



KEY FEATURES



9BB Half-cut Cell Technology

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



ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	435	323	440	327	445	330	450	334	455	338
Operating Voltage (Vmpp/V)	41.4	38.7	41.6	38.9	41.8	39.1	42.0	39.3	42.2	39.4
Operating Current (Impp/A)	10.51	8.36	10.58	8.41	10.65	8.47	10.72	8.52	10.79	8.57
Open-Circuit Voltage (Voc/V)	49.8	46.6	50.0	46.8	50.2	46.9	50.4	47.1	50.6	47.3
Short-Circuit Current (Isc/A)	11.16	9.00	11.22	9.04	11.29	9.10	11.36	9.16	11.43	9.21
Module Efficiency (%)	20.00		20.20		20.50		20.70		20.90	

STC: Irradiance 1000W/m², Spectra at AM1.5, Module Temperature 25 °C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: ±3%
 NMOT: Irradiance 800W/m², Spectra at AM1.5, Ambient Temperature 20 °C, Wind speed 1m/s

REAR SIDE POWER GAIN(REFERENCE TO 440W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	462	484	506	528	550
Vmpp/V	41.6	41.6	41.6	41.6	41.6
Impp/A	11.11	11.64	12.17	12.70	13.23
Voc/V	50.0	50.0	50.0	50.2	50.2
Isc/A	11.78	12.34	12.90	13.46	14.03

MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline Silicon (9Busbar)
No. of Cells	144pcs in series (6*24)
Module Dimensions	2094*1038*30mm (82.44*40.87*1.18inches)
Weight	28.0kg (61.73lbs)
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
Output Cables	4mm ² (IEC), 12AWG(UL) 300mm in Length or Customized Length
Connectors	T01/LJQ-3-CSY/MC4/MC4-EV02

APPLICATION CONDITIONS

Maximun System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximun Series Fuse	25A
Safety Protection Class	Class II
Mechanical Load	Front side 5400Pa, Back side 2400Pa
Refer. Bifaciality Factor	70%±5%

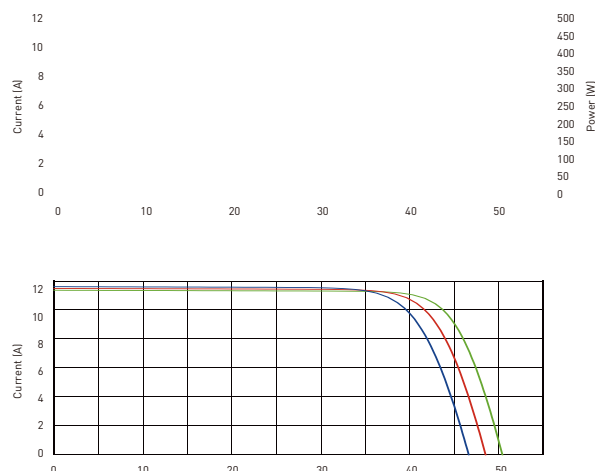
TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	-0.36%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	+0.043%/°C
Nominal Module Operating Temperature(NMOT)	43±2°C

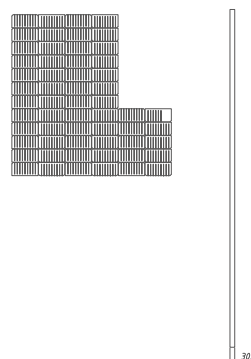
PACKING CONFIGURATION

Pieces Per Pallet	36	36(USA)
Pieces Per Container(40'HQ)	792	648

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.