

SP445M-78H SERIES

Mono Large Half Cell 425-445W

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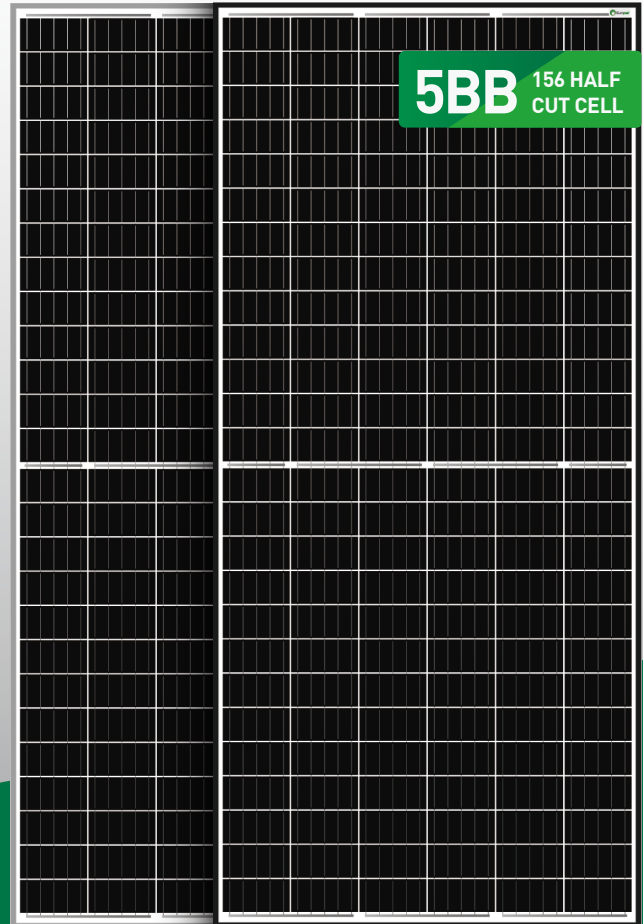
10-year product workmanship warranty

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10-year guarantee for 90% rated power

25

25-year guarantee for 80% rated power



Half-cut cell technology

Lower cell connection power losses
Lower hot spot temperature risk



+5Wp

Excellent power generation performance

Guaranteed 0~+5W positive rated power tolerance ensures more power generation every day



Low-light Performance

Advanced glass and solar cell surface texturing allow for excellent performance in low-light environments.



PID

Long weather resistance

Excellent anti-PID(Potential Induced Degradation)
Certified in fireproofing for safety



TEMP

Lower temperature coefficient

Improved temperature coefficient decreases power loss in the high temperature application.



Stable mechanical performance

Passed rigorous hail test
Withstands 5400Pa snow and 2400Pa wind loads

MONO L-SERIES 156 HALF-CELL SOLAR MODULE 425W-445W

ELECTRICAL DATA(STC)

Module	SPxxxM-78H(xxx=425,430,435,440,445)				
Peak Power Watts(Pmax/W)	425	430	435	440	445
Power Output Tolerance(W)	0 ~ +5				
Maximum Power Voltage(Vmp/V)	43.50	43.60	43.70	43.80	43.90
Maximum Power Current(Imp/A)	9.78	9.87	9.97	10.06	10.15
Open Circuit Voltage(Voc/V)	52.23	52.38	52.50	52.65	52.70
Short Circuit Current(Isc/A)	10.38	10.47	10.57	10.67	10.77
Module Efficiency(%)	19.6	19.8	20.1	20.3	20.5

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

*Measuring tolerance: ±3%.

ELECTRICAL DATA(NOCT)

Maximum Power(Pmax/W)	318.0	321.8	325.5	329.3	332.9
Maximum Power Voltage(Vmp)	39.80	39.90	40.00	40.10	40.24
Maximum Power Current(Imp)	7.98	8.06	8.13	8.21	8.27
Open Circuit Voltage(Voc)	48.10	48.20	48.30	48.40	48.48
Short Circuit Current(Isc)	8.51	8.59	8.67	8.75	8.83

NOCT: Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Mono PERC 158.75×158.75mm
Cell Orientation	156 cells (6 × 26)
Module Dimensions	2178 × 996 × 40 mm
Weight	25.5 kg
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Tempered Glass
Backsheet	White
Frame	Silver / Black Anodized Aluminium Alloy
Junction Box	IP 68 rated
Cables	TÜV 1x4.0mm ² , Anode 290mm, Cathode 145mm or Customized Length
Connector	MC4

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	45°C (±2°C)
Temperature Coefficient of Pmax	- 0.37%/°C
Temperature Coefficient of Voc	- 0.29%/°C
Temperature Coefficient of Isc	+0.05%/°C

WARRANTY

10 year Product Workmanship Warranty

25 year Linear Power Warranty

(Please refer to product warranty for details)

MAXIMUM RATINGS

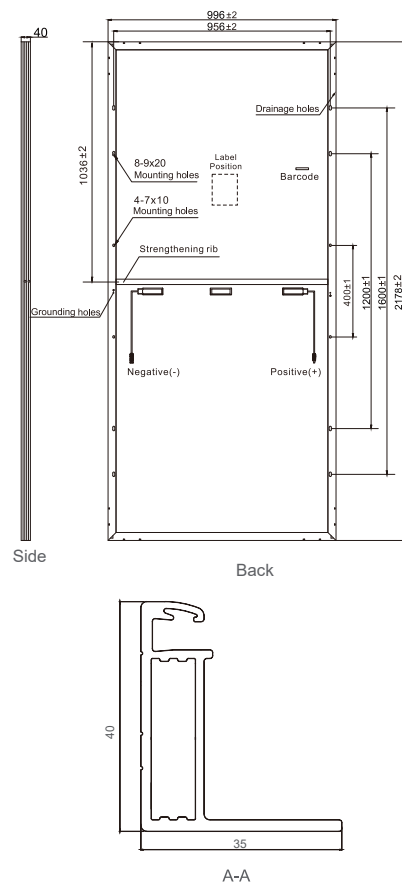
Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
	1500V DC (UL)
Max Series Fuse Rating	20A

PACKAGING CONFIGURATION

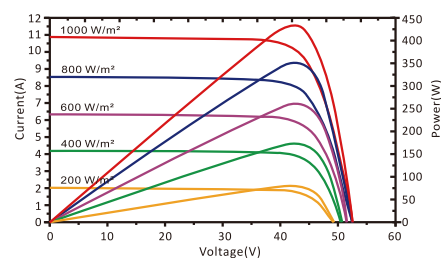
Modules per box: 27 pieces

Modules per 40' container: 594 pieces

DIMENSIONS OF PV MODULE(mm)



Current-Voltage & Power-Voltage Curves (435W)



Temperature Dependence of Isc, Voc, Pmax

