



IM54 SERIES PHOTOVOLTAIC MODULES

PEAK POWER: 220-230 Wp

FEATURES INCLUDE:

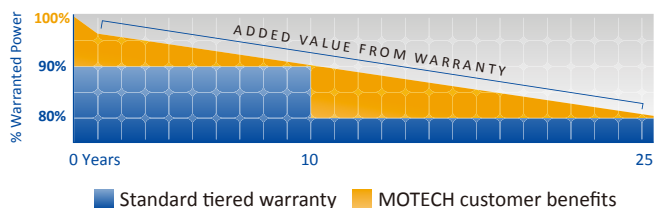
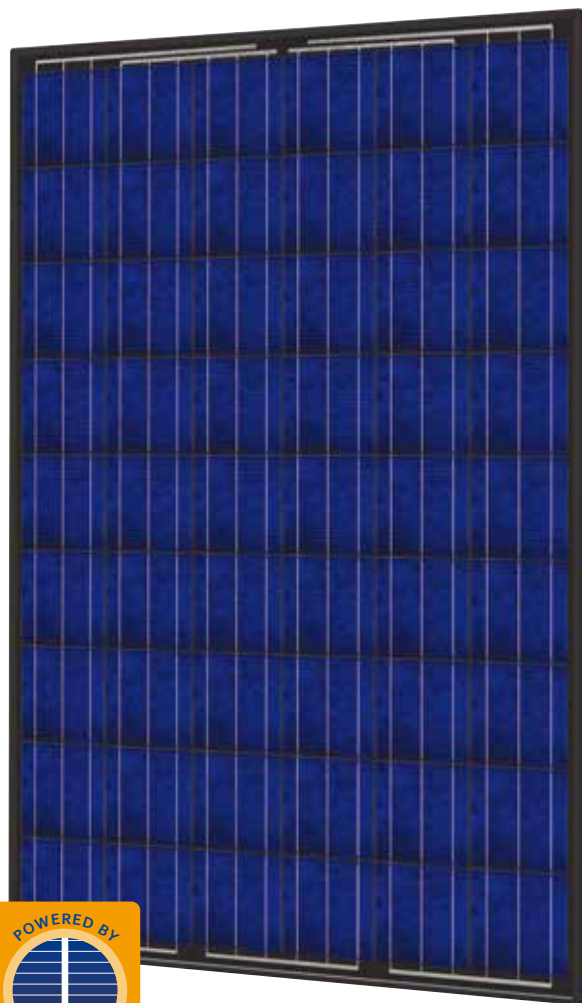
- 54 MOTTECH multicrystalline solar cells connected in series
- Positive power tolerance of 0~3% improves system performance
- Industry-leading module efficiency
- For grid-tied applications
- Tested up to 5400Pa for maximum load resistance
- Progressive Power Warranty guarantees 80.2% of rated power at 25 years
- Manufactured globally with world-class quality standards

QUALITY, RELIABILITY, AND KWH YIELD

MOTTECH modules are powered by industry acknowledged high performance, reliable MOTTECH 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

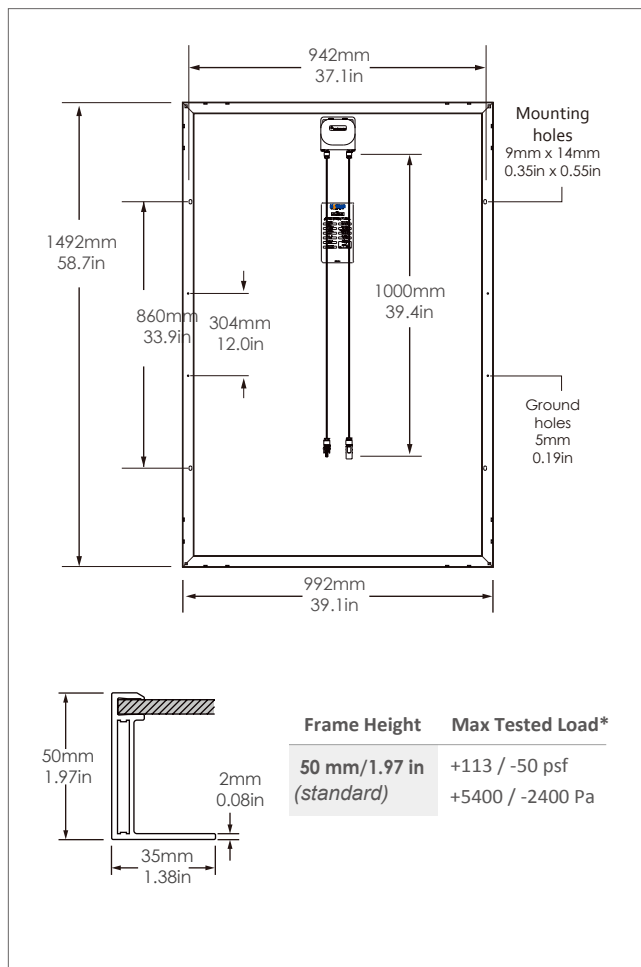


CERTIFICATIONS & STANDARDS*

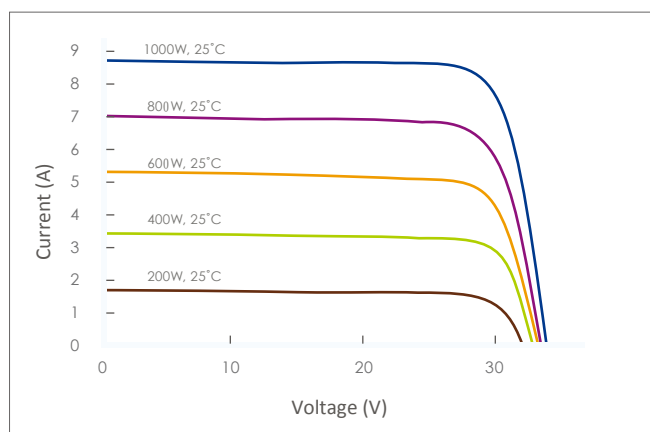


Intertek
UL1703
IEC61215
IEC61730-1,2

* Please refer to our website at www.mottechsolar.com for certification and warranty details

PHYSICAL CHARACTERISTICS

PHYSICAL DESIGN PROPERTIES

Weight	40.1 lb [18.2 kg]
Glass	3.2mm low iron tempered glass with anti-reflective coating
Hailstone Impact Resistance	1" @ 50 mph [25 mm @ 80 kph]
Junction Box	IP65 rated
Output Cables	4.0mm ² Universal PVWire, 1000mm[39.4in]

IV CURVE

ELECTRICAL PERFORMANCE
IM54B3-220
IM54B3-225
IM54B3-230

STC Peak Power (W)	220	225	230			
NOCT Peak Power (W)	162	165	169			
Efficiency (%)	14.9%	15.2%	15.5%			
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power Voltage V _{mpp} (V)	27.47	25.17	27.82	25.46	27.69	25.29
Max. Power Current I _{mpp} (A)	8.01	6.43	8.09	6.50	8.31	6.68
Open Circuit Voltage V _{oc} (V)	33.78	31.30	33.91	31.42	33.81	31.33
Short Circuit Current I _{sc} (A)	8.55	6.93	8.63	6.99	8.86	7.18

ELECTRICAL PERFORMANCE PARAMETERS

I _{sc} Temperature Coefficient	α (%/°C)	+0.07 ±0.02	Max. Series Fuse	15A
V _{oc} Temperature Coefficient	β (%/°C)	-0.34 ±0.01	Max. System Voltage	IEC 1000V
				UL 600V/ 1000V
P _{max} Temperature Coefficient	γ (%/°C)	-0.46 ±0.02	Normal Operating Cell Temp. (NOCT)	46°C ± 2°C
Efficiency Reduction at 200W/m ² , 25°C		<5%	Limiting Reverse Current (I _r)	9.0A

IV parameters are rated at Standard Test Conditions (Irradiance of 1000 W/m², AM 1.5, cell temperature 25°C). All measurements are guaranteed at the laminate leads. NOCT is measured at 800 W/m², 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.

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