







DuDrive Series

MSHP-120H



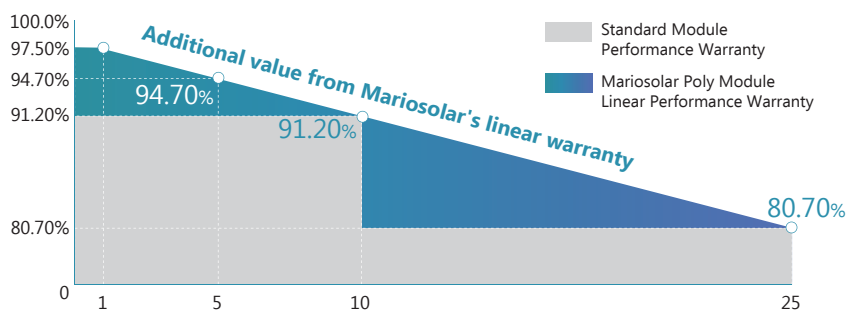
Mariosolar High Efficiency Polycrystalline Half-cut Cell Solar Module (1500V)

275-290W

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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 MSHP-120H Mariosolar High Efficiency Polycrystalline Half-cut Cell Solar Module (1500V)

ELECTRICAL DATA @ STC*		MSHP275-120H	MSHP280-120H	MSHP285-120H	MSHP290-120H
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		1500V			
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*		MSHP275-120H	MSHP280-120H	MSHP285-120H	MSHP290-120H
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

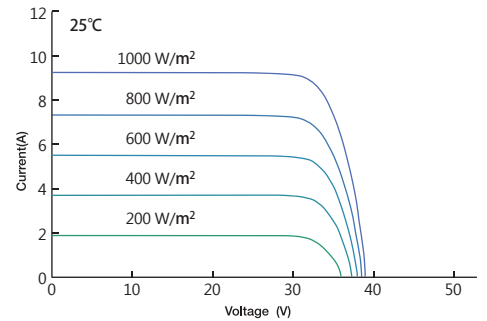
TEMPERATURE CHARACTERISTICS		
Temperature coefficient of Pmax		-0.39%/°C
Temperature coefficient of Voc		-0.33%/°C
Temperature coefficient of Isc		0.05%/°C
NMOT		42±3°C

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

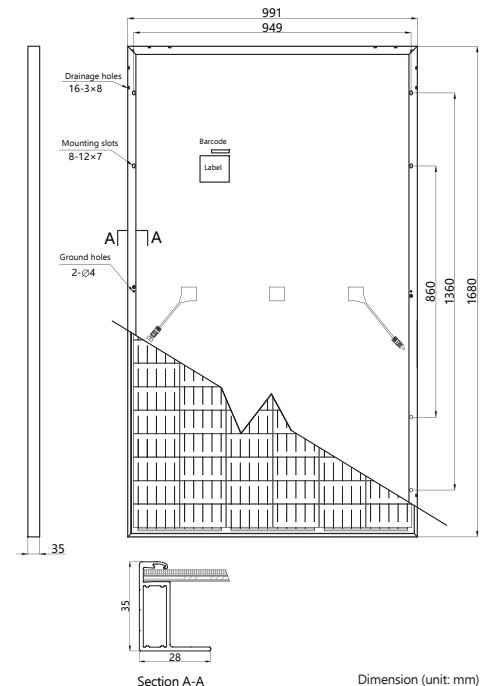
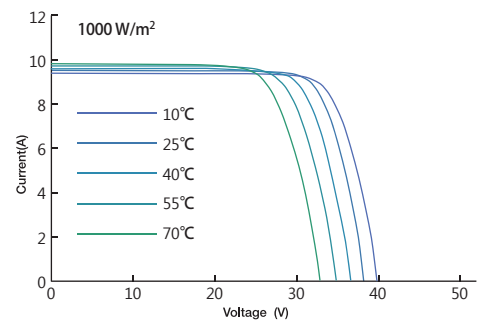
PACKING MANNER		
Packing Type		40HQ
Piece/Pallet		30
Pallet/Container		26
Piece/Container		780

*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.

Current-Voltage Curve under different irradiance



Current-Voltage Curve under different working temperatures



*Power measurement tolerance: ±3%

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