



# HW-M12/120H(585-605)

## High Efficiency Mono Solar Module

### Introduction

MBB and high-density interconnect technology improves power output and module efficiency.

Deploying advanced non-destructive cutting and half-cut technology, the Module features excellent Mechanical performance.



### Excellent power generation performance

0/+5W positive power tolerance  
Improved low light irradiance performance and low degradation



### Advanced production process

Optimized MBB design  
Cell efficiency >23.0%

### Certificate

TUV: EN IEC 61215, EN IEC 61730  
GB/T 19001-2016/ISO 9001:2015  
GB/T 24001-2016/ISO 14001:2015  
GB/T 45001-2020/ISO 45001:2018



### Stable mechanical performance

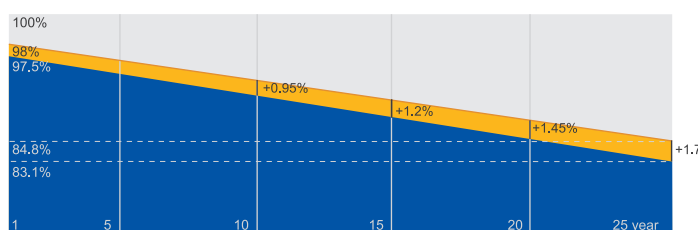
Passed rigorous hail test  
Withstands 5400Pa snow and 2400Pa wind loads



### Superior quality control

Full automatic production line  
100% three times EL and appearance inspection

### Warranty



■ New linear power warranty ■ Standard module linear power warranty

## Hiwatt Solar Limited

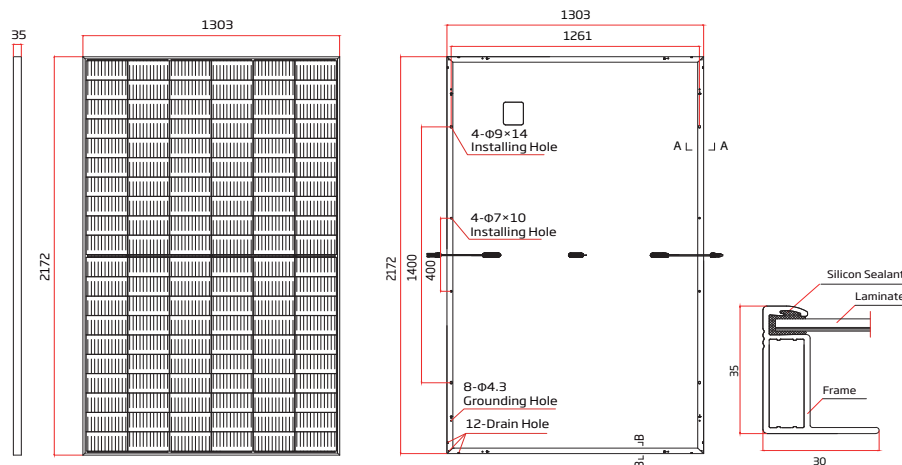
No.6, Fazhan Road, Dongtai city, Jiangsu, China

Tel:+86-523-89118897

Email: [Info@hiwattsolar.com](mailto:Info@hiwattsolar.com)

Web: [www.hiwattsolar.com](http://www.hiwattsolar.com)

## MECHANICAL DIAGRAMS



## SPECIFICATIONS

Solar Cells	Monocrystalline
No. Of Cells	120(6x20)
Dimensions	2172x1303x35mm
Weight	30.9kgs
Junction Box	IP 68, 3 Diodes
Cables	4.0mm <sup>2</sup>
Connectors	QC 4.10-35(1500V)

## ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)	585	590	595	600	605
Power Tolerance-PMAX (W)			0 ~ +5		
Maximum Power Voltage -VMPP (V)	33.8	34.0	34.2	34.4	34.6
Maximum Power Current -IMPP (A)	17.31	17.35	17.40	17.44	17.49
Open Circuit Voltage -VOC (V)	40.9	41.1	41.3	41.5	41.7
Short Circuit Current -ISC (A)	18.37	18.42	18.47	18.52	18.57
Module Efficiency (%)	20.7	20.8	21.0	21.2	21.4

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.

## ELECTRICAL DATA (NOCT)

Maximum Power-PMAX (Wp)	443	447	451	454	458
Maximum Power Voltage -VMPP (V)	31.5	31.7	31.9	32.0	32.2
Maximum Power Current -IMPP (A)	14.05	14.09	14.13	14.18	14.22
Open Circuit Voltage -VOC (V)	38.5	38.7	38.9	39.1	39.3
Short Circuit Current -ISC (A)	14.81	14.85	14.88	14.92	14.96

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

## TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coe-cient of PMAX	- 0.34%/°C
Temperature Coe-cient of VOC	- 0.25%/°C
Temperature Coe-cient of ISC	0.04%/°C

## MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	30A

## PACKAGING

Modules per box:	31 pieces
Modules per 40' container:	558 pieces

## WARRANTY

- 12 year Product Workmanship Warranty
- 25 year Power Warranty
- 0.55% Annual Power Attenuation
- 2% first year degradation

## CHARACTERISTICS

