

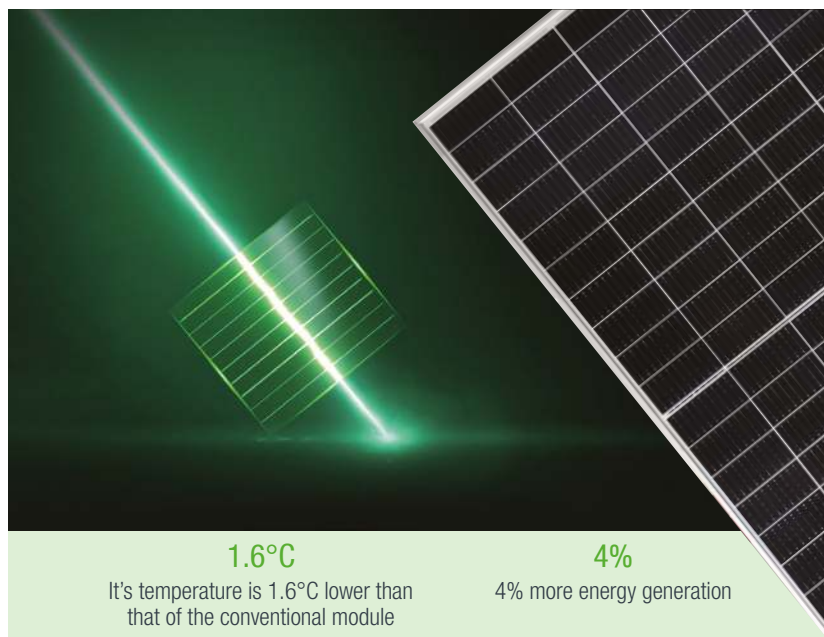
## MP-MF8612M (HV)-455W

MONO PERC 9BB HALF-CUT



### Certificates

ISO 9001: 2015 Quality Management System  
ISO 14001: 2015 Environmental Management System  
IEC 61215 / IEC 61730  
OHSAS 18001: 2007 Occupational Health & Safety Management System



1.6°C

It's temperature is 1.6°C lower than that of the conventional module

4%

4% more energy generation

### Main Features

#### Half-Cut technique leads to increased power output

When the cells are cut into halves, the current are also halved, which enables less internal loss. Series-parallel wiring improves power performance. The working temperature of module and junction box are lower than that of conventional types, which effectively reduces the hot spot risk and reduces overall module damage.

#### Series-parallel wiring mode results in reduced shading loss

Series-parallel wiring will not only reduce power loss from shade but also improves the effective use of supports and space.

#### Excellent temperature performance

The temperature of HC module is 1.6°C lower than that of the conventional module under the same working condition, which results less power loss.

#### Reduced encapsulation loss due to reduced current

HC module is of lower current and lower CTM loss at around 0.2%, while the CTM loss of conventional module is 1%.

#### 1500V high system voltage design

#### Cells

Tier 1 Brands Solar Cells

#### Anti-reflective

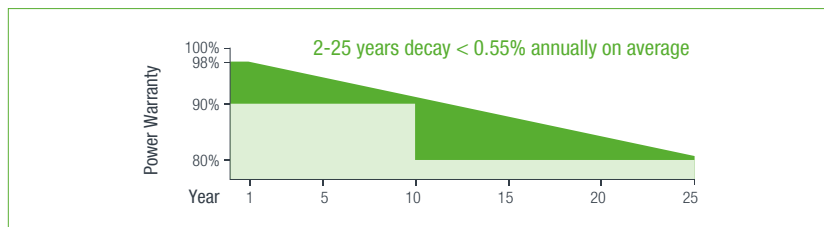
### Linear Performance Warranty

12 years

Product Warranty on Materials and Workmanship

25 years

Linear Power Output Warranty



### Electrical Parameters @ STC

Max. Power Output Pmax (W)	455
Power Tolerance	0 ~ +3%
Max. Power Voltage Vmp (V)	41.63
Max. Power Current Imp (A)	10.93
Open Circuit Voltage Voc (V)	49.89
Short Circuit Current Isc (A)	11.45
Module Efficiency (%)	20.93

\*STC (Standard Test Condition): Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass 1.5

\*Measurement Tolerance (±3.0%)

# SOLAR PANEL

MP-MF8612M(HV)-455W **MasterPower**  
Unlimited power

## Mechanical Parameters

Cell Type	Mono 166 x 83 mm
Number of Cells	144 pcs (6 x 24)
Dimensions (L*W*H)	2094 x 1038 x 35 mm
Weight	24.0 kg
Frame	Anodised Aluminum
Junction Box	IP68, 3 bypass diodes
Cable, Length	4.0 mm <sup>2</sup> , 300 mm

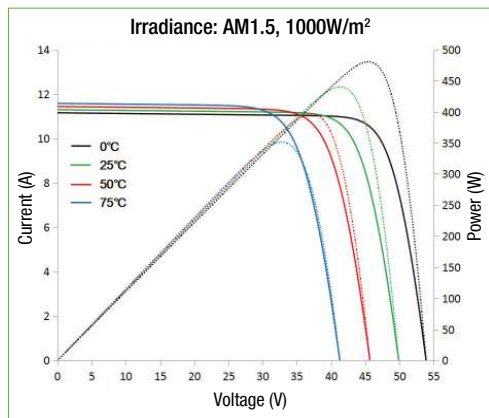
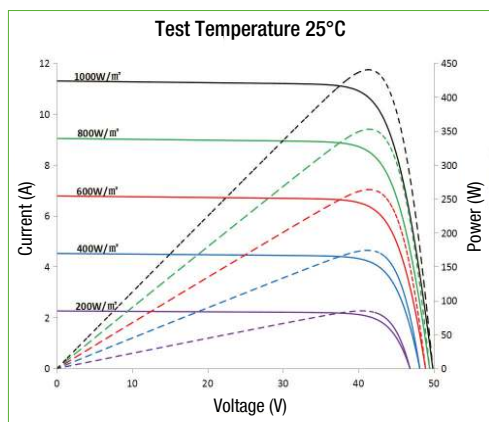
## Temperature Coefficients

Temperature Coefficients of Pmp	-0.36% / °C
Temperature Coefficients of Voc	-0.29% / °C
Temperature Coefficients of Isc	+0.048% / °C

## Package Information

Container 40'HQ	715 pcs
Quantity / Pallet	CTNR: 31 pcs

## I-V Curves



## Electrical Parameters @ NOCT

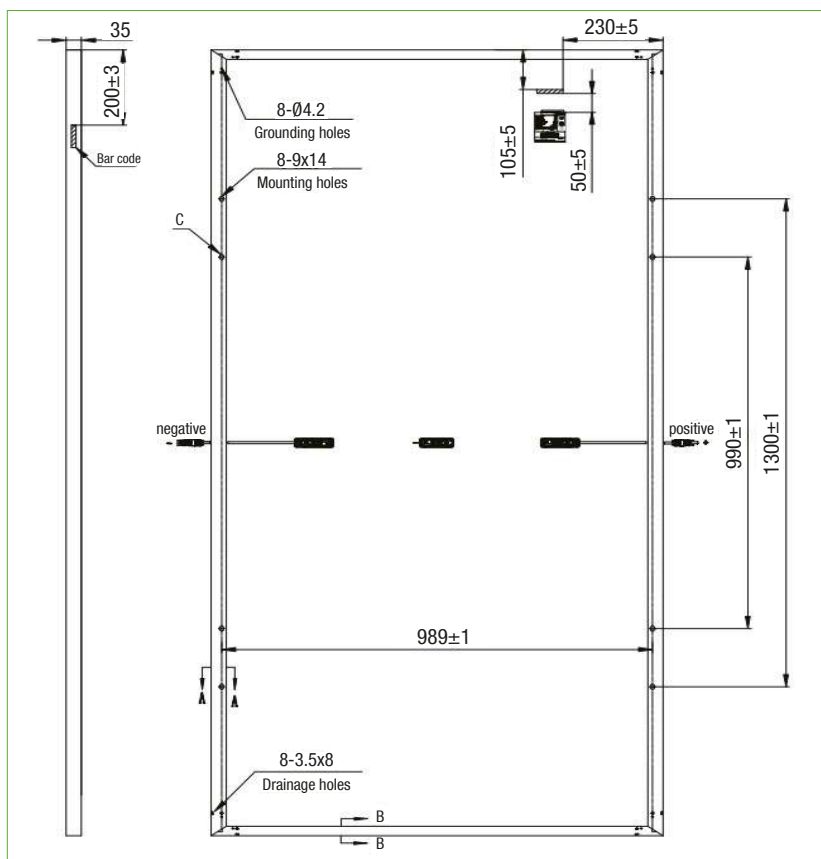
Max. Power Output Pmax (W)	337
Max. Power Voltage Vmp (V)	38.73
Max. Power Current Imp (A)	8.71
Open Circuit Voltage Voc (V)	46.35
Short Circuit Current Isc (A)	9.25

\*NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

## Operating Condition

Maximum System Voltage (V)	1000 (DC)	1500 (DC)
Operating Temperature (°C)	-40 ~ 85	
Max. Wind Load / Snow Load (pa)	2400 / 5400	
Max. Over Current (A)	20	
Application Class	Class A	
Fire Rating	Class C	
NOCT (OC)	45 ± 2	

## Assembly Drawing (Unit: mm)



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