DuDrive Series TSHP-120



Trunsun High Efficiency Polycrystalline Half-cut Cell Solar Module 275–290W



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

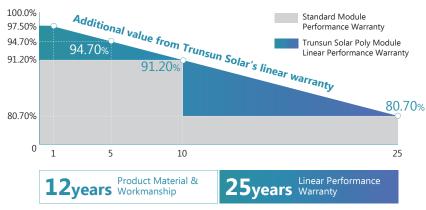
Thanks to Paralleling circuit design, more power generated under shading condition and during morning & evening time



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







DuDrive Series TSHP-120

Trunsun High Efficiency Polycrystalline Half-cut Cell Solar Module

ELECTRICAL DATA @ STC*		TSHP275-120	TSHP280-120	TSHP285-120	TSHP290-120
Peak Power (Pmax)	(W)	275	280	285	290
Maximum Power Voltage (Vmp)	(V)	31.87	32.15	32.43	32.70
Maximum Power Current (Imp)	(A)	8.63	8.71	8.79	8.87
Open-circuit Voltage (Voc)	(V)	38.14	38.42	38.69	38.98
Short-circuit Current (Isc)	(A)	9.20	9.27	9.35	9.42
Module Efficiency	(%)	16.52	16.82	17.12	17.42
Operating Temperature			-40°C	~+85°C	
Maximum System Voltage			100	00V	
Maximum Series Fuse Rating			15	δA	
Application Class			Cla	ss A	
Power Telorance			0~-		

^{*}STC (Standard Test Condition): Irradiance 1000W/ m², Module Temperature 25°C, AM 1.5

ELECTRICAL DATA @ NMOT*

Peak Power (Pmax)	(W)	204	207	211	215
MPP Voltage (Vmp)	(V)	29.42	29.68	29.93	30.18
MPP Current (Imp)	(A)	6.93	6.99	7.05	7.12
Open Circuit Voltage (Voc)	(V)	35.83	36.09	36.35	36.62
Short Circuit Current (Isc)	(A)	7.45	7.51	7.57	7.63

 $^{^{\}star} Under \ Nominal \ Module \ Operating \ Temperature \ (NMOT), Irradiance \ of \ 800W/\ m^{\dagger}, Spectrum \ AM \ 1.5, Ambient \ Temperature \ 20^{\circ}C, \ Wind \ Speed \ 1m/s$

TEMPERATURE CHARACTERISTICS

Temperature coefficient of Pmax	-0.39%/°C
Temperature coefficient of Voc	-0.33%/°C
Temperature coefficient of Isc	0.05%/℃
NMOT	42±3°C

MECHNICAL DATA

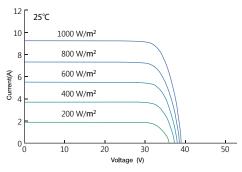
Cell Type	Poly-Crystalline, 156.75×78.38mm			
Cell Arrangement	120pcs (2×(6×10))			
Dimension (L×W×H)	1680×991×35mm			
Weight	19kg			
Front Cover	3.2mm Tempered Glass			
Frame	Anodized Aluminium Alloy			
Junction Box	IP67, 3 Bypass Diodes			
Cable Type	4mm²			
Length of Cable	1160mm			
Connector	PV Connector			

PACKING MANNER

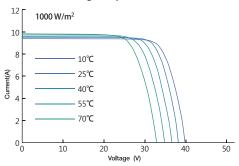
Packing Type	40HQ
Piece/Pallet	30
Pallet/Container	26
Piece/Container	780

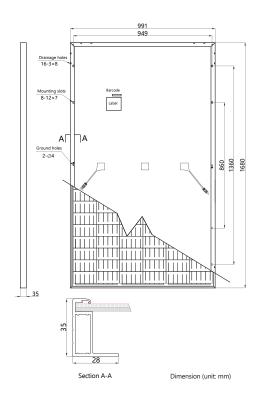
^{*}The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Zhejiang Trunsun Solar Co., Ltd. Reserves the right to make any adjustment to the information described herein at any time without notice. Please 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.

Current-Voltage Curve under different irradiance



Current-Voltage Curve under different working temperatures





^{*}Power measurement tolerance: ±3% Version 2019.04 © Zhejiang Trunsun Solar Co., Ltd All Rights Reserved.