








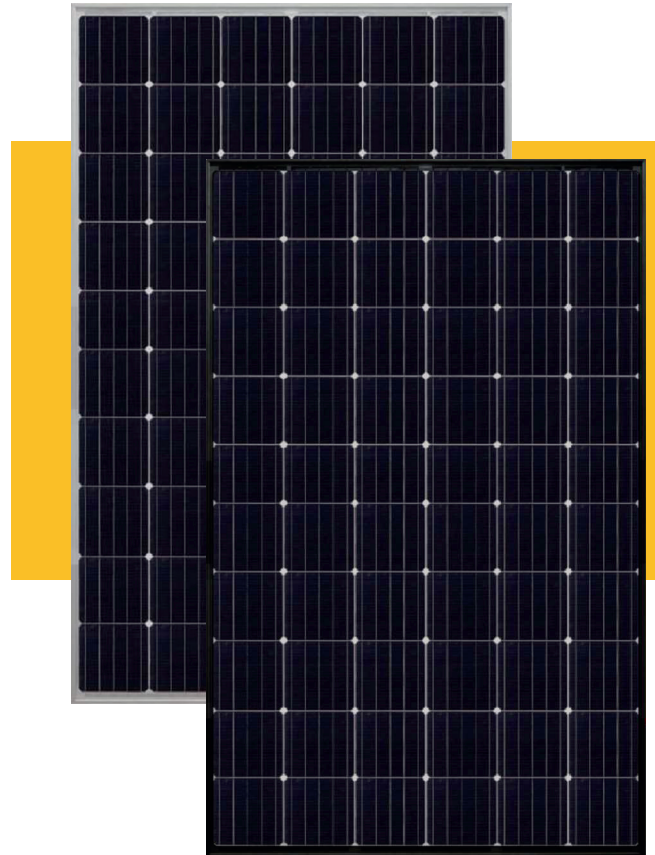
## MSMDxxxM3-30

# 300W-320W

## KEY FEATURES

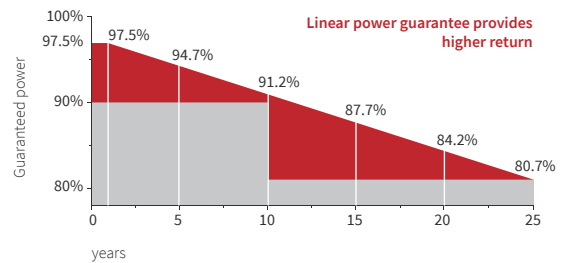
-  **Class A fire resistant (industry standard class C)**
-  **Outstanding performance in low-light conditions**
-  **Low temperature coefficient (Pmax): -0.35 % / °C**
- +5W** 0~+5W positive tolerance - to assure high output
-  **Lower internal current, lower hot spot temperature**
-  **Cell crack risk 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

# MSMDxxxM3-30

## ELECTRICAL CHARACTERISTICS

STC	300	305	310	315	320
Maximum Power at STC (Pmax)	300 W	305 W	310 W	315 W	320 W
Optimum Operating Voltage (Vmp)	32.5 V	32.8 V	33.1 V	33.4 V	33.6 V
Optimum Operating Current (Imp)	9.23 A	9.30 A	9.37 A	9.43 A	9.6 A
Open Circuit Voltage (Voc)	39.6 V	39.8 V	40.2 V	40.6 V	40.8 V
Short Circuit Current (Isc)	9.72 A	9.80 A	9.87 A	9.92 A	10.10 A
Module Efficiency	18.3%	18.6%	18.9%	19.2%	19.5%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1000/1500 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0/+5W				

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5; Tolerances of Pmax, Voc and Isc are all within +/- 5%.

NMOT	300	305	310	315	320
Maximum Power at NMOT (Pmax)	224.8 W	228.3 W	232.6 W	235.8 W	239.3 W
Optimum Operating Voltage (Vmp)	30.2 V	30.5 V	30.8 V	31.1 V	31.4 V
Optimum Operating Current (Imp)	7.43 A	7.49 A	7.55 A	7.59 A	7.64 A
Open Circuit Voltage (Voc)	36.6 V	37.1 V	37.6 V	37.9 V	38.3 V
Short Circuit Current (Isc)	7.87 A	7.92 A	7.97 A	8.01 A	8.06 A

NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.

## TEMPERATURE CHARACTERISTICS

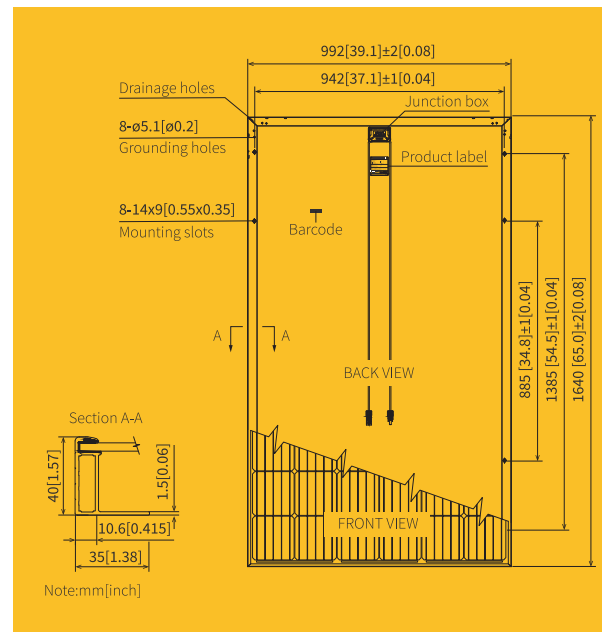
Nominal Module Operating Temperature (NMOT)	42±2°C
Temperature Coefficient of Pmax	-0.35 %/°C
Temperature Coefficient of Voc	-0.29 %/°C
Temperature Coefficient of Isc	0.050 %/°C

## MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon
No. of Cells	60 (6 × 10)
Dimensions	1665 × 1002 × 40 mm
Weight	19.0 kgs
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm <sup>2</sup> , symmetrical lengths (-) 900 mm and (+) 900 mm
Connectors	MC4 compatible

## PACKING CONFIGURATION

Container	20' GP	40' HC
Pieces per pallet	30	28
Pallets per container	12	26
Pieces per container	360	728



Current-Voltage & Power-Voltage Curve (320)

