# DuDrive Series TSHM-120H



Trunsun High Efficiency Monocrystalline Half-cut Cell Solar Module with Perc Technonoly (1500V)

305-325W



## **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**

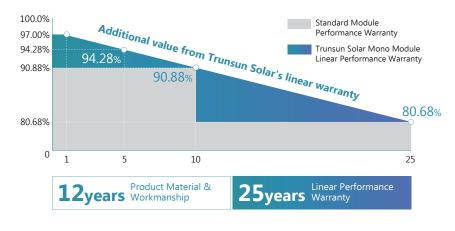
Minimize the impact by micro crack by limiting cell damage and potentially extending area by half-cut module architecture



## 1500V System Voltage

Approved IEC1500Vdc system voltage, saving on BoS cost







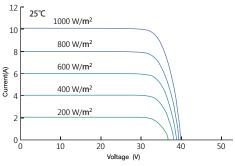
DuDrive Series TSHM-120H

Trunsun High Efficiency Monocrystalline
Half-cut Cell Solar Module with Perc Technonoly (1500V)

ELECTRICAL DATA @ STC*		TSHM305-120H	TSHM310-120H	TSHM315-120H	TSHM320-120H	TSHM325-120H
Peak Power (Pmax)	(W)	305	310	315	320	325
Maximum Power Voltage (Vmp)		33.23	33.52	33.80	34.08	34.36
Maximum Power Current (Imp)		9.18	9.25	9.32	9.39	9.46
Open-circuit Voltage (Voc)		40.16	40.44	40.72	41.00	41.26
Short-circuit Current (Isc)		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°C~+85°C		
Maximum System Voltage				1500V		
Maximum Series Fuse Rating				15A		
Application Class				Class A		
Power Telorance				0~+3%		

<sup>\*</sup>STC (Standard Test Condition): Irradiance 1000W/ m², Module Temperature 25°C, AM 1.5

## **Current-Voltage Curve under** different irradiance

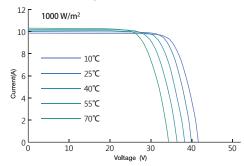


## **ELECTRICAL DATA @ NMOT\***

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)		7.82	7.88	7.95	8.00	8.06

<sup>\*</sup>Under Nominal Module Operating Temperature (NMOT), Irradiance of 800W/ m², Spectrum AM 1.5, Ambient Temperature 20°C, Wind Speed 1m/s

## **Current-Voltage Curve under** different working temperatures



# **TEMPERATURE CHARACTERISTICS**

Temperature coefficient of Pmax	-0.38%/°C
Temperature coefficient of Voc	-0.31%/°C
Temperature coefficient of Isc	0.05%/℃
NMOT	41±3°C

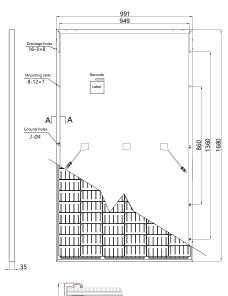
# **MECHNICAL DATA**

Mono-Crystalline, 156.75×78.38mm
120pcs (2×(6×10))
1680×991×35mm
19kg
3.2mm Tempered Glass
Anodized Aluminium Alloy
IP67, 3 Bypass Diodes
4mm²
1160mm
PV Connector

### **PACKING MANNER**

Packing Type	40HQ
Piece/Pallet	30
Pallet/Container	26
Piece/Container	780

\*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 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 produccts described herein.





Version 2019.04 © Zhejiang Trunsun Solar Co., Ltd All Rights Reserved.

<sup>\*</sup>Power measurement tolerance: ±3%