	326	330	334	338	342
Maximum Power (Pmax/W)	326	330	334	338	342
Operating Voltage (Vmp/V)	31.2	31.4	31.6	31.8	32.0
Operating Current (Imp/A)	10.45	10.52	10.58	10.64	10.71
Open-Circuit Voltage (Voc/V)	37.6	37.8	37.9	38.1	38.3
Short-Circuit Current (Isc/A)	11.11	11.19	11.28	11.36	11.45

NMOT: Irradiance 800W/m², ambient temperature 20 °C, AM=1.5, wind speed 1m/s

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	120 (6*20)
Weight	24kg
Module Dimensions	1909*1134*35mm
Cable Length	Portrait 350mm/Customized
Cable Cross Section Size	TÜV: 4mm ²
Front Glass	3.2mm AR Coating Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration	31pcs/Carton, 744pcs/40HQ
Frame	Anodized Aluminium Alloy
Junction Box	IP68

OPERATING CONDITIONS

Maximun System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C to +85°C
Maximun Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 compatible

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.34%/°C
Temperature Coefficient Voc	-0.25%/°C
Temperature Coefficient Isc	+0.040%/°C
NMOT	43±2°C

I-V CURVE

