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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Anhui Uzon Photovoltaic Technology Co., Ltd.**

**UZ158MHC400-410-72**

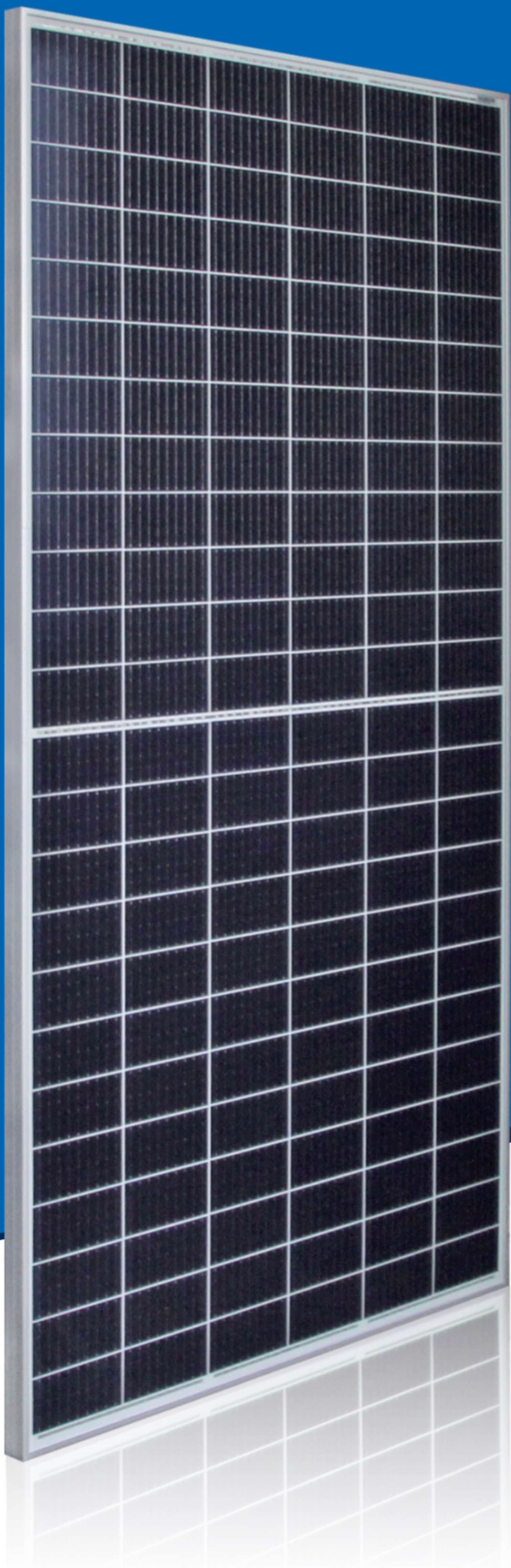
**UZ158MHC410-72**

Also available on the web at  
[EnergyPal.com/anhui-uzon-photovoltaic-technology-co-ltd-solar-panels/uz158mhc410-72](http://EnergyPal.com/anhui-uzon-photovoltaic-technology-co-ltd-solar-panels/uz158mhc410-72)



# UzonSemi™

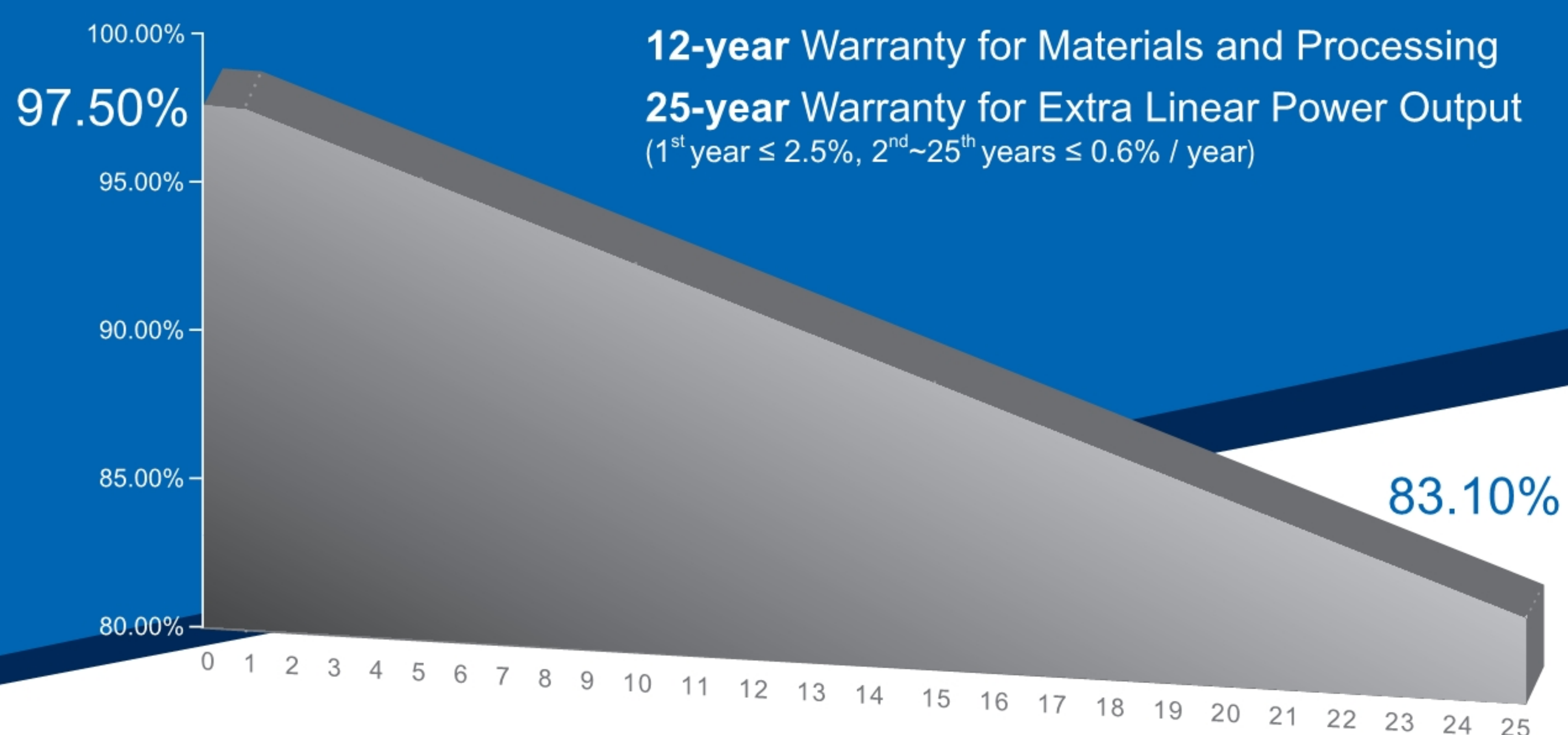
Incredible Power for Small Body



## 400W~410W

Monocrystalline PV Module

### UZM410-72HCSeries (158.75)



#### COMPREHENSIVE CERTIFICATES



#### KEY FEATURES

- OUTPUT POSITIVE TOLERANCE**  
 Guaranteed 0~+5W positive tolerance ensures power output reliability.
- INNOVATIONAL HALF-CELL TECHNOLOGY**  
 Improves the module output, decreases the risk of micro-crack, enhances the module reliability.
- INNOVATIVE PERC CELL TECHNOLOGY**  
 Excellent cell efficiency and output.
- REDUCE SHADOW LOSS**  
 Effectively reduces the effect of shadow on the module surface.
- REDUCE INTERNAL MISMATCH LOSS**  
 Reduces mismatch loss and improves output.
- PASSED HAIL TEST**  
 Certified to hail resistance: ice ball size (d=45mm) and ice ball velocity (v=30.7m/s).
- Anti PID RESISTANCE**  
 Excellent PID resistance at 96 hours (@85°C /85%) test, and also can be improved to meet higher standards for the particularly harsh environment.

For Global Market



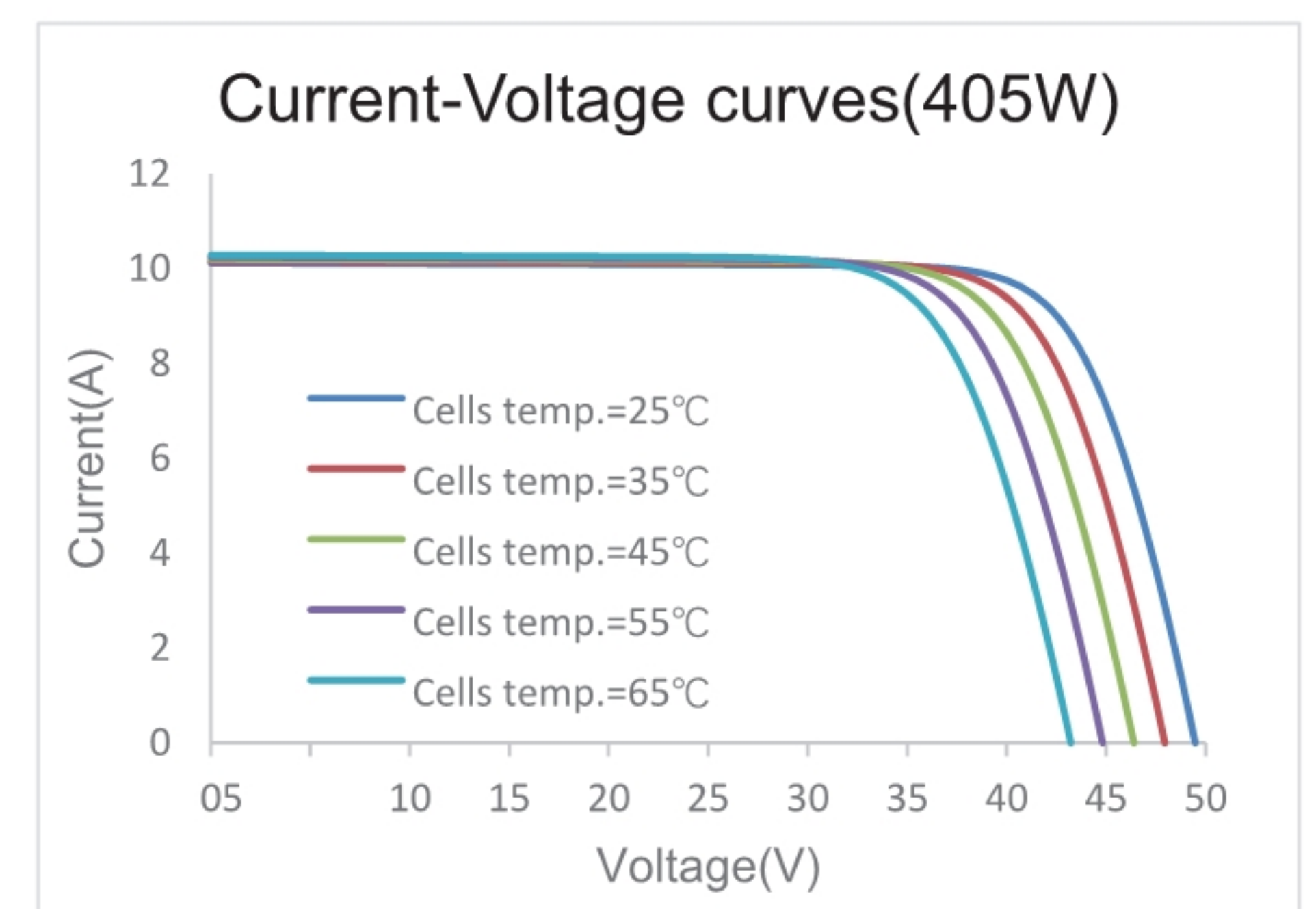
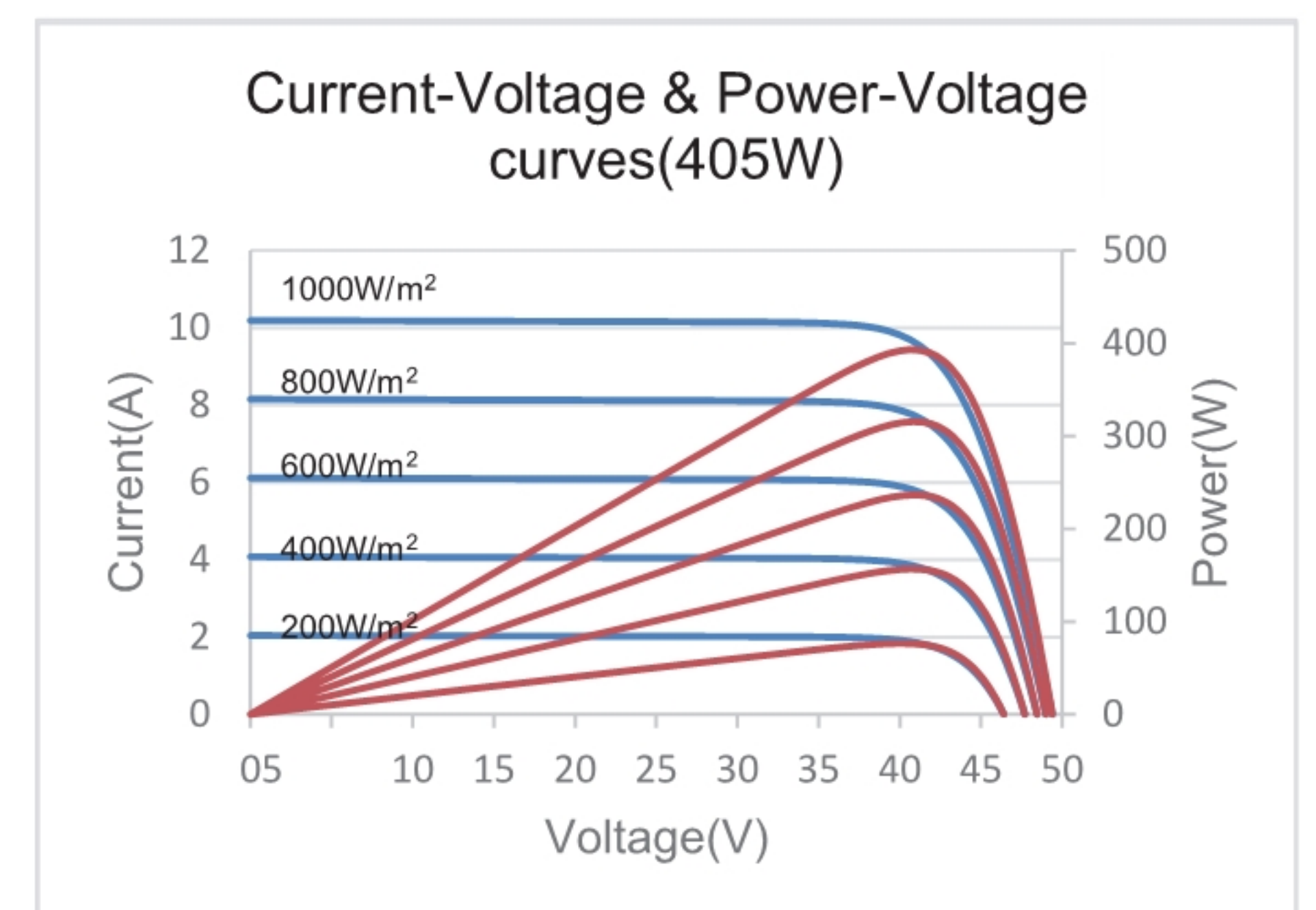


## ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )*	400 Wp	405 Wp	410 Wp
Rated voltage ( $V_{mpp}$ ) at STC	41.32 V	41.59 V	41.85 V
Rated current ( $I_{mpp}$ ) at STC	9.68 A	9.74 A	9.80 A
Open circuit voltage ( $V_{oc}$ ) at STC	49.25 V	49.53 V	49.80 V
Short circuit current ( $I_{sc}$ ) at STC	10.24 A	10.31 A	10.38 A
Module efficiency	19.8%	20.0%	20.3%
Rated output ( $P_{mpp}$ ) at NMOT	297.4 Wp	301.1 Wp	304.8 Wp
Rated voltage ( $V_{mpp}$ ) at NMOT	38.37 V	38.61 V	38.84 V
Rated current ( $I_{mpp}$ ) at NMOT	7.75 A	7.80 A	7.85 A
Open circuit voltage ( $V_{oc}$ ) at NMOT	46.12 V	46.38 V	46.64 V
Short circuit current ( $I_{sc}$ ) at NMOT	8.25 A	8.31 A	8.36 A
Temperature coefficient ( $P_{mpp}$ )		- 0.3528%/°C	
Temperature coefficient ( $I_{sc}$ )		+0.0400%/°C	
Temperature coefficient ( $V_{oc}$ )		- 0.2769%/°C	
Nominal module operating temperature (NMOT)		44±2°C	
Maximum system voltage (IEC/UL)		1500V <sub>DC</sub>	
Number of diodes		3	
Junction box IP rating		IP 67	
Maximum series fuse rating		20 A	

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5  
 NMOT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

## CURVE



## MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	2018 x 1002 x 40 mm 79.45 x 39.45 x 1.57 in
Frame technology	Aluminum, silver anodized
Module composition	Glass / EVA / Backsheet (white)
Front glass thickness	3.2 mm / 0.13 in
Cable length (IEC/UL)	Portrait: 350 mm (13.78 in) Landscape: 1200 mm (47.24 in)
Cable diameter (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Fire performance (IEC/UL)	Class C (IEC) or Type 1 (UL)
Connector type (IEC/UL)	MC4 compatible

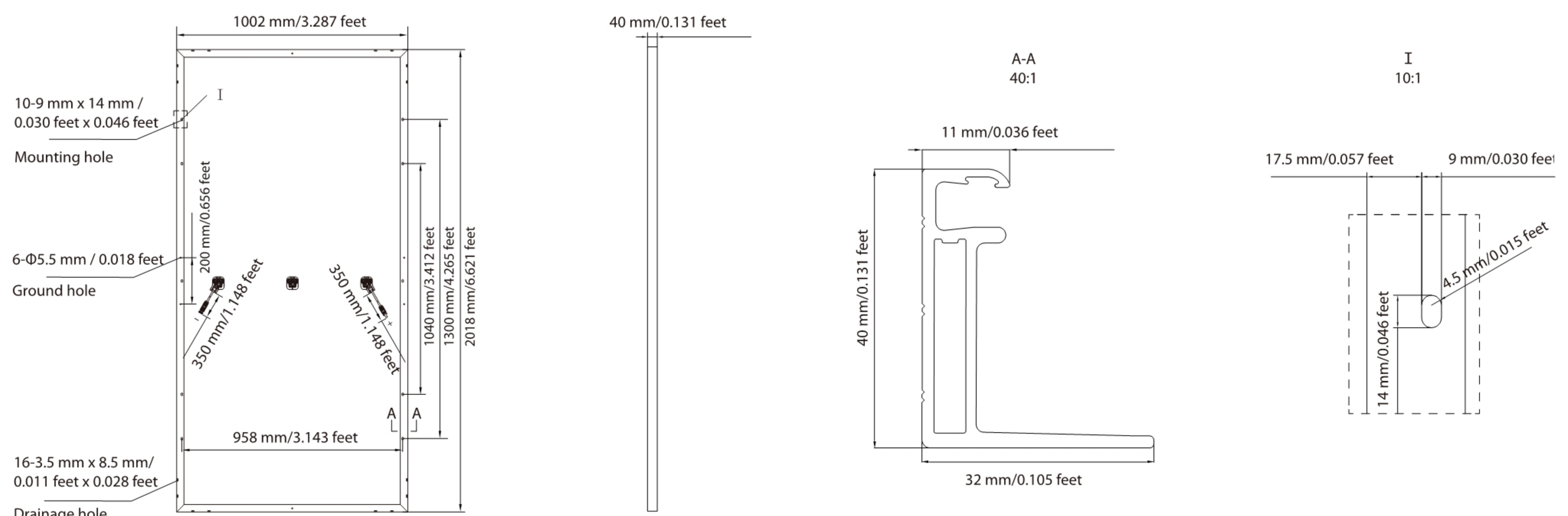
① Refer to Crystalline Silicon PV Module Installation Manual or contact technical department.  
 Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

## PACKING SPECIFICATIONS

① Weight (module only)	22.8 kg / 50.27 lbs
② Packing unit	27 pcs / box
Weight of packing unit (for 40'HQ container)	663 kg / 1462 lbs
Number of modules per 40'HQ container	594 pcs

① Tolerance +/- 1.0kg  
 ② Subject to sales contract

## MODULE DIMENSION DETAILS



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