



## ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	580	432	585	436	590	439	595	443	600	447
Operating Voltage (Vmpp/V)	44.97	41.9	45.11	42.1	45.25	42.2	45.39	42.3	45.53	42.5
Operating Current (Impp/A)	12.90	10.30	12.97	10.35	13.04	10.41	13.11	10.46	13.18	10.52
Open-Circuit Voltage (Voc/V)	53.59	50.4	53.73	50.6	53.87	50.7	54.01	50.8	54.15	51.0
Short-Circuit Current (Isc/A)	13.79	11.12	13.86	11.17	13.93	11.23	14.00	11.28	14.07	11.34
Module Efficiency (%)	20.70		20.90		21.10		21.30		21.50	

STC: Irradiance 1000W/m<sup>2</sup>, Spectra at AM1.5, Module Temperature 25 °C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: ±3%  
 NMOT: Irradiance 800W/m<sup>2</sup>, Spectra at AM1.5, Ambient Temperature 20 °C, Wind speed 1m/s

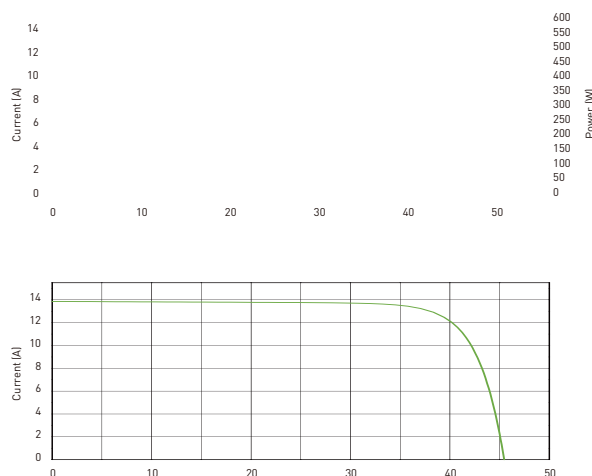
## REAR SIDE POWER GAIN(REFERENCE TO 590W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	620	649	679	708	725
Vmpp/V	45.25	45.25	45.25	45.25	45.25
Impp/A	13.69	14.34	15.00	15.65	16.30
Voc/V	53.87	53.87	53.87	53.87	53.87
Isc/A	14.63	16.02	16.02	16.72	17.41

## MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline Silicon (10Busbar)
No. of Cells	156pcs in series (6*26)
Module Dimensions	2465*1134*35mm (97.05*44.65*1.38inches)
Weight	35kg (77.2lbs.)
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 <sup>2</sup> (IEC), 12AWG(UL) 300mm in Length or Customized Length
Connectors	T01/LJQ-3-CSY/MC4/MC4-EV02

## I-V CURVE



## APPLICATION CONDITIONS

Maximun System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximun Series Fuse	30A
Safety Protection Class	Class II
Mechanical Load	Front side 5400Pa, Back side 2400Pa
Refer. Bifaciality Factor	70%±5%

## TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	+0.048%/°C
Nominal Module Operating Temperature(NMOT)	43±2°C

## PACKING CONFIGURATION

Pieces Per Pallet	31	31(USA)
Pieces Per Container(40'HQ)	496	496



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.