

(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.



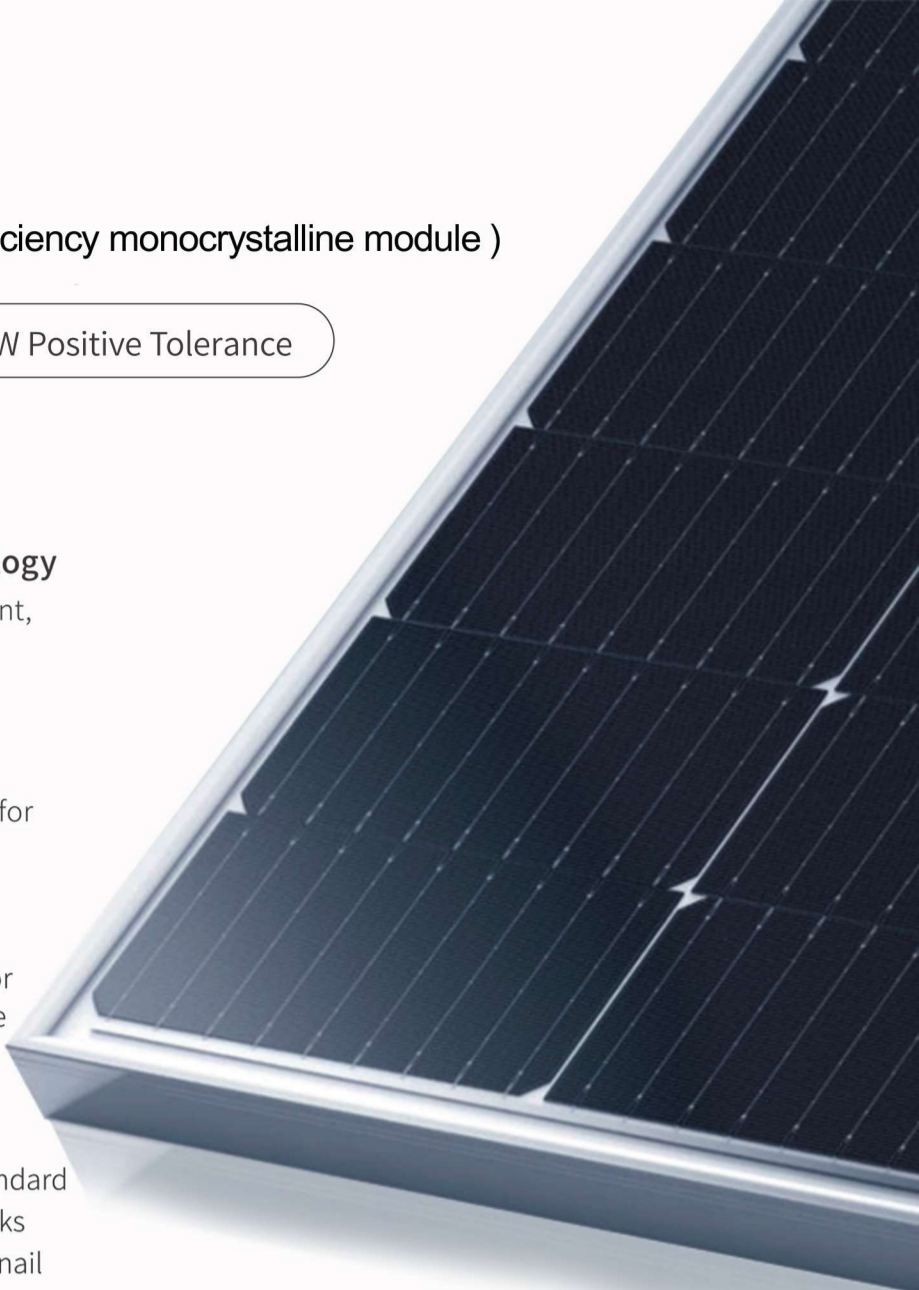
Excellent Weather Resistance

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.

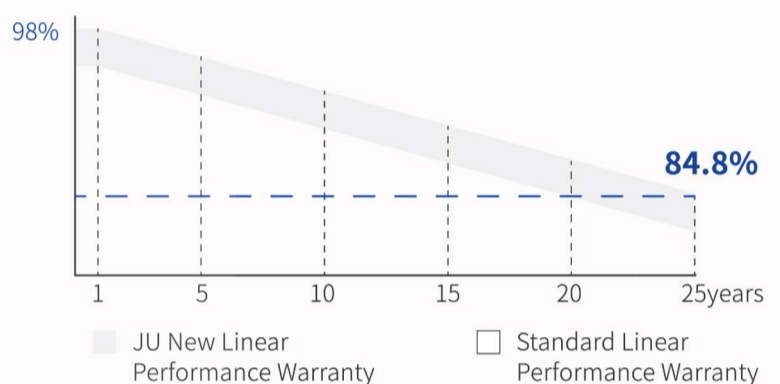


4 Times 100% EL Detection

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/m²; cell temperature, 25°C; spectral range, AM1.5

NOCT: irradiance, 800 W/m²; 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 _{mp} (W)	440	328	445	332	450	336	455	339	460	343
Open-circuit voltage - V _{oc} (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 _{sc} (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 _{mp} (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 _{mp} (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 _m	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 ² , wire length 300mm
Connector	MC4 Compatible

Temperature coefficient (P _{max})	-0.35% / °C
Temperature coefficient (V _{oc})	-0.26% / °C
Temperature coefficient (I _{sc})	+0.048% / °C
NMOT	43±2°C

PACKAGING

Container	40HQ
PCS / Pallet	31
PCS / Container	744

PRODUCT ASSEMBLY DRAWING(mm)

