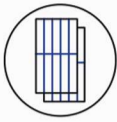


(182mm mono PERC half-cell, high-efficiency monocrystalline module )

# 440-460W 0-5W Positive Tolerance



**MBB&SMBB Half-cut Cell Technology**  
New circuit design, lower internal current, and lower Rs loss.



**High Power Density**  
A new generation of monocrystalline products with reduced resistive losses for greater power output.



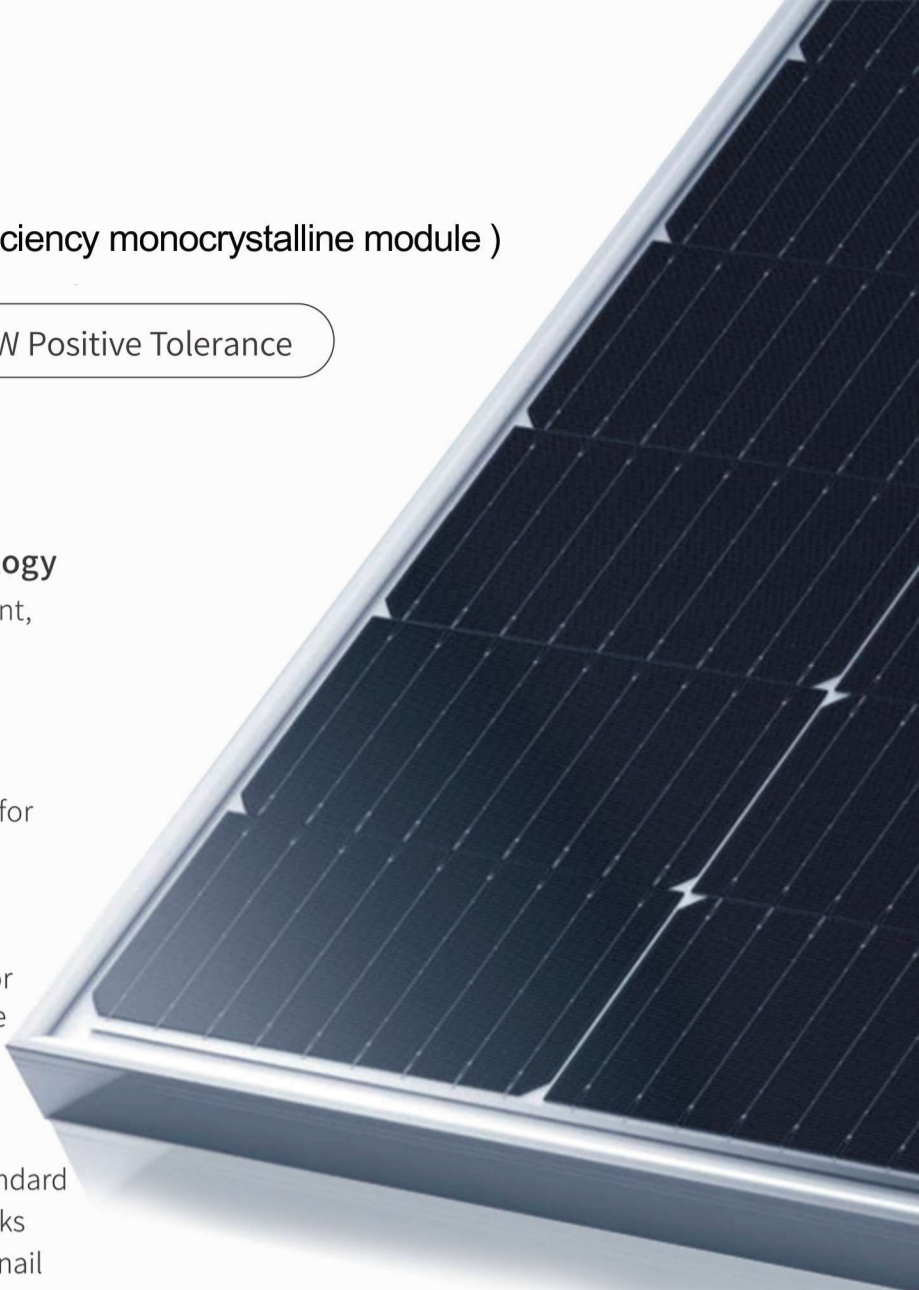
**Mechanical Properties**  
An aluminum frame in special design for better mechanical properties and more efficient installation.



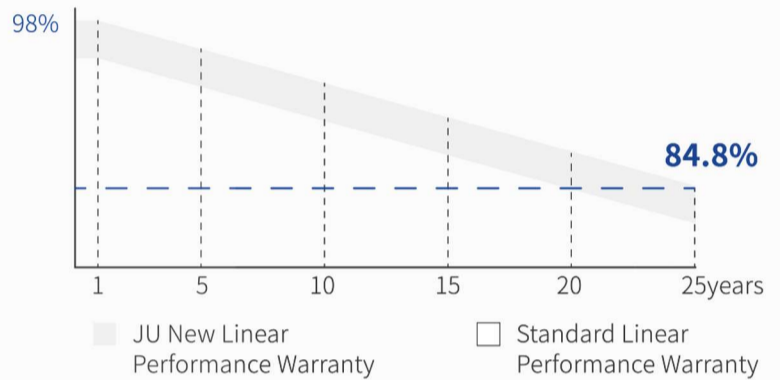
**Excellent Weather Resistance**  
The solar modules can meet the IEC standard requirements with strong resistant to risks such as salt spray, ammonia gas, dust, snail marks and electric potential induced attenuation.



**4 Times 100% EL Detection**  
Guarantee no micro cracks



**PRODUCT QUALITY SYSTEM & CERTIFICATION**



**12years** Material & process Warranty

**25years** Linear Performance Warranty

**0.55%** Linear Power Degradation

**ELECTRICAL PROPERTIES**

**SM-182M-60H 120PCS**

**STC** : irradiance, 1000W/m<sup>2</sup>; cell temperature, 25°C; spectral range, AM1.5

**NOCT** : irradiance, 800 W/m<sup>2</sup>; ambient temperature, 20 °C; spectral range, AM1.5; wind speed, 1m/s

	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power - P <sub>mp</sub> (W)	440	328	445	332	450	336	455	339	460	343
Open-circuit voltage - V <sub>oc</sub> (V)	40.99	38.60	41.16	38.70	41.33	38.90	41.50	39.10	41.70	39.20
Short-circuit current - I <sub>sc</sub> (A)	13.69	11.04	13.78	11.11	13.86	11.17	13.94	11.24	14.02	11.30
Maximum operating voltage - V <sub>mp</sub> (V)	34.35	32.10	34.53	32.20	34.70	32.40	34.87	32.60	35.04	32.70
Maximum operating current - I <sub>mp</sub> (A)	12.81	10.23	12.89	10.30	12.97	10.36	13.05	10.42	13.13	10.49
Module conversion efficiency - η <sub>m</sub>	20.34%		20.57%		20.80%		21.03%		21.26%	
Power tolerance (W)	(0, +5)									
Maximum system voltage (V)	1500V/DC									
Class of safety protection	Class II									
Mechanical load (Front)	5400Pa									
Mechanical load (Back)	2400Pa									
Maximum series fuse rating (A)	25									
Operating temperature	-40~+85°C									

**STRUCTURAL CHARACTERISTICS**

**TEMPERATURE CHARACTERISTIC**

Module dimensions(L*W*H)	1908 x 1134 x 35mm
Weight	24.3kg
Cell quantity	120PCS
Cell model	PERC Monocrystalline182 x 91mm
Glass	3.2mm AR, High Transmission, tempered glass
Frame	Anodized aluminium alloy
Junction box	IP68 Rated, 3diodes
Output line	4.0mm <sup>2</sup> , wire length 300mm
Connector	MC4 Compatible

Temperature coefficient (P <sub>max</sub> )	-0.35% / °C
Temperature coefficient (V <sub>oc</sub> )	-0.26% / °C
Temperature coefficient (I <sub>sc</sub> )	+0.048% / °C
NMOT	43±2°C

**PACKAGING**

Container	40HQ
PCS / Pallet	31
PCS / Container	744

**PRODUCT ASSEMBLY DRAWING(mm)**

