



Made In China

# LIGHTWAY SOLAR MODULE

## LWG1MH72 Series KEY FEATURES

**20.63%**  
Max  
Efficiency

**415W**  
Max Peak  
Power

**10YEAR**  
Product  
Warranty

**25YEAR**  
Linear Power  
Warranty



### Positive Tolerance 0-5W

Provides our customers with maximum power output



### Electric Current Classification

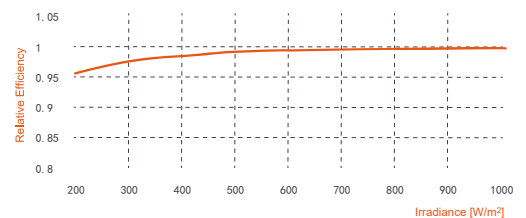
System output maximized by reducing mismatch losses up to 2% with modules sorted and package by amperage



### System Certification

ISO 9001:2015, ISO 14001:2015,  
ISO 45001:2018

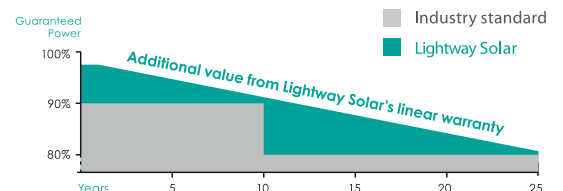
### PERFORMANCE AT LOW IRRADIANCE



The typical relative change in module efficiency at an irradiance of 200W/m<sup>2</sup> in relation to 1000W/m<sup>2</sup> (both at 25°C and AM 1.5 spectrum) is less than 4%.

### LINEAR WARRANTY

- 10-year warranty on materials and workmanship
- 25-year warranty > 83.1% power output
- 2.5% degradation rate the first year
- 0.60% yearly linear degradation



## ELECTRICAL DATA @ STC

Values at standard test condition STC: air mass AM 1.5, irradiance 1000W/m<sup>2</sup>, cells temperature 25°C.

Module Type		LWG1MH72-415	LWG1MH72-410	LWG1MH72-405	LWG1MH72-400	LWG1MH72-395
Peak Power_Pmax	W	415	410	405	400	395
Power tolerance_ΔPmax		±3%				
Voltage at Pmax_Vmpp	V	42.10	41.80	41.50	41.20	40.90
Current at Pmax_Imp	A	9.86	9.81	9.76	9.71	9.66
Open Circuit Voltage_Voc	V	50.46	50.20	49.95	49.68	49.42
Open Circuit Voltage tolerance_Voc		±3%				
Short Circuit Current_Isc	A	10.35	10.30	10.25	10.20	10.15
Short Circuit Current tolerance_Isc		±4%				
Module Efficiency_η		20.63%	20.38%	20.13%	19.88%	19.63%

## ELECTRICAL DATA @ NOCT

Nominal operating cell temperature NOCT: irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1m/s.

Module Type		LWG1MH72-415	LWG1MH72-410	LWG1MH72-405	LWG1MH72-400	LWG1MH72-395
Peak Power_Pmax	W	308.77	304.95	301.23	297.45	294.09
Voltage at Pmax_Vmpp	V	40.31	40.02	39.74	39.45	39.16
Current at Pmax_Imp	A	7.66	7.62	7.58	7.54	7.51
Open Circuit Voltage_Voc	V	47.38	47.14	46.90	46.65	46.41
Short Circuit Current_Isc	A	8.27	8.23	8.19	8.15	8.11

### TEMPERATURE RATING

Nominal operating cell temperature(NOCT)	°C	45±2
Temperature Coefficient of Pmax	%/°C	-0.350
Temperature Coefficient of Isc	%/°C	0.051
Temperature Coefficient of Voc	%/°C	-0.289

### MAXIMUM RATING

Max. System Voltage	1500VDC
Operating Temperature	-40 ~ +85 °C
Max. Series Fuse Rating	20A
Max. Mechanical load	3600Pa (downward) / 1600Pa (upward). γm=1.5
Fire Resistance Rating	Class C

### CONSTRUCTION MATERIALS

Solar cells	144 mono - silicon cells, 158.75mm*79.375mm
Glass	3.2mm low-iron tempered glass
Encapsulant	ethylene vinyl acetate(EVA)
Frame	anodized aluminium alloy
Cable	4mm <sup>2</sup> PV cable, positive electrode 290mm, negative electrode 145mm (according to customer's requirement)
Installation method	clamp mounting, see installation manual for more

### Connector

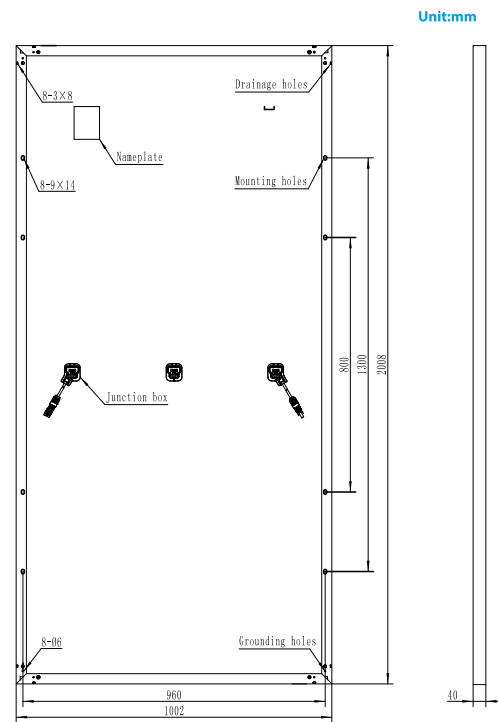
Manufacture	Type
Zhejiang renhe Photovoltaic Technology Co.,Ltd/ Dongguan zherun electronics Technology Co.,Ltd/ QC Solar corporation	05-8/Z4S/QC4.10-cd

### GENERAL DATA

Module Dimension(L×W×H)	2008×1002×40mm
Weight	22.0kg

### PACKING

Modules per pallet	27
Pallets per 40' container	22
Packing box dimension(L×W×H)	2046*1140*1140mm



Module Back View

