

SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems

UL LISTED



PERFORMANCE WARRANTY

KEY FEATURES



12BB Half-cut Cell Technology

New circuit design, lower internal current, lower R_s loss
Ga doped wafer, attenuation $<2\%$ (1st year) / $\leq 0.45\%$ (Linear)



Industry Leading High Yield

Bifacial PERC cell technology,
5%-25% more yield depends on different conditions



Excellent Anti-PID Performance

2 times of industry standard Anti-PID test



Wider Application

No water-permeability and high wear-resistance,
can be widely used in high-humid, windy and dusty area



IP68 Junction Box

High waterproof level

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (P _{max} /W)	585	437	590	441	595	444	600	448	605	452
Operating Voltage (V _{mpp} /V)	34.1	32.0	34.3	32.2	34.5	32.4	34.7	32.6	34.9	32.7
Operating Current (I _{mpp} /A)	17.16	13.65	17.21	13.69	17.25	13.72	17.30	13.77	17.34	13.80
Open-Circuit Voltage (V _{oc} /V)	41.0	38.7	41.2	38.9	41.4	39.1	41.6	39.3	41.8	39.4
Short-Circuit Current (I _{sc} /A)	18.25	14.72	18.30	14.75	18.34	14.78	18.39	14.82	18.43	14.85
Module Efficiency (%)	20.70		20.80		21.00		21.20		21.40	

STC: Irradiance 1000W/m², Spec. a.a. AM1.5, Module Temperature 25°C, Power loss due to temperature: 0 +5W, Temperature gain for P_{max}: ±3%
 NMOT: Irradiance 800W/m², Spec. a.a. AM1.5, Ambient Temperature 20°C, Wind speed 1m/s

REAR SIDE POWER GAIN(REFERENCE TO 595W FRONT)

P _{max} gain	5%	10%	15%	20%	25%
P _{max} /W	625	655	684	714	744
V _{mpp} /V	34.50	34.50	34.50	34.50	34.50
I _{mpp} /A	18.11	18.98	19.84	20.70	21.56
V _{oc} /V	41.30	41.30	41.30	41.30	41.30
I _{sc} /A	19.23	20.14	21.06	21.97	22.89

MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline Silicon (12Busbar)
No. of Cell	120pcs in series (6*20)
Module Dimension	2172*1303*35mm (85.51*51.30*1.38inches)
Weight	34.8kg (76.72lbs.)
Front Glass	2.0mm AR Coating Semi-tempered Glass
Back Glass	2.0mm Glazed Semi-tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Cable	4mm ² (IEC), 12AWG(UL) 300mm in Length or Customized Length
Connector	T01/LJQ-3-CSY/MC4/MC4-EV02

APPLICATION CONDITIONS

Maximum System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	35A
Safety Protection Class	Class II
Mechanical Load	Front side 5400Pa, Back side 2400Pa
Relative Humidity Ratio	70%±5%

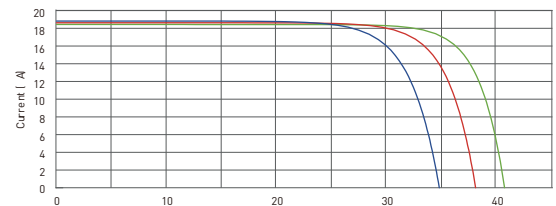
TEMPERATURE CHARACTERISTICS

Temperature Coefficient of P _{max}	-0.34%/°C
Temperature Coefficient of V _{oc}	-0.25%/°C
Temperature Coefficient of I _{sc}	+0.046%/°C
Nominal Module Operating Temperature (NMOT)	43±2°C

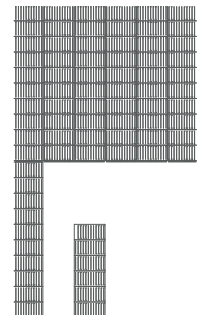
PACKING CONFIGURATION

Pieces per Pallet	31	31(USA)
Pieces per Container (40 HQ)	527	527

I-V CURVE



TECHNICAL DRAWINGS



The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Suzhou Talesun Solar Technologies Co., Ltd. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.