

IM54 Series Photovoltaic Modules

Peak Power: 210-220Wp

► Features

- 54 MOTTECH multicrystalline solar cells connected in series
- Designed for 600V or 1000V applications
- For residential, commercial and solar farm grid-tied applications
- Output power tolerance of -3% +5%
- Robust, anodized aluminum frame and tempered glass
- Tyco junction box, easy click SOLARLOK® connectors and cables
- Manufactured globally with world-class quality standards

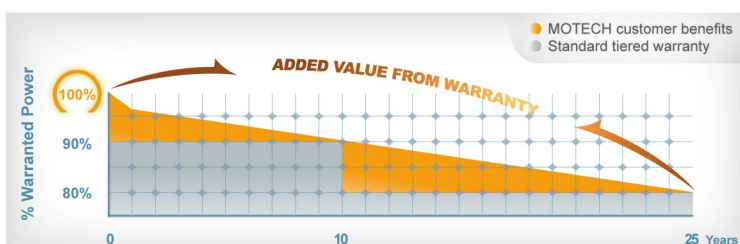
► Quality, Reliability, and kWh Yield

MOTTECH modules are powered by industry acknowledged high performance, reliable silicon cells. The modules have been designed and engineered with over 20 years of industry experience. Rigorous durability and performance tests are performed to ensure each module's lifetime performance and maximum kWh yield.



► 25-Year Progressive Warranty*

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

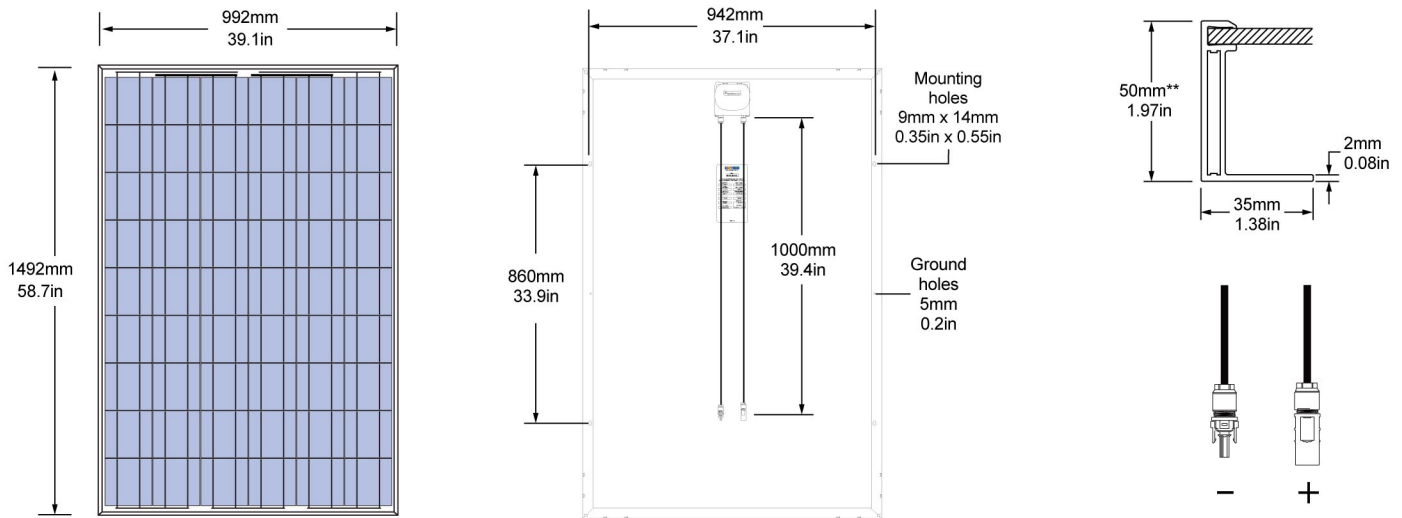


► Certifications & Standards*



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

Physical Characteristics

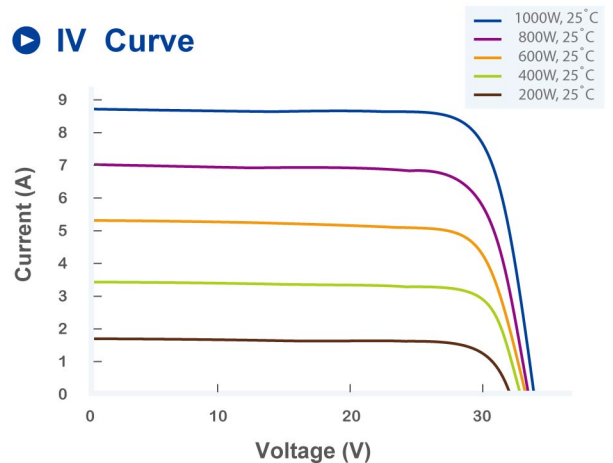


Physical Design Properties

Weight	40.1 lb [18.2 kg]
Maximum Tested Load	±50 psf [2400 Pa] / +113 psf [5400 Pa] *
Hailstone Impact Resistance	1" @ 50 mph [25 mm @ 80 kph]
Junction Box	IP65 rated
Output Cables	4.0mm ² Universal PV Wire, 1000mm [39.4in], Tyco SOLARLOK [®] Connectors

* Refer to module installation instructions for maximum loading configurations.
** Please also inquire with your dealer on the option of 40mm frame height.

IV Curve



Electrical Performance

Module Model Number		IM54D2-210-T10B50		IM54D2-215-T10B50		IM54D2-220-T10B50	
Peak Power	Pmax(Wp)	210		215		220	
Test Conditions		STC	NOCT	STC	NOCT	STC	NOCT
Max. Power Voltage	Vmpp(V)	26.53	23.99	26.89	24.39	27.28	24.77
Max. Power Current	Impp(A)	7.91	6.35	7.99	6.41	8.06	6.48
Open Circuit Voltage	Voc(V)	33.18	30.33	33.48	30.72	33.81	31.01
Short Circuit Current	Isc(A)	8.48	6.88	8.55	6.94	8.62	6.99

Electrical Performance Parameters

Isc Temperature Coefficient	α (%/°C)	+0.07 ±0.02	Max. Series Fuse	15A
Voc Temperature Coefficient	β (%/°C)	-0.34 ±0.01	Max. System Voltage	600V, 1000V
Pmax Temperature Coefficient	γ (%/°C)	-0.46 ±0.02	Normal Operating Cell Temp. (NOCT)	48°C ± 2°C
Efficiency Reduction at 200W/m ² , 25°C		<5%	Limiting Reverse Current (Ir)	8.9A

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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