

IM72 Series Photovoltaic Modules

Peak Power: 285-295Wp

► Features

- > 72 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

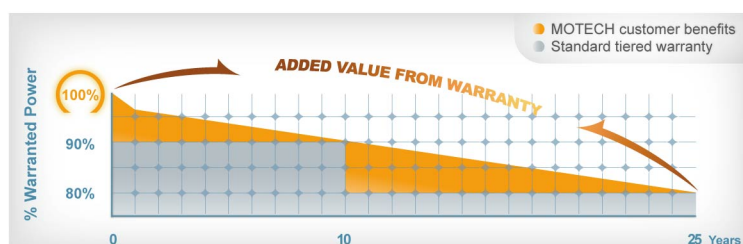
► Quality, Reliability, and kWh Yield

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*

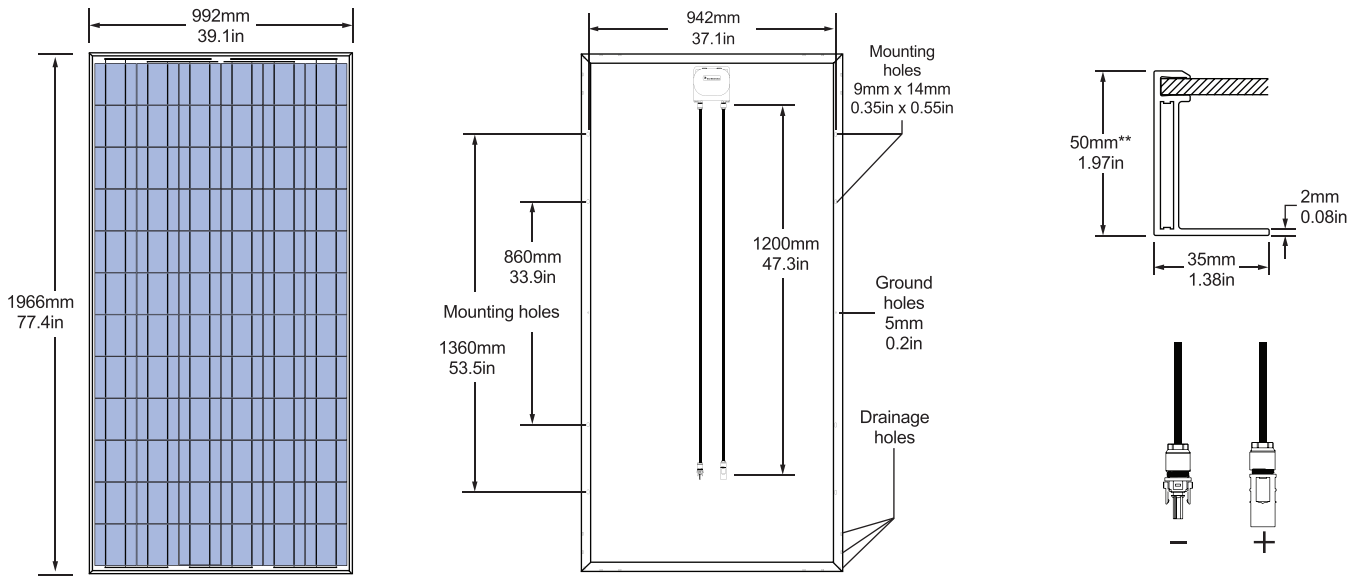


Application Class A
Safety Class II

Intertek
IEC 61215
IEC 61730

Intertek
UL 1703

Physical Characteristics

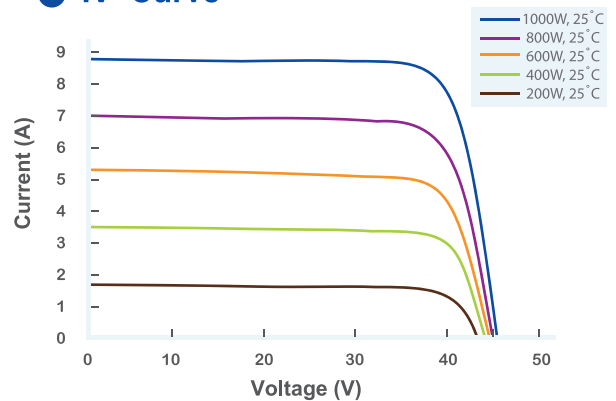


Physical Design Properties

| | |
|-----------------------------|--|
| Weight | 59.5 lb [27.0 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 45mm frame height.

IV Curve



Electrical Performance

| Module Model Number | IM72C2-285-T12B50 | | IM72C2-290-T12B50 | | IM72C2-295-T12B50 | | | |
|-----------------------|-------------------|--|-------------------|-------|-------------------|-------|-------|-------|
| Peak Power | Pmax(Wp) | | 285 | | 290 | | 295 | |
| Test Conditions | | | STC | NOCT | STC | NOCT | STC | NOCT |
| Max. Power Voltage | Vmpp(V) | | 35.88 | 32.50 | 36.24 | 32.82 | 36.63 | 33.24 |
| Max. Power Current | Imp(A) | | 7.94 | 6.37 | 8.00 | 6.44 | 8.05 | 6.47 |
| Open Circuit Voltage | Voc(V) | | 44.40 | 40.67 | 44.89 | 41.23 | 45.12 | 41.44 |
| Short Circuit Current | Isc(A) | | 8.53 | 6.92 | 8.60 | 6.98 | 8.64 | 7.01 |

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.

MA001566 Rev A Mar. 2012

