

## PERC MONOCRYSTALLINE MODULE

# 320~340W

## 30 years of warranty

## 15

YEARS  
IN MATERIALS  
AND LABOR



High Efficiency photovoltaic panel of 60 M3 cells of monocrystalline silicon that improves the performance of the module; PERC technology with which a greater capture of sunlight is achieved, generating more electricity and obtaining an improvement in production capacity. With 3.2 mm anti-reflective tempered glass, IP68 connection box with 3 bypass diodes and MC4 compatible connectors.

Dimensions 1665 x 992 x 35mm

Weight 18kg



Automated process with  
100% German technology



High performance efficient  
materials



Strict quality control, ISO  
9001-2015 certified  
process



Resistant to degradation  
PID



Inspection of  
100% electroluminescence  
that ensures crack-free product



Positive Power Tolerance



Supports systems up to 1,500 V, BOS  
cost savings  
(System)



Higher power output



5BB technology

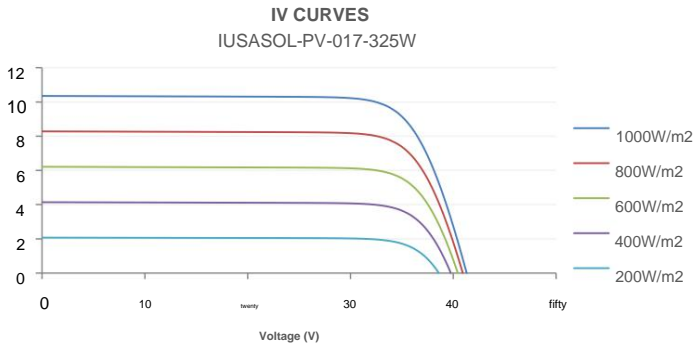
# PERC MONOCRYSTALLINE MODULE

## 320W, 325W, 330W, 335W, 340W

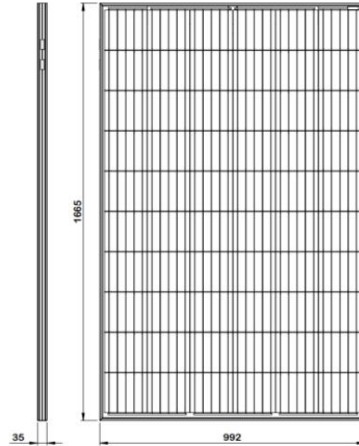
### OPERATING CHARACTERISTICS

Operating Temperature	-40°C ~ +85°C
Maximum System Voltage	1500V (IEC)
Fire resistance	CLASS C (IEC 61730)
Maximum Reverse Current	15A
Application class	A CLASS
Power Tolerance	0~+5W

### IV CURVE



### MODULE DIMENSIONS (mm)



### ELECTRICAL CHARACTERISTICS IN STANDARD CONDITIONS STC

Code	223895	223868	223871	223874	223898	
maximum power	Pmax (Wp)	320	325	330	335	340
Voltage at Maximum Power	Umpp (V)	33.5	33.6	33.6	33.7	33.8
Current at Maximum Power	Impp (A)	9.6	9.74	9.87	10.01	10.15
Open Circuit Voltage	Uoc (V)	41.2	41.3	41.4	41.5	41.6
Short Circuit Current	A	10.13	10.35	10.56	10.78	10.99
Module Efficiency	η	19.4%	19.7%	20.0%	20.3%	20.6%

### MECHANICAL CHARACTERISTICS Cells

Cells 60 monocrystalline silicon PERC cells, M3  
 Cell Array 6 x 10 Array  
 Dimensions 1665 x 992 x 35mm  
 Weight 18kg  
 Front 3.2 mm tempered glass, anti-reflective.  
 Back White multilayer foil  
 Natural anodized aluminum frame  
 \*Standard Test Conditions (STC): Irradiance 1000 W/m<sup>2</sup>, spectrum AM 1.5, cell temperature 25°C.  
 Connection box IP68, UL, TUV, with 3 bypass diodes  
 Measurement tolerance (Pmax, Voc, Isc): +/- 2% Connector MC4 compatible, weather resistant  
 1x4mm<sup>2</sup> section cables (12 AWG), 1000 mm long  
 Pallet 25 modules, 486Kg  
 ELECTRICAL CHARACTERISTICS IN NORMAL CONDITIONS NOCT Container (40' HQ) 300 modules

### ELECTRICAL CHARACTERISTICS IN NORMAL NOCT CONDITIONS

Code	223895	223868	223871	223874	223898
maximum power	Pmax (Wp)	232	236	239	243
Voltage at Maximum Power	Umpp (V)	33.6	33.7	33.9	34.0
Current at Maximum Power	Impp (A)	6.91	6.98	7.05	7.12
Open Circuit Voltage	Uoc (V)	41.6	41.8	41.9	42.1
Short Circuit Current	A	7.5	7.57	7.66	7.75

223898

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### TEMPERATURE COEFFICIENTS

34.1	Isc temperature coefficient	+0.07% / °C
7.17	Voc temperature coefficient	-0.36% / °C
42.3	Pmax temperature coefficient	-0.38% / °C

### STANDARDS

IEC 61215 / IEC 61730  
 UL 61730  
 ISO 9001:2015 / Quality Management System



### WARRANTY

Product guarantee: 15 years in materials and workmanship.  
 Linear power guarantee: 25 years.

