

520 Watt

144 Half Cell Monocrystalline Module

Features

Ultra-light: Glass free module weighs 7.7 kg, 70% lighter than conventional glass modules.

Fast-Installation: Through "Quick-Bonding" installation, It requires no penetration, reduces time on roof by 40% and eliminates the use of mounting hardware.

Aesthetic: Seamless integration with underlying installation surface.

Durable: It is the first glassless module to pass the same durability.

Transportation: Its innovative frame and low weight will very significantly reduce the cost of transportation.

Deployment: Ultra-light weight and customizable size make it the best choice to change the way how solar is deployed in the market and bring added value to special applications.

Durability: The panels are certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal), while special materials and stringent quality control ensure panel longevity.



515W ~ 520 W

POWER OUTPUT RANGE

0-5 W

POWER TOLERANCE

LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty

25 Year Linear Power Warranty



MS-MFSP515M-12X12

MS-MFSP520M-12X12

Electrical Characteristics

STC	MFSP515M-12X12	MFSP520M-12X12
Maximum Power (P_{max})	515	520
Maximum Power Voltage (V_{mp})	42.12	42.31
Maximum Power Current (I_{mp})	10.23	12.24
Open-circuit Voltage (V_{oc})	49.3	49.5
Short-circuit Current (I_{sc})	13.49	13.56
Module Efficiency (%)	19.1	19.3
Operating Temperature ($^{\circ}C$)	-40 $^{\circ}C$ to 85 $^{\circ}C$	
Maximum System Voltage	1500 V DC (IEC)	
Maximum Series Fuse Rating	25 A	
Application Class	Class A	
Power Tolerance	0/+5 W	

STC: Irradiance 1000W/m², Cell temperature 25 $^{\circ}C$, AM=1.5.

NOCT	MFSP515M-6X24	MFSP520M-6X24
Maximum Power (P_{max})	424.4	429.2
Maximum Power Voltage (V_{mp})	41.6	41.8
Maximum Power Current (I_{mp})	10.21	10.26
Open-circuit Voltage (V_{oc})	49.6	49.8
Short-circuit Current (I_{sc})	10.76	10.82

NOCT: Irradiance 800W/m², Ambient temperature 20 $^{\circ}C$, AM=1.5, Wind speed 1 m/s.

Mechanical Characteristics

Solar Cell	Monocrystalline silicon (182mm half cell)
No. of Cells	144 (12 × 12)
Module Dimensions	2246×1197×2mm
Weight	7.7 kgs
Backsheet	White
Frame	Flameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm ² , (±)450 mm
Connector	MC4 compatible

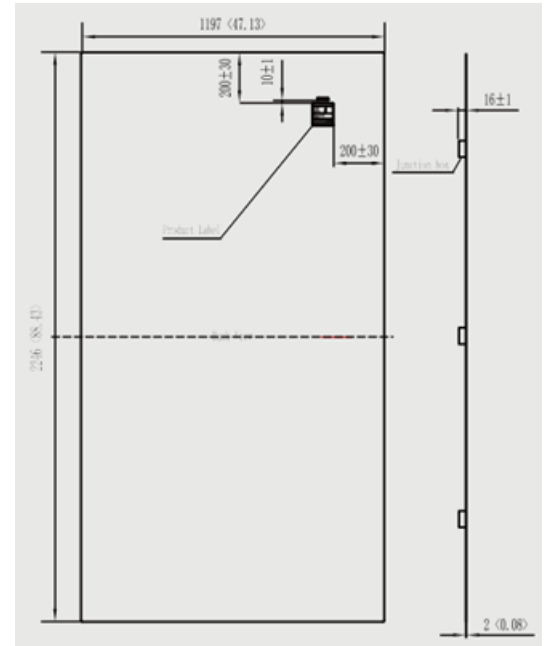
Packaging Configuration

	20' GP	40' HC
Module per pallet	66	66
Pieces per container	264	528

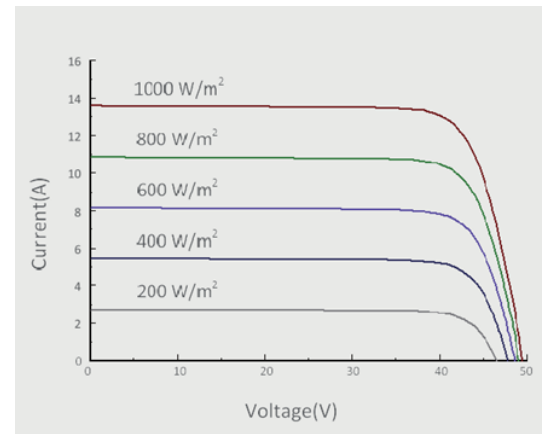
CAUTION: Read installation manual before using the product.

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Dimensions



I-V Curve (520W)



Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	41±2 $^{\circ}C$
Temperature Coefficient of P_{max}	-0.34 %/ $^{\circ}C$
Temperature Coefficient of V_{oc}	-0.26 %/ $^{\circ}C$
Temperature Coefficient of I_{sc}	0.033 %/ $^{\circ}C$

Dealer Information:

MS_IEC_EN_2023A