



# IM72 SERIES PHOTOVOLTAIC MODULES

PEAK POWER: 300-310 Wp

## FEATURES INCLUDE:

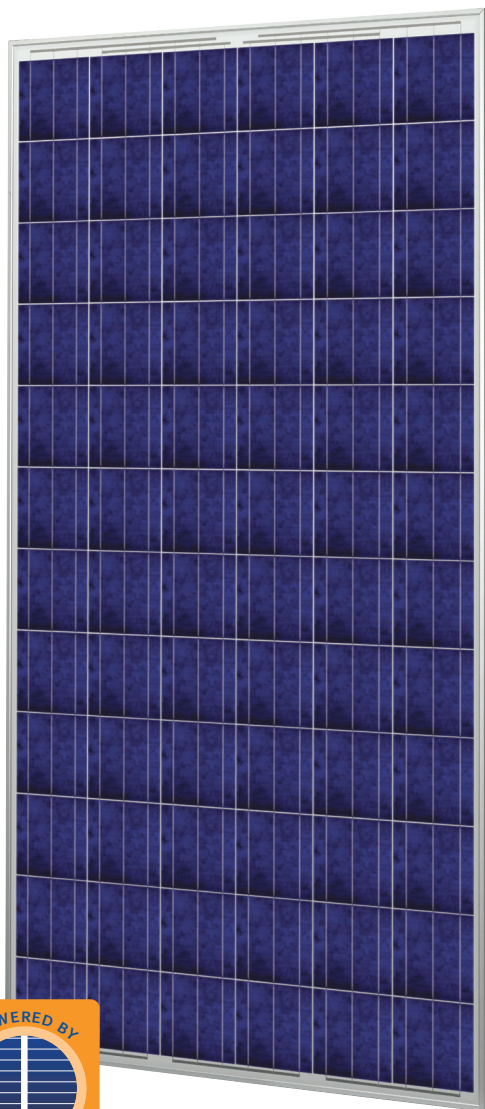
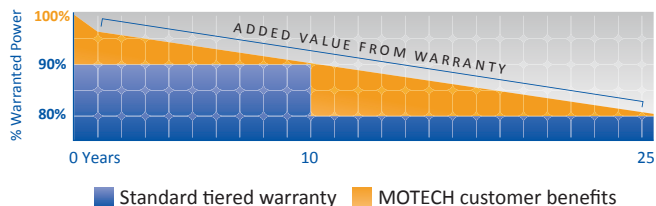
- 72 MOTEC multicrystalline solar cells connected in series
- Positive power tolerance of 0~3% improves system performance
- Industry-leading module efficiency: maximum efficiency of 15.9%
- Dual certified to UL and International IEC standards
- Designed for 600V or 1000V systems
- Tested up to 5400Pa for maximum load resistance
- Progressive Power Warranty guarantees 80.2% of rated power at 25 years
- Manufactured globally with world-class quality standards

## QUALITY, RELIABILITY, AND KWH YIELD

MOTEC modules are powered by industry acknowledged high performance, reliable MOTEC silicon cells. 20 years of experience in solar module engineering and design, along with rigorous durability and performance tests, ensure reliable lifetime performance and maximum kWh yield.

## 25-YEAR PROGRESSIVE WARRANTY\*

- 25-year progressive power warranty
- 10-year warranty on materials and workmanship



## CERTIFICATIONS & STANDARDS\*

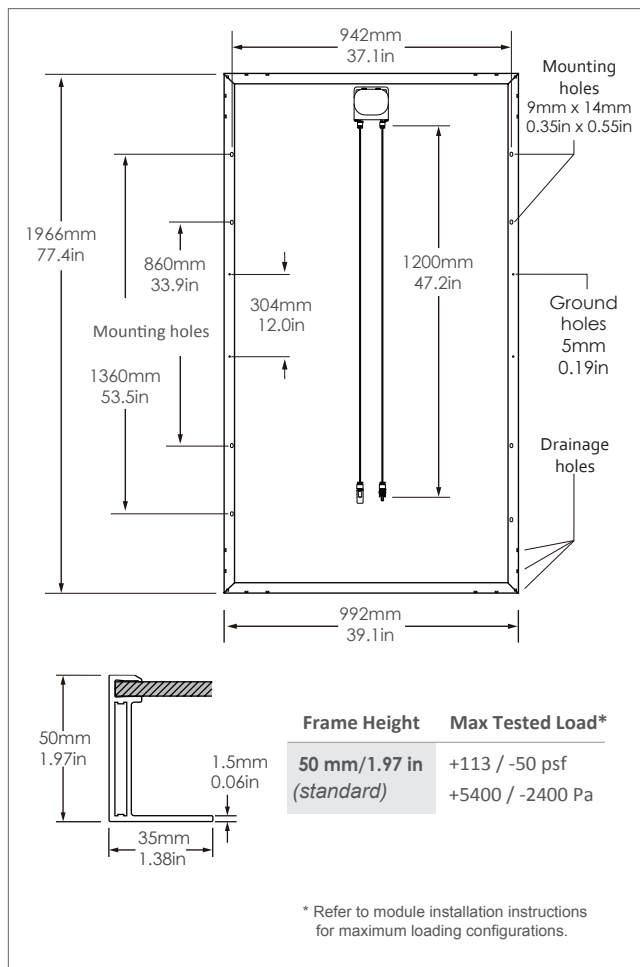


Application Class A Safety Class II

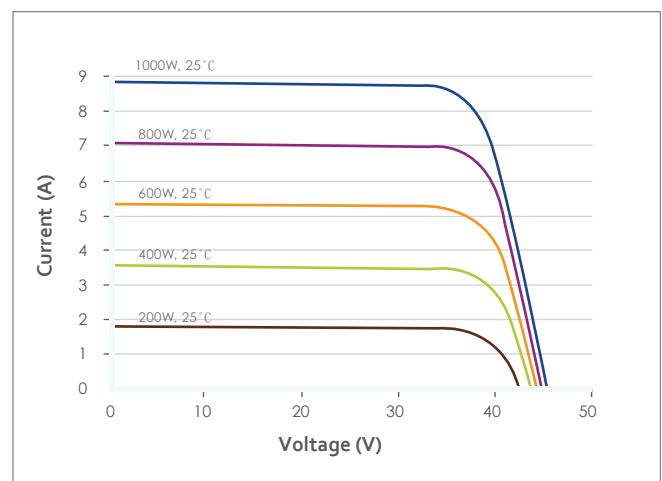
**Intertek**  
 UL1703  
 IEC61215  
 IEC61730-1,2



\* Please refer to our website at [www.motechsolar.com](http://www.motechsolar.com) for certification and warranty details

**PHYSICAL CHARACTERISTICS**

**PHYSICAL DESIGN PROPERTIES**

Weight	58.86 lb [26.7 kg]
Glass	4.0mm low iron tempered glass with anti-reflective coating
Hailstone Impact Resistance	1" @ 50 mph [25 mm @ 80 kph]
Junction Box	IP65/IP67 rated UL 600V/IEC 1000V Certified
Output Cables	4.0mm <sup>2</sup> Universal PVWire, 1200mm[47.2in]
Connectors	MC4 Compatible

**IV CURVE**

**ELECTRICAL PERFORMANCE**

	IM72C3-300		IM72C3-305		IM72C3-310	
STC Peak Power (W)	300		305		310	
NOCT Peak Power (W)	222		226		229	
Efficiency (%)	15.4%		15.6%		15.9%	
<b>Test Conditions</b>	<b>STC</b>	<b>NOCT</b>	<b>STC</b>	<b>NOCT</b>	<b>STC</b>	<b>NOCT</b>
Max. Power Voltage V <sub>mpp</sub> (V)	36.20	33.21	36.60	33.58	36.90	33.85
Max. Power Current I <sub>mpp</sub> (A)	8.29	6.68	8.33	6.72	8.40	6.78
Open Circuit Voltage V <sub>oc</sub> (V)	44.90	41.85	45.30	42.22	45.59	42.49
Short Circuit Current I <sub>sc</sub> (A)	8.72	7.07	8.76	7.11	8.83	7.16

**ELECTRICAL PERFORMANCE PARAMETERS**

Isc Temperature Coefficient	$\alpha$ (%/°C)	+0.07 ± 0.02	Max. Series Fuse	15A
Voc Temperature Coefficient	$\beta$ (%/°C)	-0.34 ± 0.01	Max. System Voltage	IEC 1000V
Pmax Temperature Coefficient	$\gamma$ (%/°C)	-0.46 ± 0.02		UL 600V/ 1000V
Efficiency Reduction at 200W/m <sup>2</sup> , 25°C		<5%	Normal Operating Cell Temp. (NOCT)	45°C ± 2°C
Operating Temperature		-40°C ~ +85°C	Limiting Reverse Current (I <sub>r</sub> )	15A

IV parameters are rated at Standard Test Conditions (Irradiance of 1000 W/m<sup>2</sup>, AM 1.5, cell temperature 25°C). All measurements are guaranteed at the laminate leads. NOCT is measured at 800 W/m<sup>2</sup>, 20°C ambient, and 1 m/s windspeed. Specifications are subject to change without notice. Motech reserves the rights of final interpretation and revision on this datasheet.

**MA001764 Rev D Apr 2015**