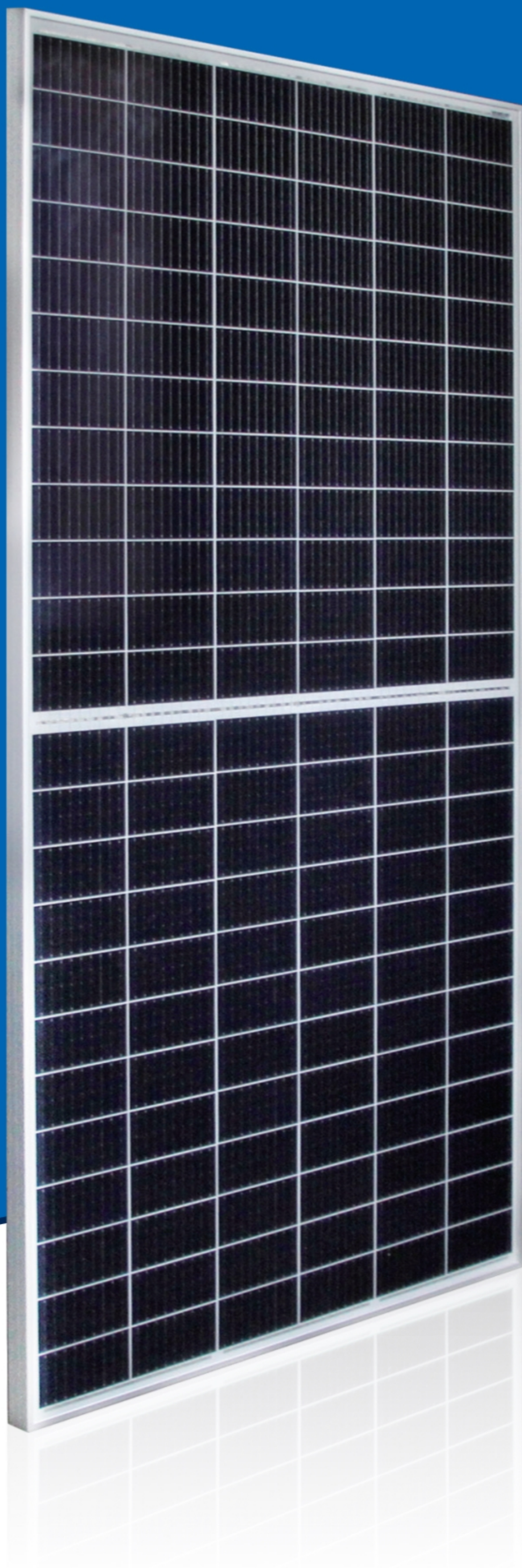


# UzonTwins™

Enjoy the Energy of the Universe

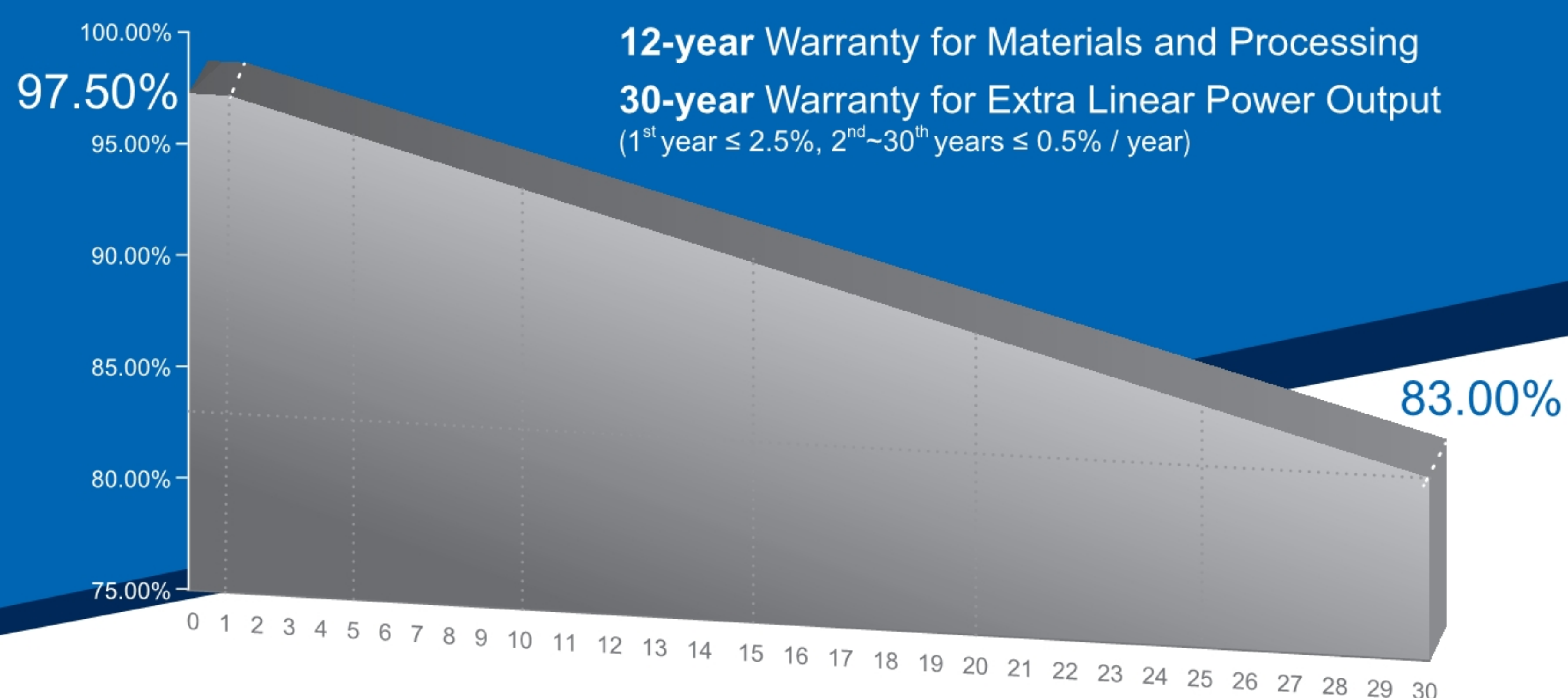


## 405W~415W

P-type Monocrystalline PV Module

**UZM415-72DGBHG** Series (158.75)

UZM415-72DGBHG is bifacial module with white glazed glass



### COMPREHENSIVE CERTIFICATES



### KEY FEATURES

- 
**OUTPUT POSITIVE TOLERANCE**  
 Guaranteed 0~+5W positive tolerance ensures power output reliability.
- 
**ENHANCED FIRE PERFORMANCE**  
 Fire Class A certified according to IEC standard.
- 
**EXCELLENT WEATHER RESISTANCE**  
 Reduces the cell micro-crack and extended product warranty.
- 
**BIFACIAL POWER**  
 The backside makes use of the reflected and scattered light from the surroundings, the modules can yield up to 5%~30% power more, depending on the albedo.
- 
**REDUCE INTERNAL MISMATCH LOSS**  
 Reduces mismatch loss and improves output.
- 
**APPLICABLE FOR MULTI DIFFERENT ENVIRONMENTS**  
 The wide range of applications, such as BIPV, vertical installation, snow area, high humidity area and strong sandstorm area, etc.
- 
**SNAIL TRAIL RESISTANCE**  
 Reduces the probability of snail trails with zero water vapor transmittance.

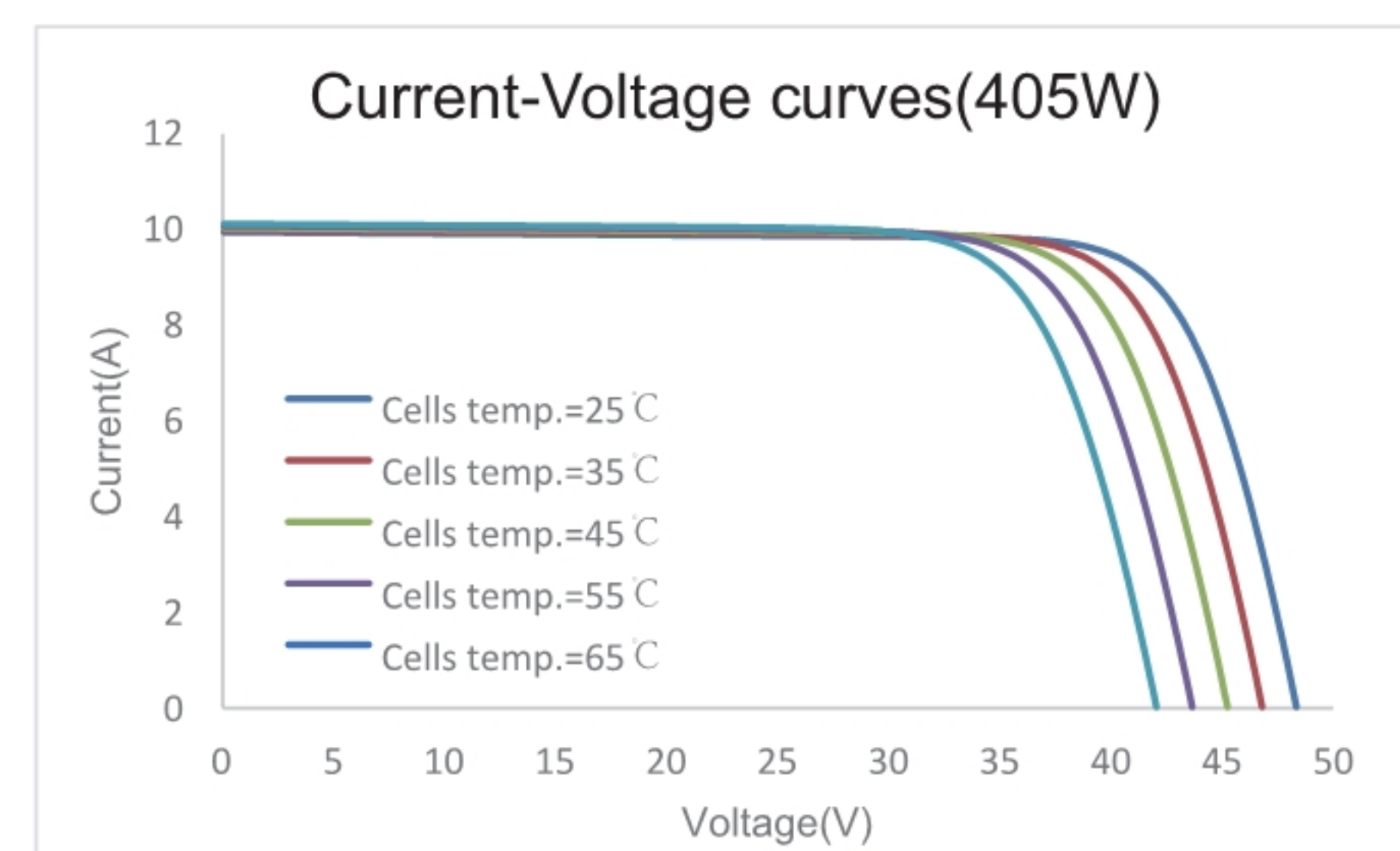
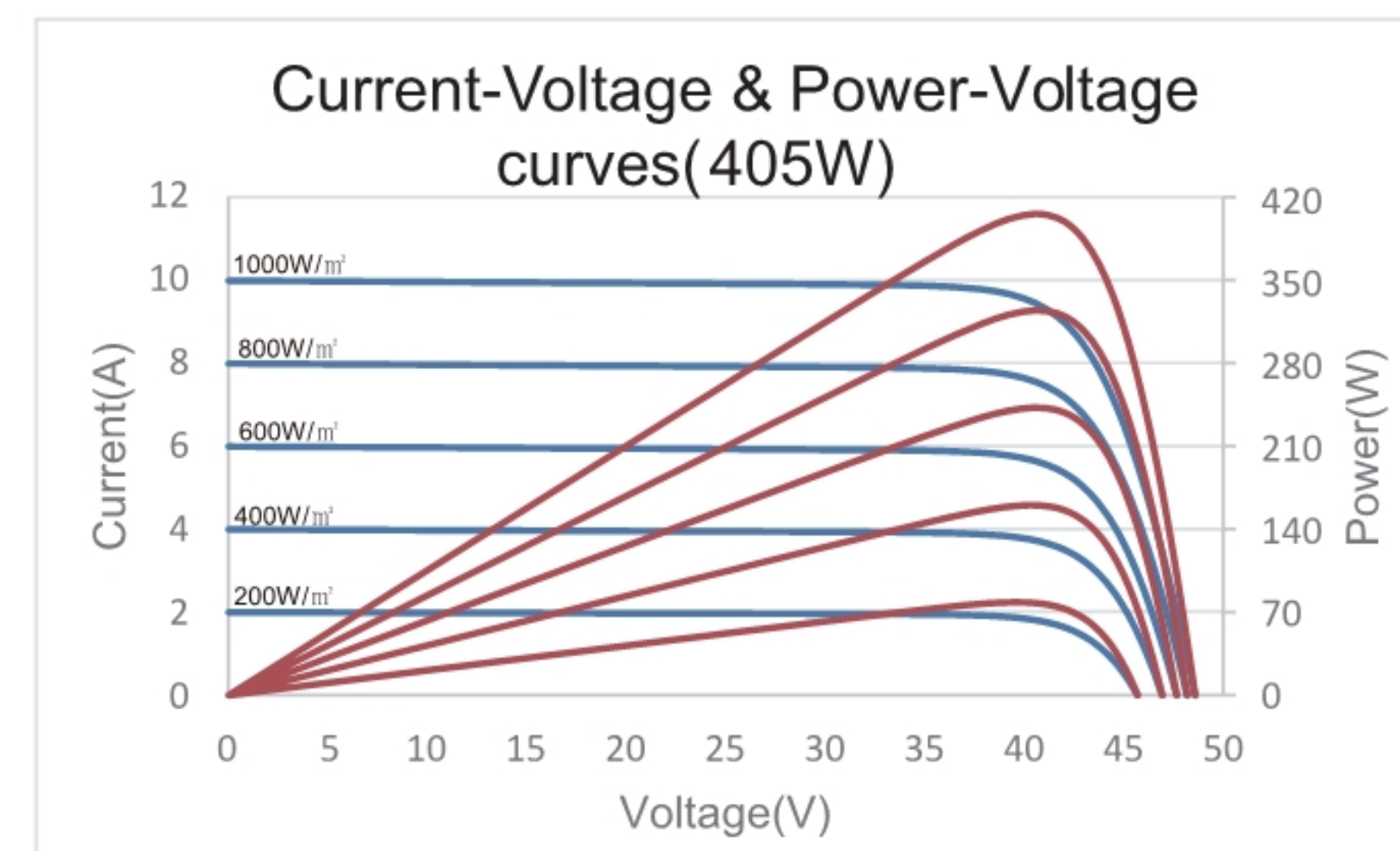
For Global Market

## ELECTRICAL SPECIFICATIONS

Power rating (front)	405 Wp		410 Wp		415 Wp	
	Front	Back	Front	Back	Front	Back
Testing Condition	Front	Back	Front	Back	Front	Back
STC rated output ( $P_{mpp}/Wp$ )*	405	285	410	289	415	292
Rated voltage ( $V_{mpp}/V$ ) at STC	40.89	41.10	41.10	41.31	41.31	41.52
Rated current ( $I_{mpp}/A$ ) at STC	9.91	6.94	9.98	6.99	10.05	7.04
Open circuit voltage ( $V_{oc}/V$ ) at STC	48.42	46.99	48.60	47.17	48.78	47.34
Short circuit current ( $I_{sc}/A$ ) at STC	10.38	7.28	10.46	7.33	10.54	7.39
Module efficiency	19.7%	13.9%	19.9%	14.0%	20.2%	14.2%
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 68					
Maximum series fuse rating	20 A					

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## CURVE



## ELECTRICAL SPECIFICATIONS (Integrated power)

$P_{mpp}$ gain	$P_{mpp}$	$V_{mpp}$	$I_{mpp}$	$V_{oc}$	$I_{sc}$
5%	425 Wp	40.89 V	10.40 A	48.42 V	10.90 A
10%	446 Wp	40.89 V	10.90 A	48.42 V	11.42 A
15%	466 Wp	40.79 V	11.42 A	48.52 V	11.94 A
20%	486 Wp	40.79 V	11.91 A	48.52 V	12.46 A
25%	506 Wp	40.79 V	12.41 A	48.52 V	12.98 A

Electrical characteristics with different rear power gain (reference to 405W)

## MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	2038 x 1010 x 30 mm 80.24 x 39.76 x 1.18 in
Module composition	Glass / POE / Glass
Glass thickness	2.5 mm / 0.098 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 A (IEC) or Type 3 (UL)
Connector type (IEC/UL)	MC4 compatible

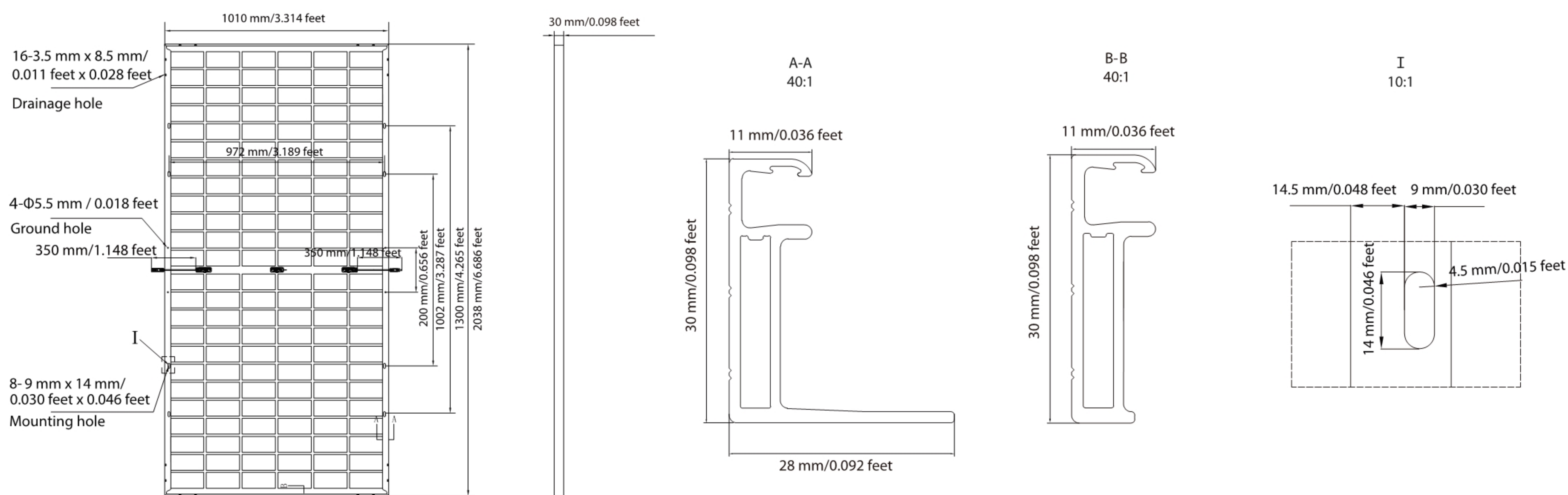
① Refer to Crystalline Silicon PV Module Installation Manual or contact technical department.  
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

## PACKING SPECIFICATIONS

① Weight (module only)	31.4 kg / 69.23 lbs
② Packing unit	36 pcs / box
Weight of packing unit (for 40'HQ container)	1177 kg / 2595 lbs
Number of modules per 40'HQ container	792 pcs

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

## MODULE DIMENSION DETAILS



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