



(182mm mono TOPCon half-cell, high-efficiency bifacial module)

460-480W 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.



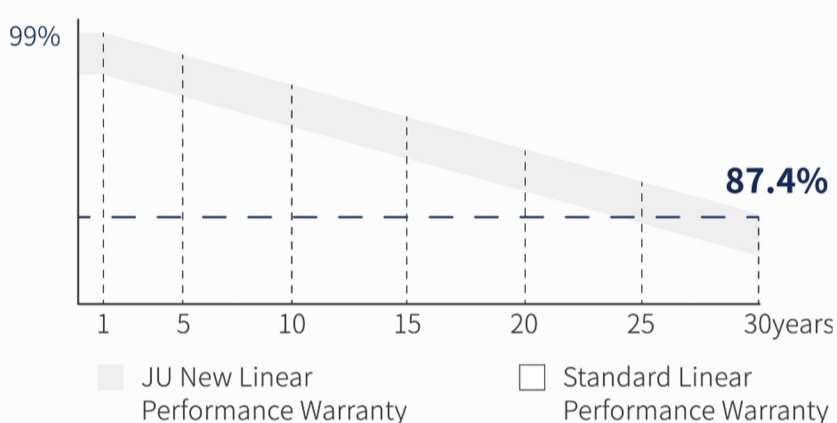
Mechanical Properties
An aluminum frame in special design for better mechanical properties and more efficient installation.



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
- 30years** Linear Performance Warranty
- 1%** Linear Power Degradation in the First Year
- 0.4%** Linear Power Degradation Every Year

ELECTRICAL PROPERTIES

SM-182T-60HBG 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)	460	346	465	350	470	353	475	357	480	361
Open-circuit voltage - V _{oc} (V)	42.05	39.94	42.22	40.10	42.38	40.25	42.54	40.41	42.71	40.57
Short-circuit current - I _{sc} (A)	13.99	11.29	14.07	11.36	14.15	11.42	14.23	11.49	14.31	11.55
Maximum operating voltage - V _{mp} (V)	34.72	33.60	34.89	32.77	35.05	32.94	35.21	33.10	35.38	33.27
Maximum operating current - I _{mp} (A)	13.25	10.61	13.33	10.67	13.41	10.73	13.49	10.79	13.57	10.85
Module conversion efficiency - η _m	21.19%		21.42%		21.65%		21.88%		22.11%	

ELECTRICAL PROPERTIES VERSUS POWER GAINS FROM THE REAR (TAKING A IRRADIANCE OF 470W)

	5%	15%	25%
Power gain	5%	15%	25%
Maximum power - P _{mp} (W)	493.5	540.5	588
Open-circuit voltage - V _{oc} (V)	42.38	42.38	42.38
Short-circuit current - I _{sc} (A)	14.86	16.27	17.69
Maximum operating voltage - V _{mp} (V)	35.05	35.05	35.1
Maximum operating current - I _{mp} (A)	14.08	15.42	16.76
Bifaciality		80±5%	

ABSOLUTE RATING

Power tolerance (W)	(0, +5)
Mechanical load	Front5400Pa/Back2400Pa
Maximum system voltage (V)	1500
Maximum series fuse rating (A)	25
Operating temperature	-40~+85°C

MECHANICAL PROPERTIES

Module dimensions(L*W*H)	1914 x 1134 x 30mm
Weight	26.8kg
Cell quantity	120PCS
Cell model	N-type TOPCon Monocrystalline182 x 91mm
Glass	2.0mm AR, High Transmission, Semi-tempered Glass
Frame	Anodized aluminium alloy
Junction box	IP68 Rated
Output line	4.0mm ² , wire length 300mm
Connector	MC4 Compatible

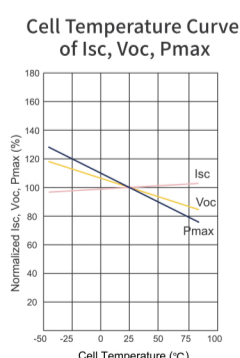
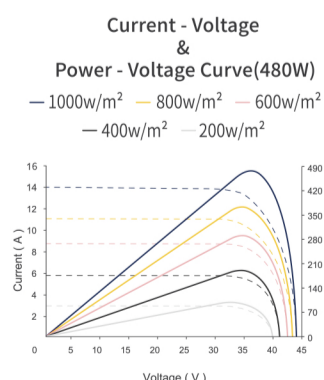
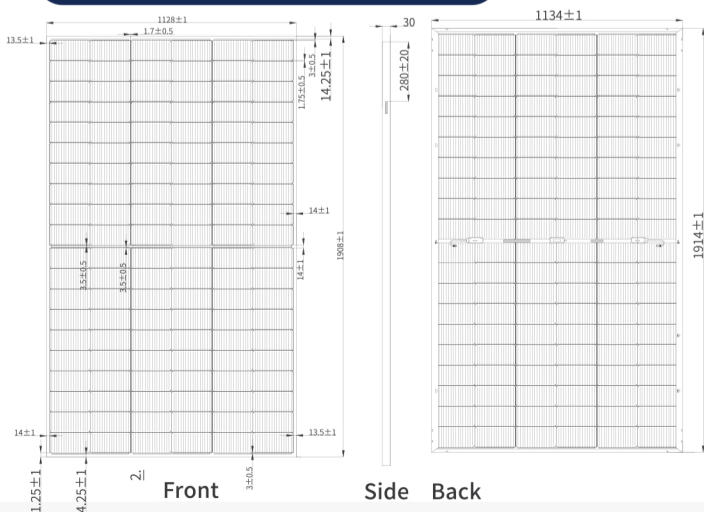
TEMPERATURE CHARACTERISTIC

Temperature coefficient (P _{max})	-0.30% / °C
Temperature coefficient (V _{oc})	-0.25% / °C
Temperature coefficient (I _{sc})	+0.046% / °C
NMOT	43±2°C

PACKAGING

Container	40HQ
PCS / Pallet	36
PCS / Container	864

PRODUCT ASSEMBLY DRAWING(mm)



20GW OEM/ODM Solar Customization
WWW.SOLAR-FOREST.COM +86 0538 5076188



Taishan ChuangGu Industrial Park,
No. 3168 Taishan Street, Taian