

P-Type

182 Mono-Facial Module

108 cells

400W-415W

Maximum output power	Maximum efficiency	Power tolerance
415W	21.25%	0~+3%



▶ Key Features



Multi Busbar Technology

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



Reduced Hot Spot Loss

Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.



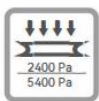
PID Resistance

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



Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



Enhanced Mechanical Load

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

▶ Quality System

IEC61215(2016), IEC61730(2016)

ISO9001:2015:Quality Management System

ISO14001:2015:Environment Management System

ISO45001:2018:Occupational Health and Safety Management Systems

▶ Product Certifications

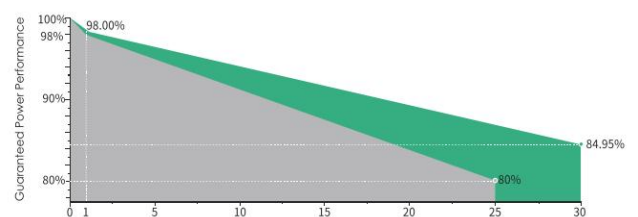


▶ Linear performance warranty

12 Year Product Warranty

30 Year Linear Warranty

0.45% Annual Degradation Over **30** Years



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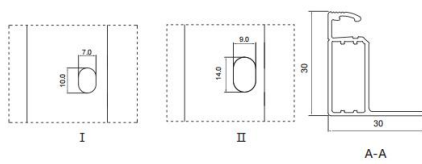
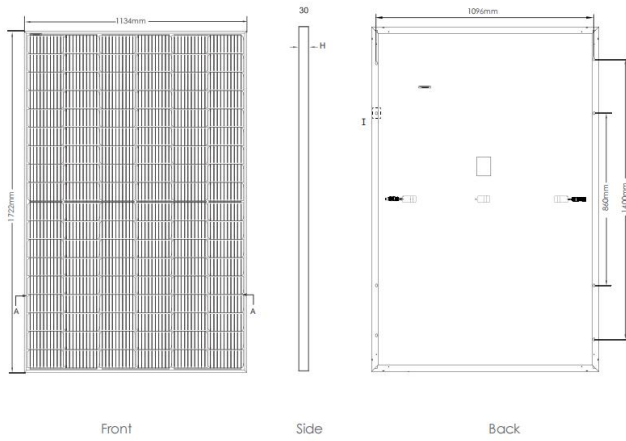
Add: No..55 Shangxiang Road, Huaqiao Corporation Head Quarter Centre, Kunshan City, Suzhou City

Tell: 0512-36684019

Web: <https://pretapower.com>

Mail: info@pretapower.com

Engineering Drawings



Length: $\pm 2\text{mm}$
 Width: $\pm 2\text{mm}$
 Height: $\pm 1\text{mm}$
 Row Pitch: $\pm 2\text{mm}$

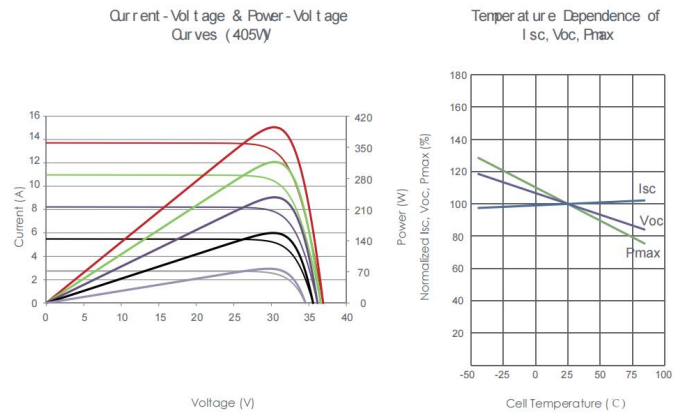
Packaging Configuration

36pcs/pallets, 72pcs/stack, 936pcs/ 40'HQ Container

Specifications

Module Type	GPM-400W(108)		GPM-405W(108)		GPM-410W(108)		GPM-415W(108)	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	400Wp	298Wp	405Wp	301Wp	410Wp	305Wp	415Wp	309Wp
Maximum Power Voltage (Vmp)	31.01V	28.42V	31.20V	28.56V	31.44V	28.72V	31.56V	28.88V
Maximum Power Current (Imp)	12.90A	10.47A	12.98A	10.55A	13.04A	10.62A	13.15A	10.69A
Open-circuit Voltage (Voc)	37.05V	34.90V	37.20V	34.98V	37.35V	35.05V	37.50V	35.21V
Short-circuit Current (Isc)	13.60A	11.13A	13.65A	11.19A	13.70A	11.24A	13.85A	11.32A
Module Efficiency STC (%)	20.48%		20.74%		21.00%		21.25%	
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 \pm 2°C							

Electical Performance (580W)



Mechanical Parameters

Cell Type	182 P type Mono-crystalline
No. of cells	108 (2x54)
Dimensions	1722x1134x30mm
Weight	20.5kg
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1x4.0mm ² (+): 300mm, (-): 300mm or Customized Length

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