# DuDrive Series MSHP-144

 $\label{eq:main_solar} \begin{array}{l} \mbox{Mariosolar High Efficiency Polycrystalline Half-cut Cell Solar Module} \\ \mbox{330-350W} \end{array}$ 



## **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



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#### About Mariosolar

Mariosolar, established in 2018, is dedicated to providing solar products with high quality, excellent performance and strong after-sales support. The company not only has strong financial support but also never stops innovating. Mariosolar will keep delivering the diversified solar products for all kinds of renewable energy generation systems around the world.

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## DuDrive Series MSHP-144 Mariosolar High Efficiency Polycrystalline Half-cut Cell Solar Module

#### **ELECTRICAL DATA @ STC\*** MSHP330-144 MSHP335-144 MSHP340-144 MSHP345-144 MSHP350-144

Peak Power (Pmax)	(W)	330	335	340	345	350
Maximum Power Voltage (Vmp)	(V)	38.11	38.38	38.60	38.86	39.11
Maximum Power Current (Imp)	(A)	8.66	8.73	8.81	8.88	8.95
Open-circuit Voltage (Voc)	(V)	45.96	46.24	46.51	46.79	46.79
Short-circuit Current (Isc)	(A)	9.20	9.46	9.57	9.68	9.74
Module Efficiency	(%)	16.65	16.90	17.15	17.41	17.66
Operating Temperature				-40°C~+85°C		
Maximum System Voltage				1000V		
Maximum Series Fuse Rating				15A		
Application Class				Class A		
Power Telorance				0~+3%		

\*STC (Standard Test Condition): Irradiance 1000W/ m<sup>2</sup> , Module Temperature 25°C, AM 1.5

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

Peak Power (Pmax)	(W)	244	248	252	256	259
MPP Voltage (Vmp)	(V)	35.18	35.43	35.63	35.87	36.10
MPP Current (Imp)	(A)	6.95	7.01	7.07	7.13	7.18
Open Circuit Voltage (Voc)	(V)	43.18	43.44	43.69	43.96	44.26
Short Circuit Current (Isc)	(A)	7.45	7.66	7.75	7.84	7.86

\*Under Nominal Module Operating Temperature (NMOT), Irradiance of 800W/ m<sup>2</sup>, Spectrum AM 1.5, Ambient Temperature 20°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%/°C
NMOT	42±3°C

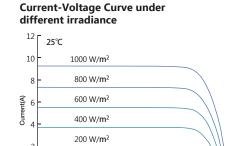
## MECHNICAL DATA

Cell Type	Poly-Crystalline, 156.75×78.38mm
Cell Arrangement	144pcs (2×(6×12))
Dimension (L×W×H)	2000×991×35mm
Weight	22kg
Front Cover	3.2mm Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67, 3 Bypass Diodes
Cable Type	4mm <sup>2</sup>
Length of Cable	1250mm
Connector	PV Connector

### **PACKING MANNER**

Packing Type	40HQ
Piece/Pallet	30
Pallet/Container	22
Piece/Container	660

\*The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Mariosolar, 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 be purchase and eale of the predivert described herein related to the purchase and sale of the produccts described herein.



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Voltage (V)

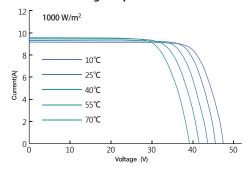
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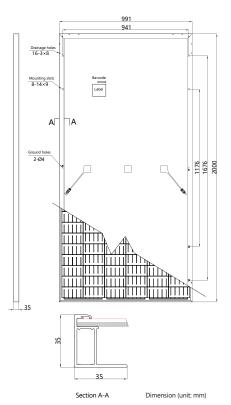
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**Current-Voltage Curve under** different working temperatures

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\*Power measurement tolerance: ±3%