








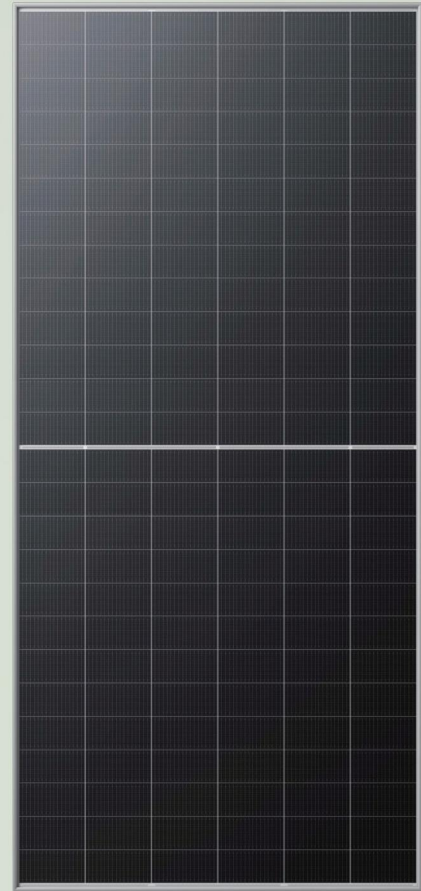




## ■ P-Type Solar Module

### KEY FEATURES

-  Excellent performance in low-light environments
-  High quality junction box and connector systems
-  100% inspection, to guarantee the reliability of solar systems
-  Lower temperature
-  Anti PID
-  Enhanced safety by excellent fire resistance
-  Perfect for sandy, snowy and high latitude regions
-  Lower operating temperature, more reliable
-  Cutcell, Less internal power loss, Less mismatch loss



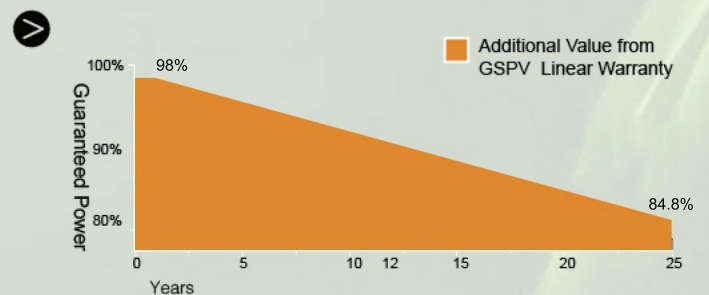
## GSPV-M10/156H-470W-490W 470~490 Watt

➤ 182mm 156 Cells PV Solar Module

**BLACK** \*BLACK FRAME/BLACK BACK-SHEET PRODUCTS ARE AVAILABLE UPON REQUEST

➤

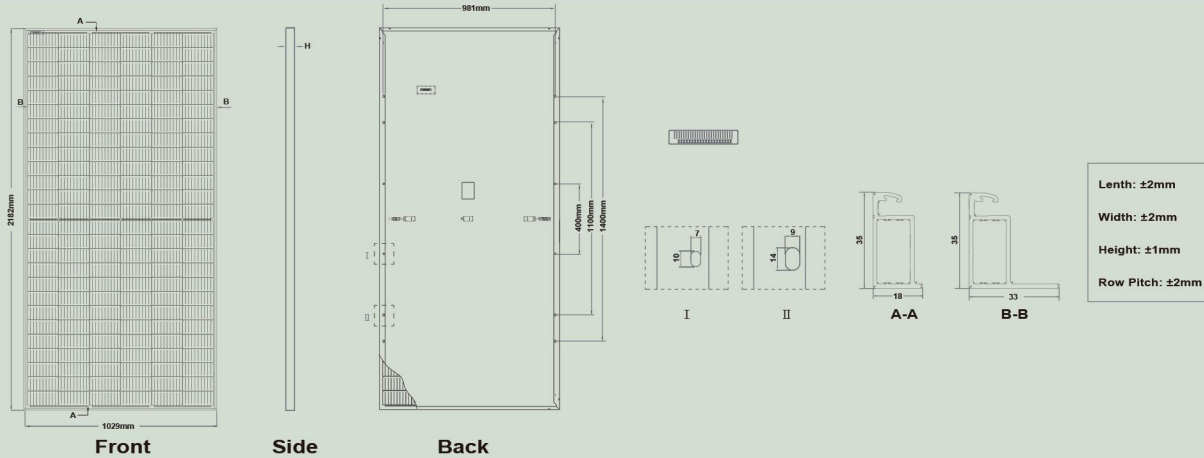
<b>12</b> Years Material & Craft Quality assurance	<b>12</b> Years 90% Output Power guarantee	<b>25</b> Years 80% Output Power guarantee	
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IEC61215  
IEC61730  
UL61215  
UL61730



## DIMENSIONS OF PV MODULE(mm)



## SPECIFICATIONS

Module Type	GSPV-M10/156H-470W		GSPV-M10/156H-475W		GSPV-M10/156H-480W		GSPV-M10/156H-485W		GSPV-M10/156H-490W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	470Wp	350Wp	475Wp	353Wp	480Wp	357Wp	485Wp	361Wp	490Wp	365Wp
Maximum Power Voltage (Vmp)	43.28V	39.69V	43.38V	39.75V	43.48V	39.90V	43.58V	40.05V	43.68V	40.05V
Maximum Power Current (Imp)	10.86A	8.81A	10.95A	8.89A	11.04A	8.95A	11.13V	9.01A	11.22A	9.08A
Open-circuit Voltage (Voc)	52.14V	49.21V	52.24V	49.31V	52.34V	49.40V	52.44V	49.50V	52.54V	49.59V
Short-circuit Current (Isc)	11.68A	9.43A	11.77A	9.51A	11.86A	9.58A	11.95A	9.65A	12.04A	9.72A
Module Efficiency STC (%)	20.93%		21.16%		21.38%		21.60%		21.82%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1000/1500VDC (IEC)									
Maximum series fuse rating	20A									
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									

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5. \*Measuring tolerance: ±3%  
 NOCT: Irradiance at 800w/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

## MECHANICAL DATA

Cell Type	P type Mono-crystalline
No. of cells	156(2×78)
Dimensions	2182×1029×35mm (85.91×40.51×1.38 inch)
Weight	25.0kg (55.12 lbs)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm <sup>2</sup> (+): 290mm, (-): 145mm or Customized Length

## PACKAGING

( Two pallets = One stack )

31pcs/pallets, 62pcs/stack, 620pcs/ 40'HQ Container

## Electrical Performance & Temperature Dependence

