

# DuDrive Series

## MSHM-144H



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

365-390W



### 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

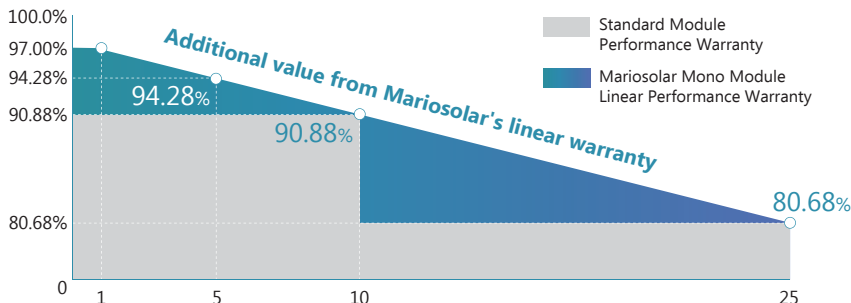


### 1500V System Voltage

Approved IEC1500Vdc system voltage, saving on BoS cost



### LINEAR PERFORMANCE WARRANTY



**12years** Product Material & Workmanship

**25years** Linear Performance Warranty

#### About Mariosolar

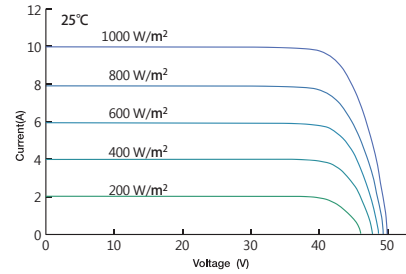
Mariosolar, established in 2018, is dedicated to providing solar products with high quality, excellent performance and strong after-sales support. The company not only has strong financial support but also never stops innovating. Mariosolar will keep delivering the diversified solar products for all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

# DuDrive Series MSHM-144H Mariosolar High Efficiency Monocrystalline Half-cut Cell Solar Module with Perc Technonoly (1500V)

ELECTRICAL DATA @ STC*		MSHM365-144H	MSHM370-144H	MSHM375-144H	MSHM380-144H	MSHM385-144H	MSHM390-144H
Peak Power (Pmax)	(W)	365	370	375	380	385	390
Maximum Power Voltage (Vmp)	(V)	39.55	39.83	40.11	40.39	40.66	40.93
Maximum Power Current (Imp)	(A)	9.23	9.29	9.35	9.41	9.47	9.53
Open-circuit Voltage (Voc)	(V)	47.90	48.17	48.43	48.72	48.99	49.26
Short-circuit Current (Isc)	(A)	9.99	10.06	10.13	10.19	10.25	10.32
Module Efficiency	(%)	18.42	18.67	18.92	19.17	19.42	19.68
Operating Temperature		-40°C~+85°C					
Maximum System Voltage		1500V					
Maximum Series Fuse Rating		15A					
Application Class		Class A					
Power Tolerance		0~+3%					

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

Current-Voltage Curve under different irradiance

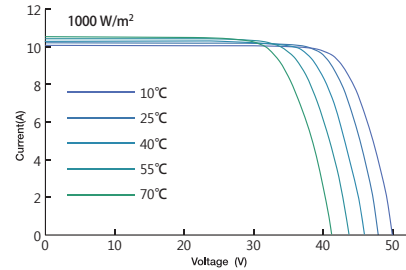


## ELECTRICAL DATA @ NMOT\*

Peak Power (Pmax)	(W)	271	274	278	282	285	288
MPP Voltage (Vmp)	(V)	36.42	36.68	36.93	37.19	37.69	37.94
MPP Current (Imp)	(A)	7.43	7.48	7.53	7.58	7.55	7.60
Open Circuit Voltage (Voc)	(V)	45.18	45.44	45.68	45.96	46.26	46.51
Short Circuit Current (Isc)	(A)	8.07	8.13	8.18	8.23	8.27	8.33

\*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

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%/°C
NMOT		41±3°C

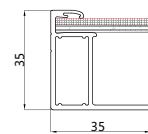
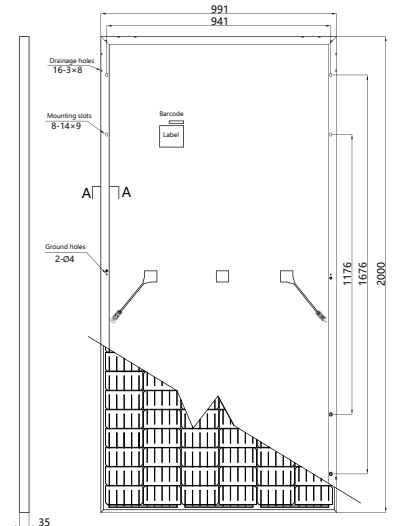
## MECHANICAL DATA

Cell Type		Mono-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 the purchase and sale of the products described herein.



Section A-A

Dimension (unit: mm)

\*Power measurement tolerance: ±3%

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