Diamond Premium™
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



Proprietary cell surface texturing process increases light absorption

Half-cut, four bus bar, monocrystalline cells increase module efficiency



Four-layer protective junction box reduces risk of failure from water or dust intrusion, enhancing reliability and safety

Beveled frame edge and drainage notches

Double anodized frame for greater corrosion resistance

Solid C-Channel frame

COUNT ON ME

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SOLAR INNOVATIONS

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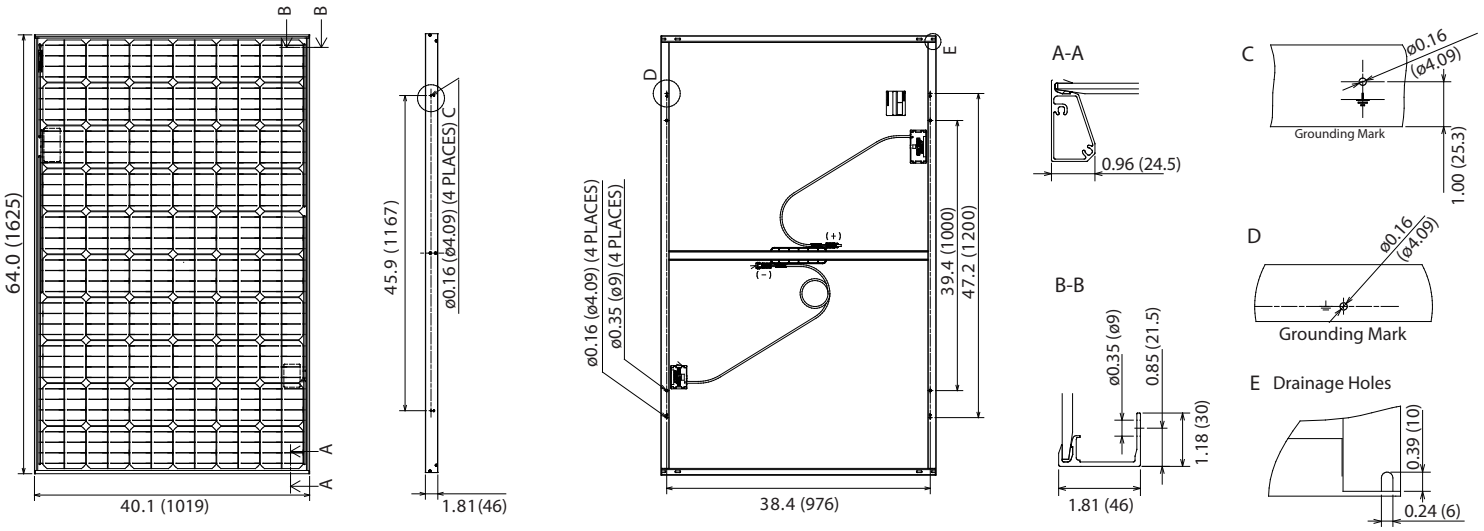
Module Specifications

Diamond Premium™

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

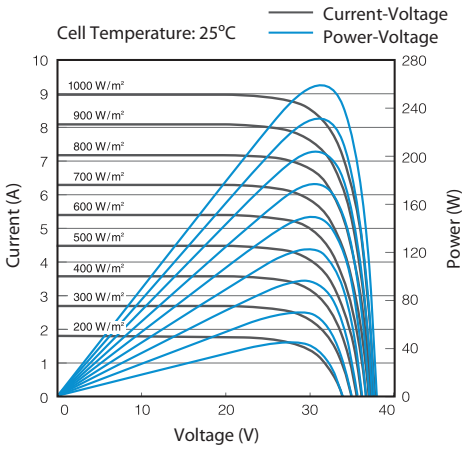
Normal operating cell temperature (NOCT)	46.5°C
Maximum system voltage, DC	1000V (UL), 1000V (IEC)
Fuse rating	15A
Dimensions	64.0 x 40.1 x 1.81 inch (1625 x 1019 x 46 mm)
Weight	44 lbs (20kg)
Number of modules per pallet	22
Number of modules per container (40 ft. container)	616
Output terminal	(+) 800mm, (-) 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)

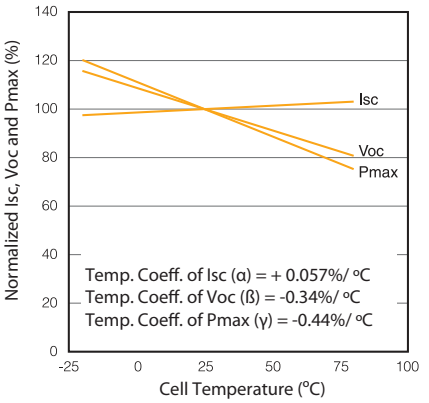


Electrical Characteristics

Electrical Performance

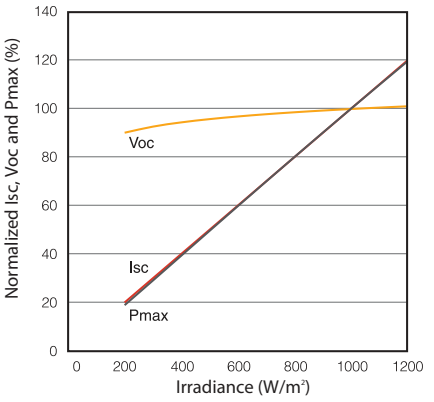


Temperature dependence of Isc, Voc and Pmax



Irradiance dependence of Isc, Voc and Pmax

Cell Temperature: 25°C



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Mitsubishi Electric US, Inc., 5900-A Katella Avenue, CA 90630-5019 Ph: 714-236-6137 Email: pv@meus.mea.com www.MitsubishiElectricSolar.com