

540-560Watt 144cells 182 P- Type Mono-BIFACIAL Module



Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018
Occupational Health and Safety Management Systems

Key Features



MBB Technology

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



Hot 2.0 Technology

The P-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.



Enhanced Mechanical Load

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

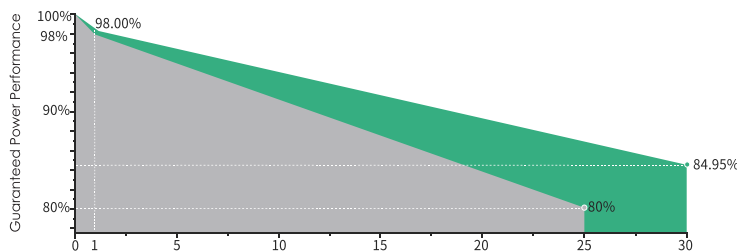


Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



LINEAR PERFORMANCE WARRANTY



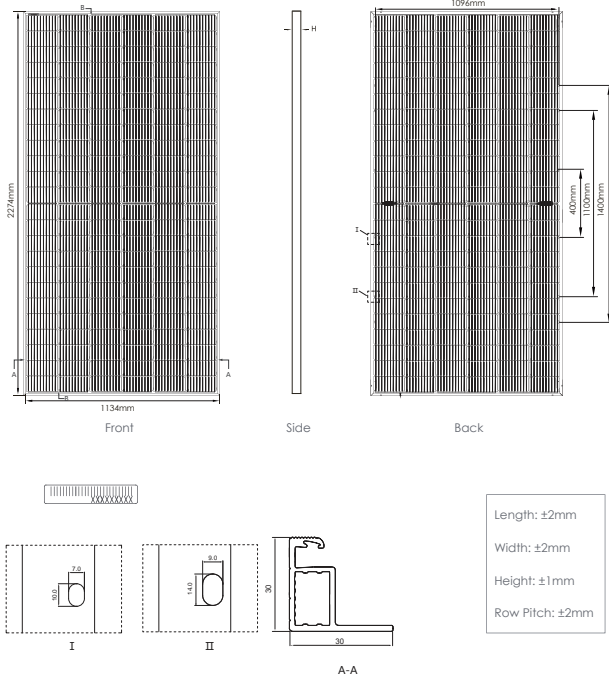
12 Year Product Warranty

30 Year Linear Power Warranty

0.45% Annual Degradation Over 30 years



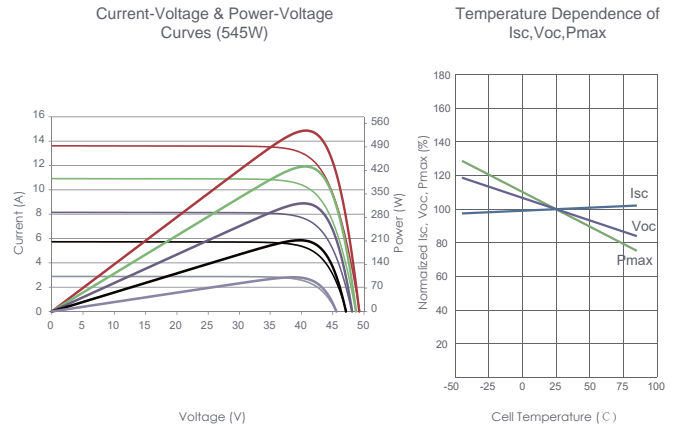
Engineering Drawings



Packaging Configuration

36pcs/pallets, 72pcs/stack, 720pcs/ 40'HQ Container

Electrical Performance & Temperature Dependence



Mechanical Characteristics

Cell Type	182 P type Mono-crystalline
No. of cells	144 (6×24)
Dimensions	2278×1134×30mm/35mm
Weight	30.5 kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm ² (+): 300mm, (-): 300mm or Customized Length

SPECIFICATIONS

Module Type	GPMDG-540W(144)		GPMDG-545W(144)		GPMDG-550W(144)		GPMDG-555W(144)		GPMDG-560W(144)	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	540Wp	402Wp	545Wp	405Wp	550Wp	409Wp	555Wp	413Wp	560Wp	417Wp
Maximum Power Voltage (Vmp)	41.64V	38.08V	41.80V	38.25V	41.96V	38.42V	42.12V	38.59V	42.28V	38.69V
Maximum Power Current (Imp)	12.97A	10.55A	13.04A	10.60A	13.11A	10.65A	13.18A	10.70A	13.25A	10.77A
Open-circuit Voltage (Voc)	49.60V	46.65V	49.75V	46.74V	49.90V	46.84V	50.05V	46.93V	50.20V	47.02V
Short-circuit Current (Isc)	13.93A	11.19A	14.00A	11.26A	14.07A	11.33A	14.14A	11.40A	14.21A	11.48A
Module Efficiency STC (%)	20.90%		21.10%		21.32%		21.50%		21.68%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1000/1500VDC (IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.35%/°C									
Temperature coefficients of Voc	-0.28%/°C									
Temperature coefficients of Isc	0.048%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

		567Wp	572Wp	578Wp	583Wp	588Wp
5%	Maximum Power (Pmax)					
	Module Efficiency STC (%)	21.95%	22.15%	22.36%	22.56%	22.75%
15%	Maximum Power (Pmax)	621Wp	627Wp	633Wp	638Wp	643Wp
	Module Efficiency STC (%)	24.04%	24.26%	24.48%	24.71%	24.94%
25%	Maximum Power (Pmax)	675Wp	681Wp	688Wp	694Wp	699Wp
	Module Efficiency STC (%)	26.13%	26.37%	26.61%	26.86%	26.99%

*STC: Irradiance 1000W/m² Cell Temperature 25°C AM=1.5
NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s

Note: Due to continuous technical innovation and R&D, the above mentioned technical parameters may subject to modification accordingly. **G&P SUN ENERGY** reserves the right to make such modification at any time without further notice.