

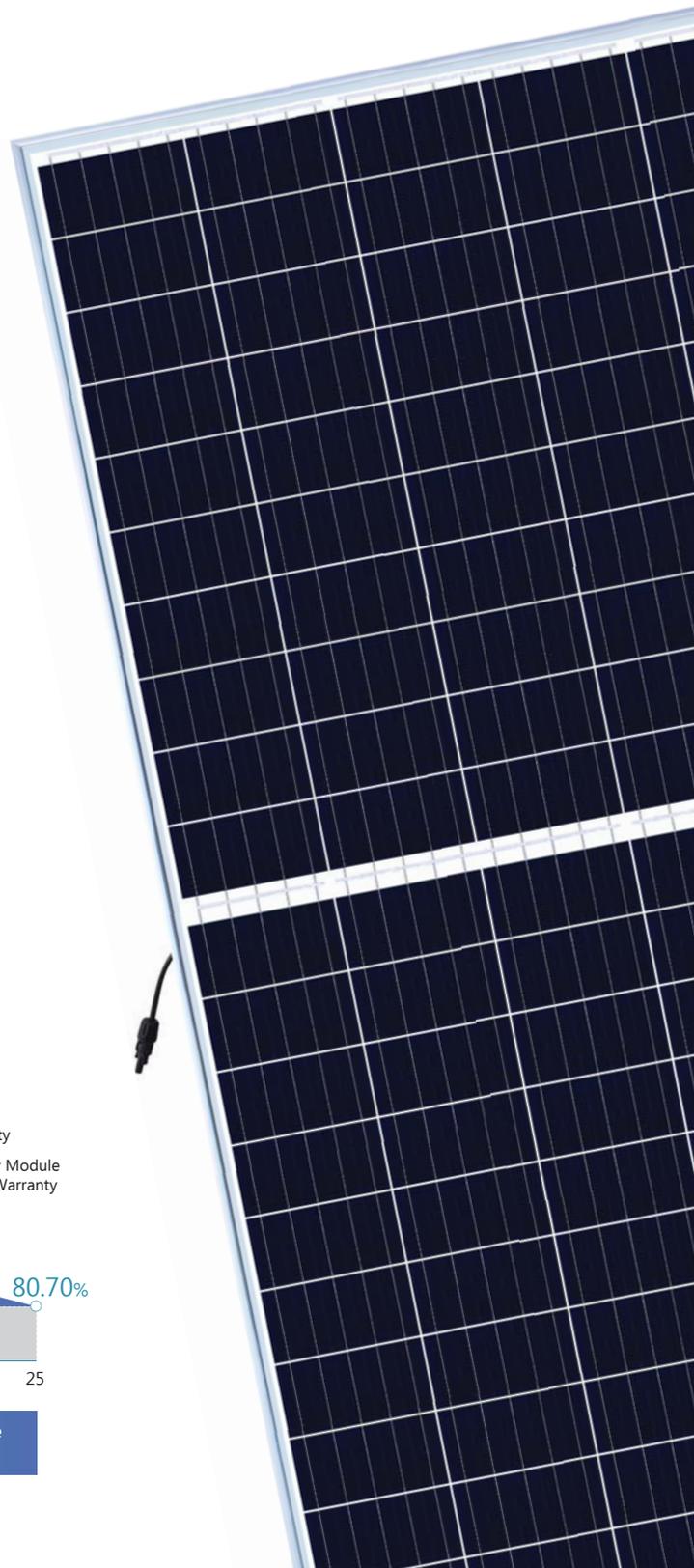
DuDrive Series

MSHM-120

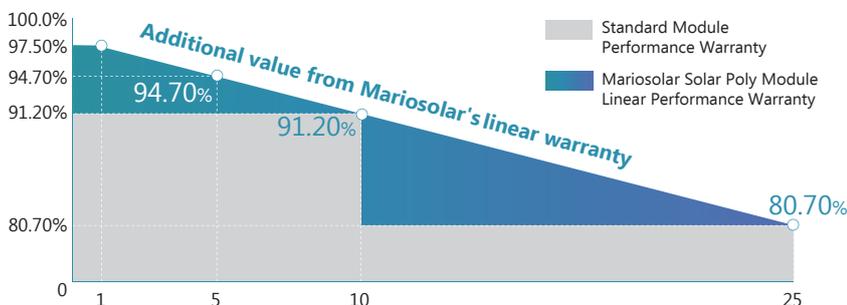


Mariosolar High Efficiency Polycrystalline Half-cut Cell Solar Module
275-290W

- 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



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-120 Mariosolar High Efficiency Polycrystalline Half-cut Cell Solar Module

ELECTRICAL DATA @ STC*		MSHP275-120	MSHP280-120	MSHP285-120	MSHP290-120
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		1000V			
Maximum Series Fuse Rating		15A			
Application Class		Class A			
Power Tolerance		0~+3%			

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

ELECTRICAL DATA @ NMOT*		MSHP275-120	MSHP280-120	MSHP285-120	MSHP290-120
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

*Under Nominal Module Operating Temperature (NMOT), Irradiance of 800W/ m², 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

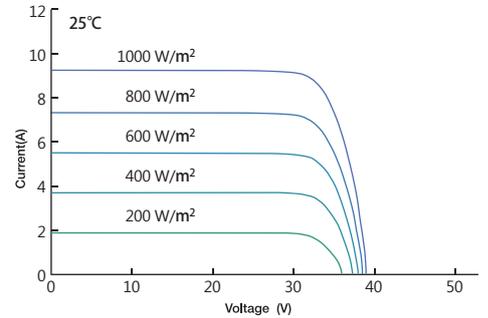
MECHANICAL DATA	
Cell Type	Poly-Crystalline, 156.75×78.38mm
Cell Arrangement	120pcs (2×(6×10))
Dimension (L×W×H)	1680×991×35mm
Weight	19kg
Front Cover	3.2mm Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67, 3 Bypass Diodes
Cable Type	4mm ²
Length of Cable	1160mm
Connector	PV Connector

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

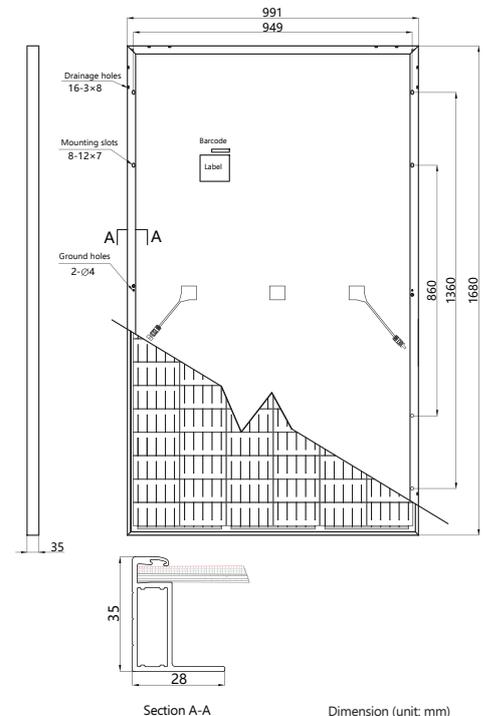
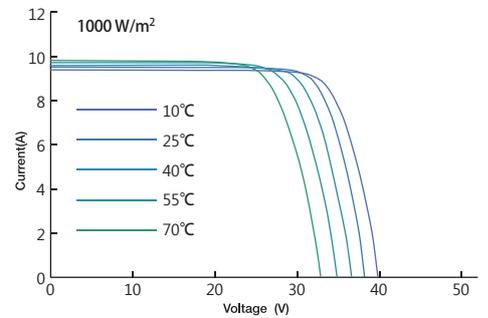
*The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Mariosolar. Reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most 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.

*Power measurement tolerance: ±3%

Current-Voltage Curve under different irradiance



Current-Voltage Curve under different working temperatures



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