## DuDrive Series TSHM-120

Trunsun High Efficiency Monocrystalline Half-cut Cell Solar Module with Perc Technonoly

## Higher Module Efficiency

Brings 5-10W power gain due to half-cut production system

## More Energy Yield

Lower NMOT and better temperature coefficient by lower cell series resistance, helps boost energy yield

Lower Operating Temperature, More Reliable
Lower operating temperature and hot spot temperature during the sunny day, making the module prevail during the sunny days

## Better Shading Tolerance

Thanks to Paralleling circuit design, more power generated under shading condition and during morning \& evening time

## Better Micro Crack Resistance

Minimize the impact by micro crack by limiting cell damage and potentially extending area by half-cut module architecture

LINEAR PERFORMANCE WARRANTY


[^0]```
25years wamarome
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| ELECTRICAL DATA @ STC* |  | TSHM305-120 | TSHM310-120 | TSHM315-120 | TSHM320-120 | TSHM325-120 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Peak Power (Pmax) | (W) | 305 | 310 | 315 | 320 | 325 |
| Maximum Power Voltage (Vmp) | (1) | 33.23 | 33.52 | 33.80 | 34.08 | 34.36 |
| Maximum Power Current (Imp) | (A) | 9.18 | 9.25 | 9.32 | 9.39 | 9.46 |
| Open-circuit Voltage (Voc) | (V) | 40.16 | 40.44 | 40.72 | 41.00 | 41.26 |
| Short-circuit Current (Isc) | (A) | 9.68 | 9.76 | 9.84 | 9.91 | 9.99 |
| Module Efficiency | (\%) | 18.32 | 18.62 | 18.92 | 19.22 | 19.52 |
| Operating Temperature |  | $-40^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}$ |  |  |  |  |
| Maximum System Voltage |  | 1000 V |  |  |  |  |
| Maximum Series Fuse Rating |  | 15A |  |  |  |  |
| Application Class |  | Class A |  |  |  |  |
| Power Telorance |  | 0~+3\% |  |  |  |  |

*STC (Standard Test Condition): Irradiance $1000 \mathrm{~W} / \mathrm{m}^{2}$, Module Temperature $25^{\circ} \mathrm{C}$, AM 1.5

## ELECTRICAL DATA @ NMOT*

| Peak Power (Pmax) | (W) | 226 | 230 | 234 | 237 | 242 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MPP Voltage (Vmp) | (V) | 30.60 | 30.87 | 31.12 | 31.38 | 31.99 |
| MPP Current (Imp) | (A) | 7.39 | 7.45 | 7.50 | 7.56 | 7.58 |
| Open Circuit Voltage (Voc) | (V) | 37.88 | 38.15 | 38.41 | 38.67 | 39.09 |
| Short Circuit Current (Isc) | (A) | 7.82 | 7.88 | 7.95 | 8.00 | 8.06 |
| *Under Nominal Module Operating Temperature (NMOT), Irradiance of 800W/ m , Spectrum AM 1.5, Ambient Temperature $20^{\circ} \mathrm{C}$, Wind Speed $1 \mathrm{~m} / \mathrm{s}$ |  |  |  |  |  |  |
| TEMPERATURE CHARACTERISTICS |  |  |  |  |  |  |
| Temperature coefficient of Pmax |  | $-0.38 \% /{ }^{\circ} \mathrm{C}$ |  |  |  |  |
| Temperature coefficient of Voc |  | $-0.31 \% /{ }^{\circ} \mathrm{C}$ |  |  |  |  |
| Temperature coefficient of Isc |  | 0.05\%/ ${ }^{\circ} \mathrm{C}$ |  |  |  |  |
| NMOT |  | $41 \pm 3^{\circ} \mathrm{C}$ |  |  |  |  |

## MECHNICAL DATA

| Cell Type | Mono-Crystalline, $156.75 \times 78.38 \mathrm{~mm}$ |
| :---: | :---: |
| Cell Arrangement | $120 \mathrm{pcs}(2 \times(6 \times 10))$ |
| Dimension ( $\mathrm{L} \times \mathrm{W} \times \mathrm{H}$ ) | $1680 \times 991 \times 35 \mathrm{~mm}$ |
| Weight | 19 kg |
| Front Cover | 3.2 mm Tempered Glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP67, 3 Bypass Diodes |
| Cable Type | $4 \mathrm{~mm}{ }^{2}$ |
| Length of Cable | 1160 mm |
| Connector | PV Connector |

## PACKING MANNER

| Packing Type | 40HQ |
| :---: | :---: |
| Piece/Pallet | 30 |
| Pallet/Containe | 26 |
| Piece/Container | 780 |

[^1]

Current-Voltage Curve under
different working temperatures




[^0]:    12 years Workmastip

[^1]:    The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R\&D enhancement, Zhejiang Trunsun Solar Co., Ltd. Reserves the right to make any adjustment to the information innovation, R\&D enhancement, Zhejiang Trunsun Solar Co., Ltd. Reserves the right to make any adjustment to the information
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