

[N-Type]

182 Mono-Bifacial Module
GPM12RTG-630(132)

630W



Maximum output power
630W

Maximum efficiency
23.32%

Power tolerance
0~+3%

▶ Key Features



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



Hot 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Duplex power generation

The power gain on both sides increases with the light received on the back, up to 25%.



Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

▶ Quality System

IEC 61215-1:2021, IEC 61730-1:2023

IEC61701 / IEC62716 / IEC62804

ISO9001:2015:Quality Management System

ISO14001:2015:Environment Management System

ISO45001:2018:Occupational Health and Safety Management Systems

▶ Product Certifications

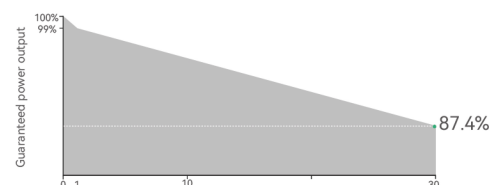


▶ Linear performance warranty

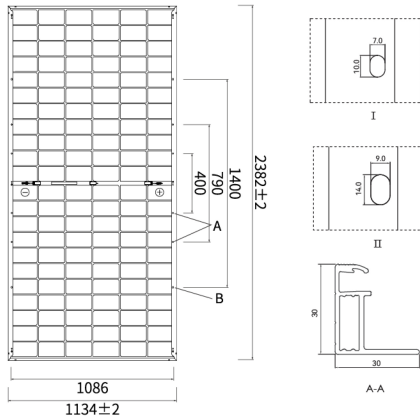
12Year Product Warranty

30Year Linear Warranty

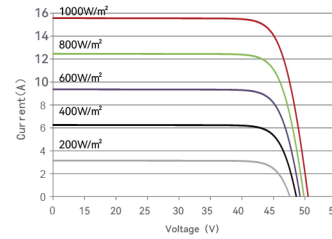
0.4%Annual Degradation Over **30** Years



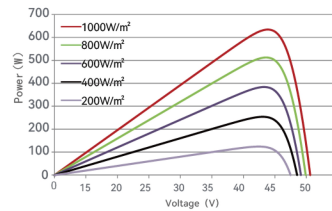
Engineering Drawings



Electical Performance (630W)



I-V curve



P-V curve

Electrical Parameters (STC*)

Maximum Power(W)	630
Maximum Power Voltage(V)	41.95
Maximum Power Current(A)	15.02
Open Circuit Voltage(V)	50.2
Short Circuit Current(A)	15.94
Module Efficiency(%)	23.32
Power tolerance	0~+3%

*Irradiance 1000W/m², Module Temperature 25°C, Air Mass 1.5

Mechanical Parameters

Cell Type	182×105mm N-Type
Number of Cells	132cells (2x66)
Dimensions	2382×1134×30mm
Weight	32.5KG
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Silver, anodized aluminium alloy
J-Box	IP68 Rated, MC4 Compatible
Cable	4 mm², 300 mm standard

Electrical Parameters (NOCT*)

Maximum Power(W)	461.9	465.6	469.4
Maximum Power Voltage(V)	38.31	38.59	38.82
Maximum Power Current(A)	12.06	12.07	12.09
Open Circuit Voltage(V)	45.9	46.18	46.46
Short Circuit Current(A)	12.81	12.82	12.83

* Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

Temperature Coefficient

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.29%/°C

Backside Power Gain (For 630W)

Backside Power Gain(%)	10%	15%	20%	25%	30%
Maximum Power(Pmax/W)	693	724	756	787	819
Open Circuit Voltage(Voc/V)	50.7	50.7	50.7	50.7	50.7
Short Circuit Current(Isc/A)	17.53	18.33	19.13	19.93	20.72
Maximum Power Voltage(Vmp/V)	42.45	42.45	42.45	42.45	42.45
Maximum Power Current(Imp/A)	16.33	17.07	17.81	18.55	19.29

Application Parameters

Operational Temperature(°C)	-40°C~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	30A
Wind/ Snow Load	2400Pa/5400Pa
Packaging Configuration	36PCS/PLT, 720PCS/40HQ