



Mitsubishi Electric has 40 years' experience in the PV industry, remaining the global leader in providing optimal solar products.

## **Diamond Premium 275W**

### **Increased cell output, Anti-reflective Glass, Taguchi Method**

Greater conductivity of cell electrodes and carrier charge resulting in a 5% increase in power capacity, along with a 2.5% increase in overall efficiency due to the structure of cell connectivity. Anti-reflective coating improves light transmittance through the glass, resulting in module output increase of 2% along with higher resistance to adhesion of dust. Utilizing "Taguchi Method" throughout entire process from research to assembly, each module has strong cell uniformity due to high quality mechanical inspections.

Improved frame including a hollow-less L-frame design with additional protection bar insert result in approximately double durability of each module.

Internal testing parameters used are well above international standards.

\*Information from Mitsubishi Electric US, Inc. website: [www.mitsubishielectricsolar.com](http://www.mitsubishielectricsolar.com)

# DiamondPremium™

## MLE 275W



The Diamond Premium 275W is a high-efficiency module with half-cut, four busbar monocrystalline cells. Designed for durability with a double coated anodized frame and I-beam support bar, the Diamond Premium excels in any environment.

Mitsubishi Electric is a global leader in providing superior-quality photovoltaic modules to businesses and residences around the world. With over 40 years experience in the photovoltaic industry, we manufacture products designed and built for optimal efficiency and reliability.

### High Power Output

Our modules are designed for high-efficiency and high power output to utilize limited space while giving you greater return on investment. Each cell is matched for electrical uniformity to eliminate hotspots and improve reliability.

### High Reliability

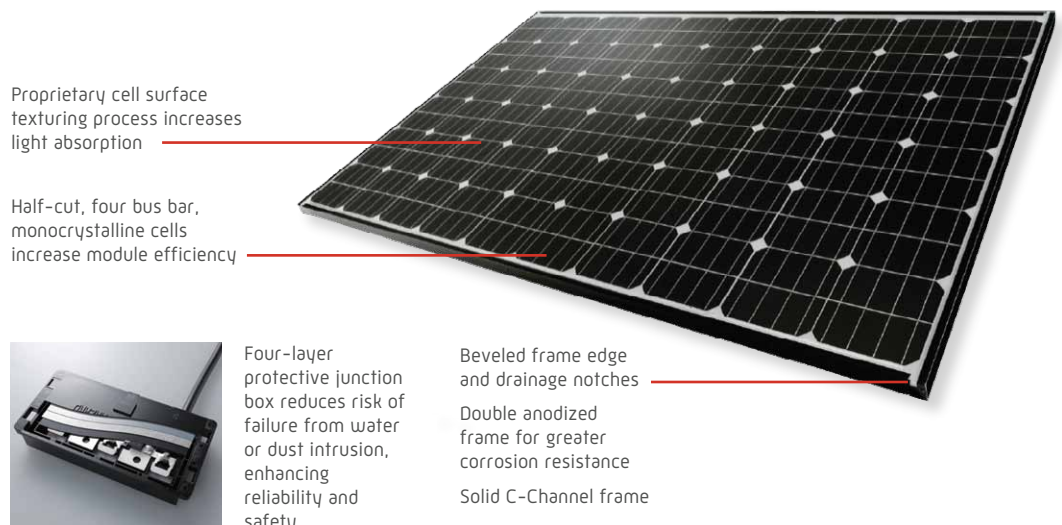
Engineering excellence and attention to the finest detail ensure longevity and optimal performance. Our corrosion-resistant design allows installation next to saltwater. With a high static load rating of 5400Pa to endure high wind and snow loading, our modules can withstand the harshest elements.

### Mitsubishi Electric Quality

Our experienced engineers and meticulous manufacturing processes provide the highest quality products possible. Automated production lines ensure consistent high quality in every cell and module, each flash tested to ensure rated level of output. We use PV wire for safe use with transformerless inverters. All Mitsubishi Electric modules are manufactured in Japan and made with 100% lead-free solder, a safer and more eco-friendly solution.

## FEATURES

- 25 years** Linear performance warranty
- 10 years** Workmanship & materials warranty
- 0/+5%** Positive power tolerance
- 1000 volts** Maximum system voltage
- 100% lead-free solder** Safer for the environment



COUNT ON ME



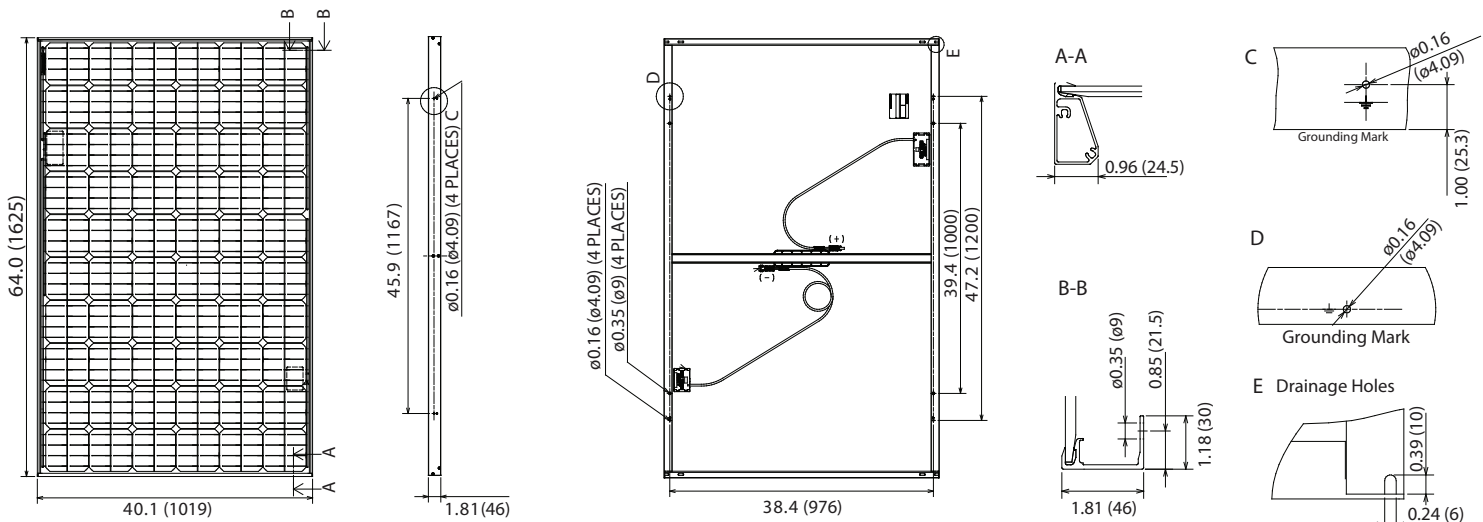
## Module Specifications

Model name	PV-MLE275HD2
Cell type	Monocrystalline Silicon, 78mm x 156 mm
Number of cells	120 cells
Maximum power rating (Pmax)	275 W
Warranted minimum Pmax	275 W
PV USA test condition rating (PTC)	247.4Wp
Open circuit voltage (Voc)	38.5V
Short circuit current (Isc)	9.28A
Maximum power voltage (Vmp)	32.1V
Maximum power current (Imp)	8.58A
Module efficiency	16.6%
Aperture efficiency	17.9%
Tolerance of maximum power rating	-0/+5%
Weight Static load test passed	5,400 Pa
Number of bus bars per cell	4 Bus bars

## DiamondPremium™

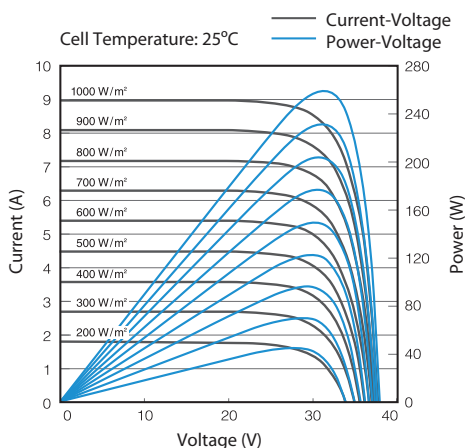
Normal operating cell temperature (NOCT)	46.5°C
Maximum system voltage, DC	600V & 1000V (UL), 1000V (IEC)
Fuse rating	15A
Dimensions	64.0 x 40.1 x 1.81 inch (1625 x 1019 x 46 mm)
Weight	44 lbs (20kg)
Number of modules per pallet	22
Number of modules per container (40 ft. container)	616
Output terminal	(+) 800mm, (-) 1250mm with SMK (PV-03) connector
Certifications	UL 1703, IEC 61215 2nd Edition, IEC 61730
Fire rating	Type 2, 5, 8

## Drawings and Dimensions Unit: inch (mm)

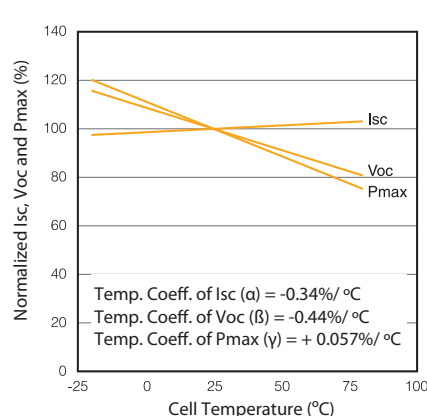


## Electrical Characteristics

### Electrical Performance



### Temperature dependence of Isc, Voc and Pmax



### Irradiance dependence of Isc, Voc and Pmax

