

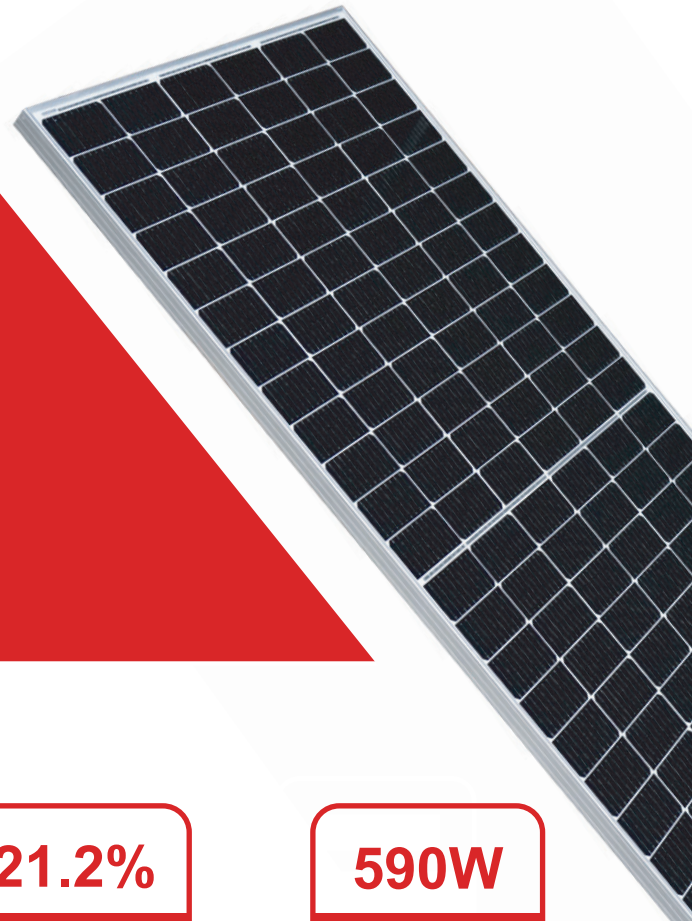
POWERTRONIK®

SuperSolar

TPVS-156/M10H

570-590w

156-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE



Product Advantages



10BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss
Ga doped wafer, attenuation < 2% (1st year) / ≤ 0.55% (Linear)



Significantly lower the risk of hot spot

Special circuit design with much lower hot spot temperature



Lower LCOE

2% more power generation, lower LCOE



Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD



IP68 junction box

High waterproof level

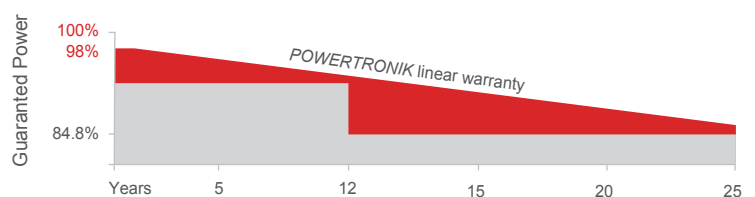
21.2%

Module efficiency

590W

Highest power output

Performance Warranty



-2.00%

First year power degradation

-0.45%

Annual degradation

12
Years

Materials and workmanship warranty

25
Years

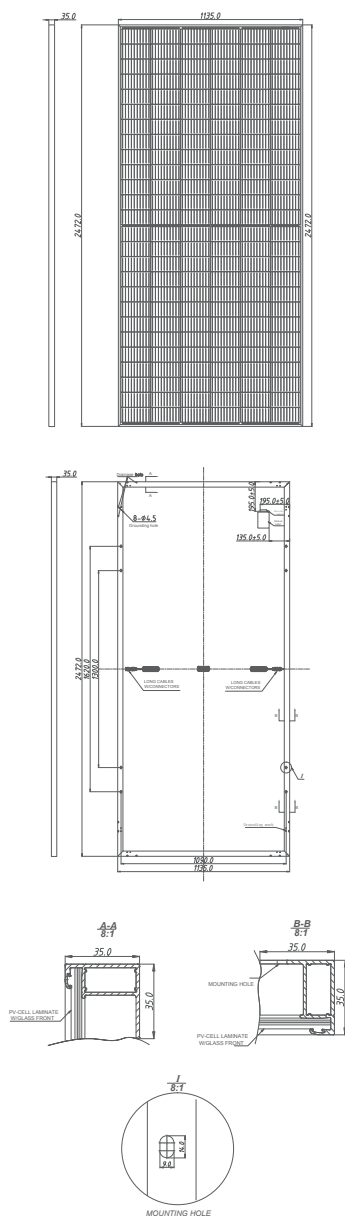
Linear power warranty

Product Certification

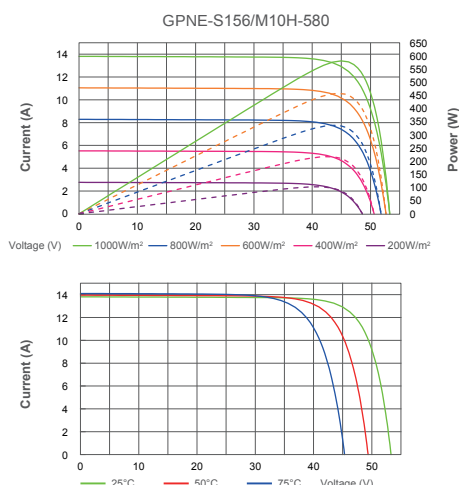


TPVS-156/M10H

TECHNICAL DRAWINGS



I-V CURVE



ELECTRICAL PARAMETERS

Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	570	575	580	585	590
Operating Voltage (Vmpp/V)	45.1	45.2	45.3	45.4	45.5
Operating Current (Impp/A)	12.65	12.73	12.81	12.89	12.97
Open-Circuit Voltage (Voc/V)	53.5	53.6	53.7	53.8	53.9
Short-Circuit Current (Isc/A)	13.38	13.46	13.54	13.62	13.70
Module Efficiency η_m (%)	20.3	20.5	20.7	20.9	21.0

Performance at NMOT

Maximum Power (Pmax/W)	420	424	427	431	435
Operating Voltage (Vmpp/V)	41.9	42.0	42.1	42.2	42.3
Operating Current (Impp/A)	10.03	10.10	10.16	10.22	10.28
Open-Circuit Voltage (Voc/V)	50.0	50.1	50.2	50.3	50.4
Short-Circuit Current (Isc/A)	10.79	10.85	10.91	10.98	11.04

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	156 (6*26)
Weight	31.5kg
Module Dimensions	2472*1135*35mm
Cable Length	Portrait 350mm/Customized
Cable Cross Section Size	TÜV: 4mm²
Front Glass	3.2mm AR Coating Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration	31pcs/Carton, 558pcs/40HQ
Frame	Anodized Aluminium Alloy
Junction Box	IP68

OPERATING CONDITIONS

Maximun System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximun Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤ 0.1Ω
Safety Class	II
Resistance	≥ 100MΩ
Connector	MC4 compatible

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	43±2°C