

# **IM60 Series Photovoltaic Modules**

Peak Power: 230-245Wp

#### Features

- > 60 MOTECH 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<sup>®</sup> connectors and cables
- > Manufactured globally with world-class quality standards

## Quality, Reliability, and kWh Yield

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







For product and purchase inquries contact:



CLEAN ENERGY SOLUTIONS www.ecodirect.com

#### Certifications & Standards\*





Application Class A Safety Class II



IEC 61215 IEC 61730 UL 1703



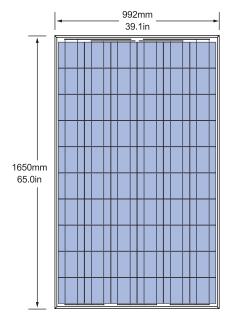
CEC listed (US)
CEC listed (AUS)
FSEC listed
J-PEC listed

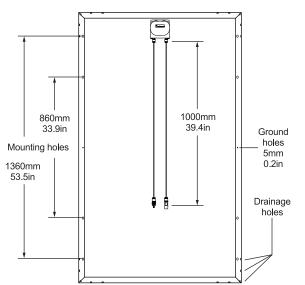
# 25-Year Extended Warranty\*

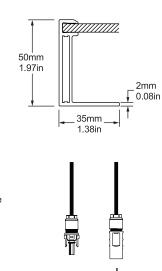
- > 10-year warranty at 90%; 25-year warranty at 80%
- > 5-year warranty on materials and workmanship
- \* Please refer to our website for certification and warranty details.



## Physical Characterstics





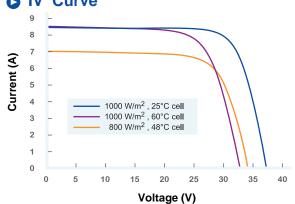


# Physical Design Properties

Weight	43.7 lb [19.8 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 <sup>2</sup> Universal PV Wire, 1000mm [39.4in], Tyco SOLARLOK <sup>®</sup> Connectors

<sup>\*</sup>Refer to module installation instructions for maximum loading configurations.

## **▶** IV Curve



### Electrical Performance

Module Model	Number	MTPVp-	-230-MSC	MTPVp-	235-MSC	MTPVp-	-240-MSC	MTPVp-2	245-MSC
Peak Power	Pmax(Wp)	2	30	2	35	2	40	2	45
Test Conditi	ons	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power Voltage	Vmpp(V)	29.1	26.4	29.4	26.6	29.8	27.0	29.9	27.1
Max. Power Current	Impp(A)	7.9	6.3	8.0	6.4	8.1	6.5	8.2	6.5
<b>Open Circuit Voltage</b>	Voc(V)	36.8	33.8	37.1	34.1	37.3	34.2	37.4	34.3
<b>Short Circuit Current</b>	Isc(A)	8.4	6.8	8.5	6.9	8.6	7.0	8.7	7.1

#### **○** 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 <sup>2</sup> , 25°C		<5%	Limiting Reverse Current (Ir)	8.7A

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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