



(ear)
ions
nce
ID 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% |

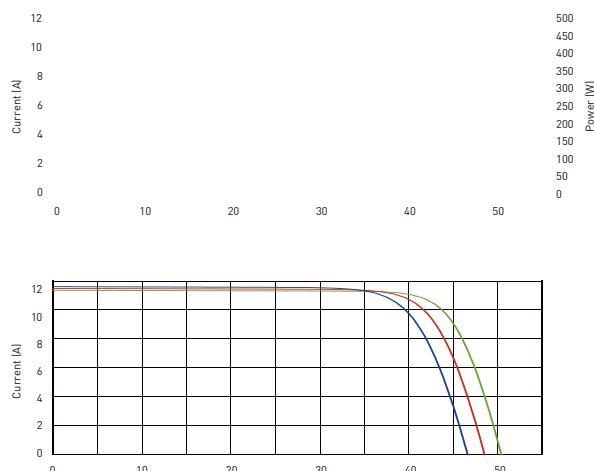
TEMPERATURE CHARACTERISTICS

| | |
|--|------------|
| 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 |

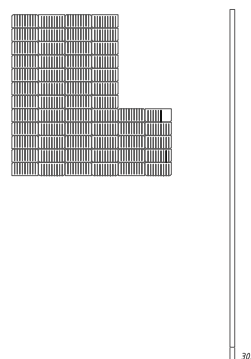
PACKING CONFIGURATION

| | | |
|-----------------------------|-----|---------|
| 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.