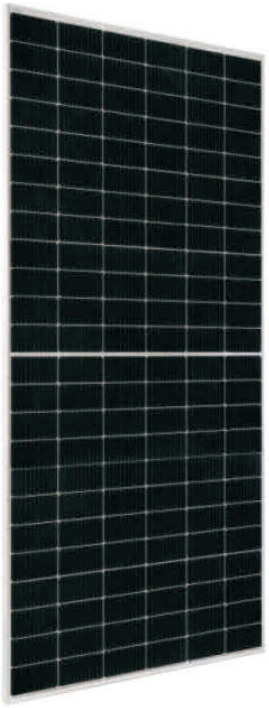


GPM144/555-600W
F 35mm
MBB Half Cell Mono Solar Panel

Key Features

High Conversion Efficiency
Module efficiency up to 21.28% achieved through advanced cell technology and manufacturing capabilities

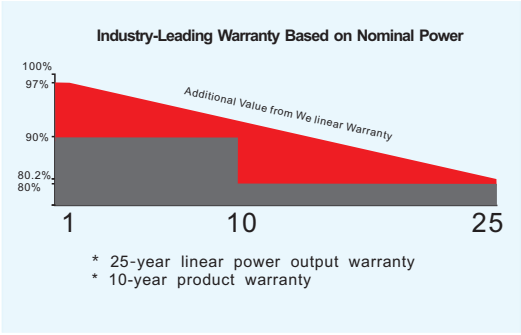
Positive Tolerance
Positive tolerance of up to 0~+5W delivers higher outputs reliablity

High PID Resistant
Advanced cell technology and qualified materials lead to high PID resistant

Current Sorting Process
System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage

Extended Wind and Snow load tests
Module certified to withstand extreme wind (2400 Pascal) and snow loads(5400 Pascal)

Withstanding Harsh Environment
Reliable quality leads to a better sustainability even in harsh environment like desert,farm and coastline



Quality Guarantee

*MBB solar cells , Low resistance loss and higher conversion efficiency

*Double EL test before and after lamination, highly control product defects

*Solar panel classified by current, to improve system performance

*Max System Voltage DC1000V/1500V(IEC)

Certificates

*ISO9001:2008

*ISO14001:2004

*TUV、 CE、 CQC、 SGS、 INMETRO

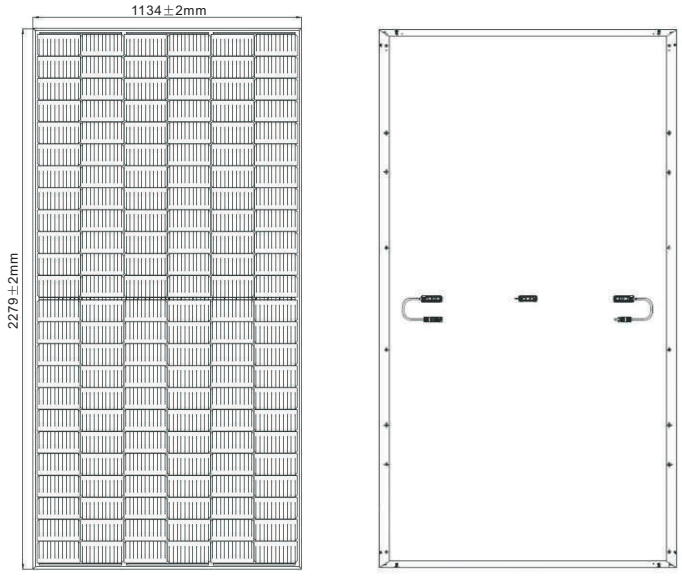
GPM144/555-600W
F 35mm
MBB Half Cell Mono Solar Panel

Electrical Characteristics

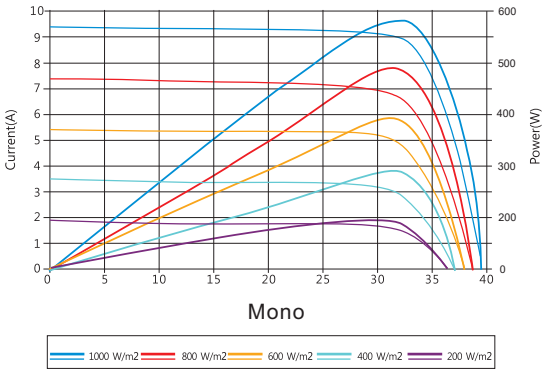
STC	GPM144-7-575M	GPM144-7-580M	GPM144-7-585M	GPM144-7-590M	GPM144-7-595M	GPM144-7-600M
Maximum Power(Pmax)	575W	580W	585W	590W	595W	600W
Optimum Operating Voltage(Vmp)	41.15V	41.31V	41.47V	41.64V	41.80V	41.96V
Optimum Operating Current(Imp)	12.76A	12.83A	12.90A	12.97A	13.04A	13.11A
Open Circuit Voltage(Voc)	49.15V	49.30V	49.45V	49.60V	49.75V	49.90V
Short Circuit Current(Isc)	13.65A	13.72A	13.79A	13.86A	13.93A	14.00A
Module Efficiency	20.31%	20.51%	20.70%	20.90%	21.09%	21.28%

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1000V/1500V DC (IEC)
Power Tolerance	0~+5W
STC	Irradiance 1000 W/m^2, module temperature 25°C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used

Engineering Drawing



I-V Curve



Excellent performance under weak light conditions: at an irradiation intensity of 800W/m^2 (AM 1.5, 25°C), 95.5% or higher of the STC efficiency(1000W/m^2) is achieved.

Mechanical Characteristics

Solar Cell	182mm MBB Monocrystalline silicon cells
No. of Cells	144(6x12x2)
Dimensions	2279±2mmx1134±2mmx35±1mm
Weight	28.6Kg±3%
Front Glass	3.2mm(0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated
Output Cables	TÜV (2Pfg1169:2007)
	4.0 mm^2 (0.006 inches^2), 300mm/400 mm Length
Connectors	Mc4 connectors

Temperature Characteristics

NOCT	45±2°C
Temperature Coefficient of Pmax	-0.350%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C

Packing Configuration(35mm)

Per Pallet	30Pieces
Per Container (20' GP)	250Pieces
Per Container (40' HQ)	624Pieces

Note: Specifications subject to technical changes and tests, We reserves the right of final interpretation.

2021.V3 EN