

## MSMDxxxM6-72 166 M6 cells half cut

# 430W-450W

### KEY FEATURES



Class A fire resistant (industry standard class C)



Outstanding performance in low-light conditions



Low temperature coefficient (Pmax): -0.35 % / °C

**+5W**

0~+5W positive tolerance - to assure high output



Lower internal current, lower hot spot temperature



Cell crack risk limited in small region, enhance the module reliability

**PID FREE**

Excellent anti-PID module design, TÜV SÜD certified



Certified to withstand high wind loads (3600pa) and snow loads (8000pa)



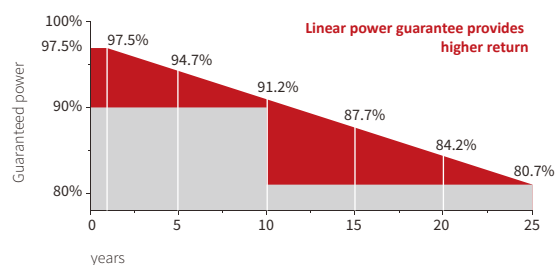
Salt mist and ammonia corrosion resistant

### PRODUCT CERTIFICATES



### WARRANTY

- Our linear power guarantee
- Standard linear power guarantee



**15 years**

Enhanced product guarantee on product and workmanship

**25 years**

Linear power output warranty

# MSMDxxxM6-72

## ELECTRICAL CHARACTERISTICS

STC	430	435	440	445	450
Maximum Power at STC (Pmax)	430 W	435W	440 W	445 W	450 W
Optimum Operating Voltage (Vmp)	40.6 V	40.8 V	41 V	41.2 V	41.4V
Optimum Operating Current (Imp)	10.6 A	10.67 A	10.74 A	10.81 V	10.87 A
Open Circuit Voltage (Voc)	48.4 V	48.6 V	48.8 V	49 V	49.2 V
Short Circuit Current (Isc)	11.32A	11.4 A	11.47 A	11.54 A	11.61A
Module Efficiency	19.4%	19.7%	19.9 %	20.1%	20.3%
Operating Module Temperature	-40 °C to +85 °				
Maximum System Voltage	C1500 V DC				
Maximum Series Fuse Rating	(IEC)				
Power Tolerance	20 A				

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Tolerances of Pmax, Voc and Isc are all within +/- 5%.

0/+5W

NMOT	430	435	440	445	450
Maximum Power at NMOT (Pmax)	323.8 W	327.5 W	331.2 W	335 W	338.2 W
Optimum Operating Voltage (Vmp)	37.9 V	38.1 V	38.3 V	38.5 V	38.7v
Optimum Operating Current (Imp)	8.53 A	8.59 A	8.65 A	8.7 A	8.74 A
Open Circuit Voltage (Voc)	46.2 V	46.4 V	46.6 V	46.8 V	47 V
Short Circuit Current (Isc)	9.03 A	9.08 A	9.14 A	9.19 A	9.22 A

NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.

## TEMPERATURE CHARACTERISTICS

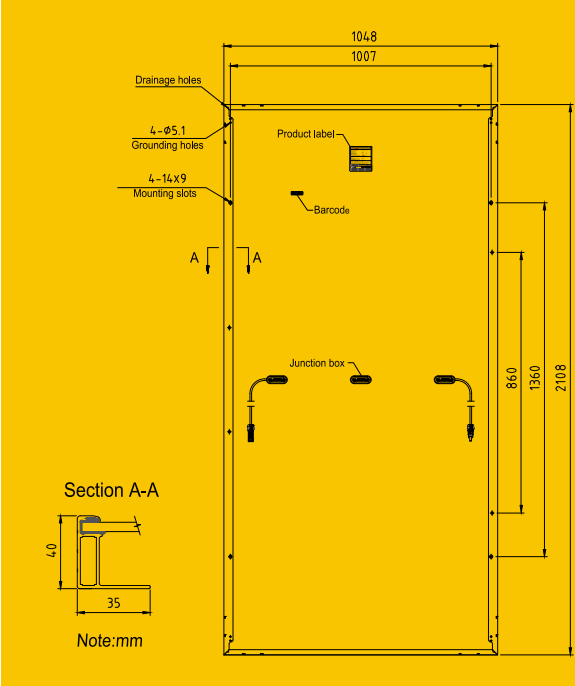
Nominal Module Operating Temperature (NMOT)	42±2°C
Temperature Coefficient of Pmax	-0.35 %/°C
Temperature Coefficient of Voc	-0.304 %/°C
Temperature Coefficient of Isc	0.050 %/°C

## MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon 166 mm (9BB)
No. of Cells	144 (6 × 24)
Dimensions	2108 x 1048 x 40 mm
Weight	24 kgs
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm², symmetrical lengths (-) 1400 mm and (+) 1400 mm

## PACKING CONFIGURATION

Container	20’ GP	40’ HC
Pieces per pallet	26	26+1
Pallets per container	5	22
Pieces per container	130	594



Current-Voltage & Power-Voltage Curve (445S)

