

## 430 Watt

# 144 Half Cell Monocrystalline Module

## Features



**Ultra-light:** Glass free module weighs 7.2 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.

**425-430 W**

**POWER OUTPUT RANGE**

**0-5 W**

**POWER TOLERANCE**

## LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty

25 Year Linear Power Warranty



## MS-MFSP425M-6X24

## MS-MFSP430M-6X24

### Electrical Characteristics

STC	MFSP425M-6X24	MFSP430M-6X24
Maximum Power ( $P_{max}$ )	425	430
Maximum Power Voltage ( $V_{mp}$ )	41.8	42.0
Maximum Power Current ( $I_{mp}$ )	10.17	10.24
Open-circuit Voltage ( $V_{oc}$ )	49.6	49.8
Short-circuit Current ( $I_{sc}$ )	10.67	10.74
Module Efficiency (%)	19.2	19.4
Operating Temperature ( $^{\circ}C$ )	-40 $^{\circ}C$ to 85 $^{\circ}C$	
Maximum System Voltage	1000 V DC (IEC)	
Maximum Series Fuse Rating	20 A	
Application Class	Class A	
Power Tolerance	0/+5 W	

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25 $^{\circ}C$ , AM=1.5.

NOCT	MFSP425M-6X24	MFSP430M-6X24
Maximum Power ( $P_{max}$ )	321.4	325.1
Maximum Power Voltage ( $V_{mp}$ )	38.6	38.8
Maximum Power Current ( $I_{mp}$ )	8.33	8.38
Open-circuit Voltage ( $V_{oc}$ )	46.6	46.8
Short-circuit Current ( $I_{sc}$ )	8.64	8.69

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20 $^{\circ}C$ , AM=1.5, Wind speed 1 m/s.

### Mechanical Characteristics

Solar Cell	Monocrystalline silicon (166mm half cell)
No. of Cells	144 (6 × 24)
Module Dimensions	2120×1046×2mm
Weight	7.2 kgs
Backsheet	White
Frame	Flameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm <sup>2</sup> , (±)70 mm
Connector	MC4 compatible

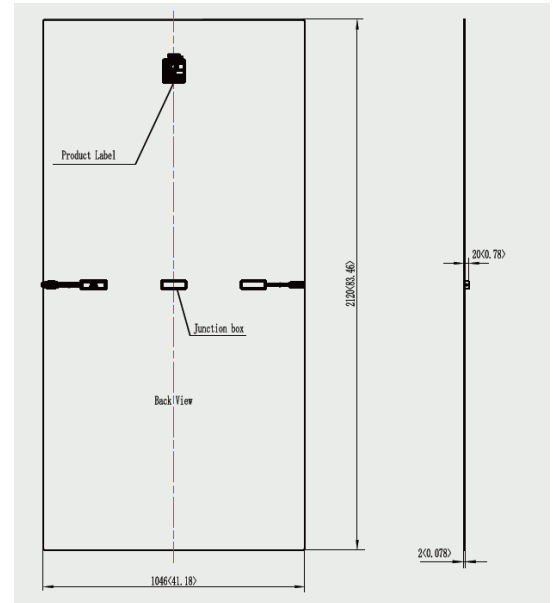
### Packaging Configuration

	20' GP	40' HC
Module per pallet	66+50	66
Pieces per container	580	1320

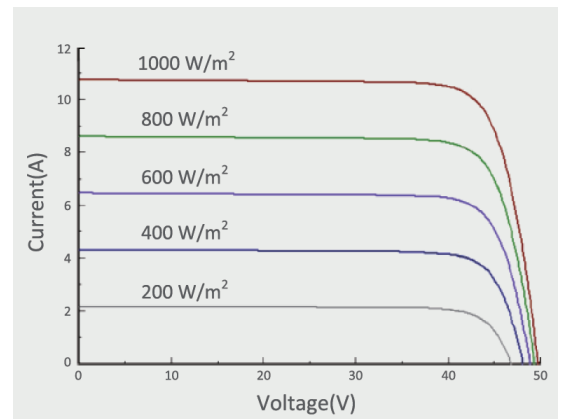
**CAUTION:** Read installation manual before using the product.

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### Dimensions



### I-V Curve (430W)



### Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45 ± 2 $^{\circ}C$
Temperature Coefficient of $P_{max}$	-0.42 %/ $^{\circ}C$
Temperature Coefficient of $V_{oc}$	-0.31 %/ $^{\circ}C$
Temperature Coefficient of $I_{sc}$	0.050 %/ $^{\circ}C$

Dealer Information:

MS\_IEC\_EN\_2018A