








MSMDxxxM3-30

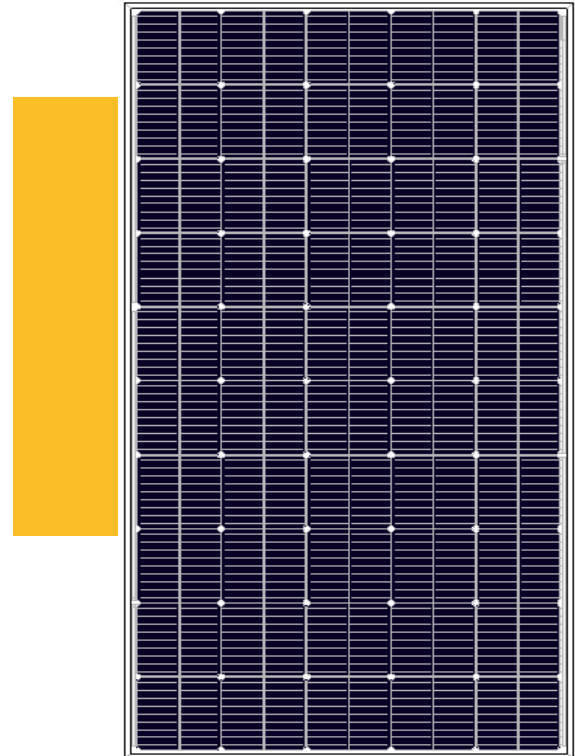
Full Black Moudule

300W-320W

KEY FEATURES

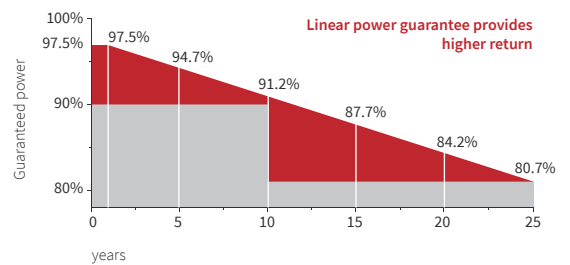
-  **Class C**
-  Outstanding performance in low-light conditions
-  Low temperature coefficient (Pmax): -0.34 % / °C
- +5W** 0~+5W positive tolerance - to assure high output
-  Lower internal current, lower hot spot temperature
-  Cell crack risk limited in small region, enhance the module reliability
- PID FREE** Excellent anti-PID module design, TÜV SÜD certified
-  Certified to withstand high wind loads (3600pa) and snow load (5400pa)
-  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)	29.25 V	29.45 V	29.65 V	29.85 V	30.05 V
Optimum Operating Current (Imp)	10.25 A	10.35 A	10.45 A	10.55 A	10.65 A
Open Circuit Voltage (Voc)	34.05 V	34.25V	34.45 V	34.65 V	34.85 V
Short Circuit Current (Isc)	10.82 A	10.91 A	11.01 A	11.09 A	10.18 A
Module Efficiency	19.8%	20.0%	20.2%	20.4%	20.6%
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/m², 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)	26.8 V	27.0 V	27.2 V	27.4 V	27.6 V
Optimum Operating Current (Imp)	8.38 A	8.45 A	8.55 A	8.60 A	8.67 A
Open Circuit Voltage (Voc)	31.1 V	31.3 V	31.5 V	31.7 V	31.9V
Short Circuit Current (Isc)	9.24 A	9.31 A	9.40 A	9.48 A	9.56 A

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

TEMPERATURE CHARACTERISTICS

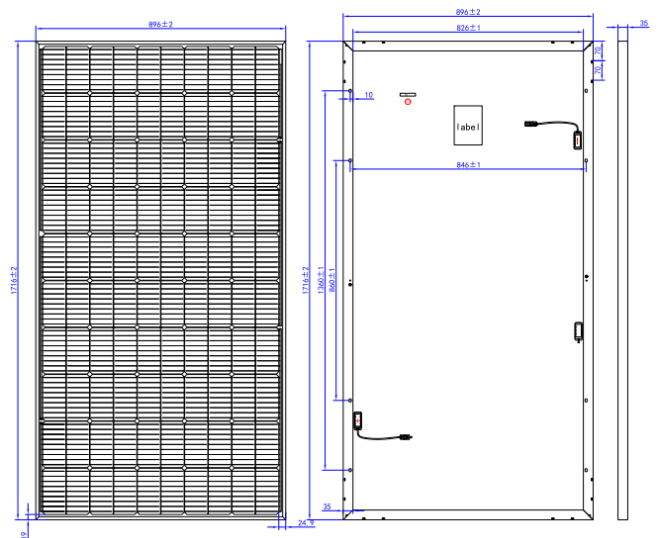
Nominal Module Operating Temperature (NMOT)	42±2°C
Temperature Coefficient of Pmax	-0.34 %/°C
Temperature Coefficient of Voc	-0.27 %/°C
Temperature Coefficient of Isc	0.03 %/°C

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon
No. of Cells	166x83 100 (10 × 10)
Dimensions	1716 × 896 × 35 mm
Weight	16.4kgs
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² , symmetrical lengths (-) 1000 mm and (+) 1000 mm
Connectors	MC4 compatible

PACKING CONFIGURATION

Container	20' GP	40' HC
Pieces per pallet	31	31
Pallets per container	12	26
Pieces per container	372	806+156



Current-Voltage & Power-Voltage Curve (310)

