



ASPEN WOODS  
GROUP INC.

# 520w Flexible Solar Panel

144 Half Cell Monocrystalline Module

**TOPCON Solar Panel**



**Power Output Range - 515w ~ 520w**  
**Power Tolerance - 0-5w**

## 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.

## Electrical Characteristics

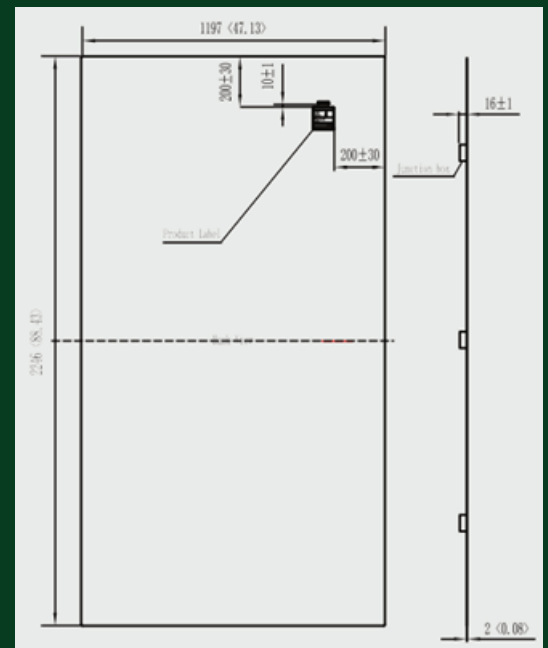
STC	MFSP515M-12X12	MFSP520M-12X12
Maximum Power (Pmax)	515	520
Maximum Power Voltage (Vmp)	42.12	42.31
Maximum Power Current (Imp)	10.23	12.24
Open-circuit Voltage (Voc)	49.3	49.5
Short-circuit Current (Isc)	13.49	13.56
Module Efficiency (%)	19.1	19.3
Operating Temperature(°C)	-40°C to 85°C	
Maximum System Voltage	1500V DC (IEC)	
Maximum Series Fuse Rating	25A	
Application Class	Class A	
Power Tolerance	0/+5 W	

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM=1.5.

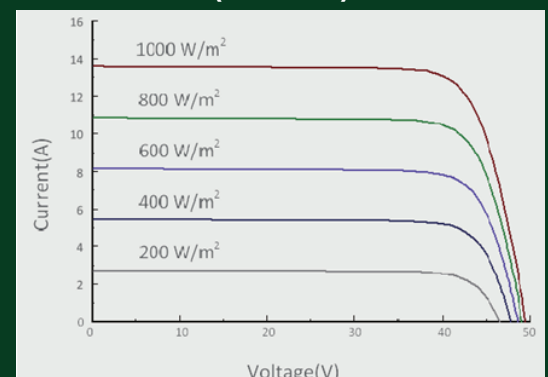
NOCT	MFSP515M-6X24	MFSP520M-6X24
Maximum Power (Pmax)	424.4	429.2
Maximum Power Voltage (Vmp)	41.6	41.8
Maximum Power Current (Imp)	10.21	10.26
Open-circuit Voltage (Voc)	49.6	49.8
Short-circuit Current (Isc)	10.76	10.82

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, AM=1.5, Wind speed 1 m/s.

## Dimensions



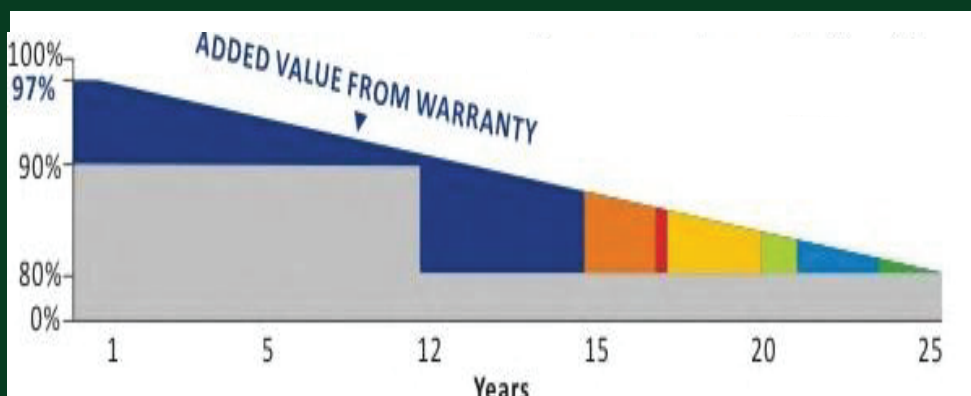
## I-V Curve (520W)



# LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty

25 Year Linear Power Warranty



## Mechanical Characteristics

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

## Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	41±2°C
Temperature Coefficient of Pmax	-0.34 %°C
Temperature Coefficient of Voc	-0.26 %°C
Temperature Coefficient of Isc	0.033 %°C



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## CONTACT US

Aspen Woods Group Inc. is an engineering led trade and development team which is responsible in providing all solutions with regards to growth and sustainability. Based in New York (USA), Aspen Woods Group Inc. is a family founded organisation whose origins began within the commodities and iron ore mining trade.

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