

### Mono & Poly-crystalline PV Module

## Features

- € High conversion efficiency through advanced manufacturing technology
- € Excellent performance under weak light conditions (mornings, evenings and cloudy days)
- € Withstand snow loads up to 5400 Pa and wind loads up to 2400 Pa under extreme temperature
- € 12 years product warranty and 25 years performance warranty ensure reliability of modules
- € Easy installation

## Certificates

- € Manufactured according to International Management System Standard  
Quality Management system: ISO9001  
Environmental Management System: ISO14001  
Occupational Health and Safety Management System: OHSAS18001
- € Certified and approved by CE, INMETRO, TUV, IEC 61215, IEC 61730, MCS, CEC and PV CYCLE



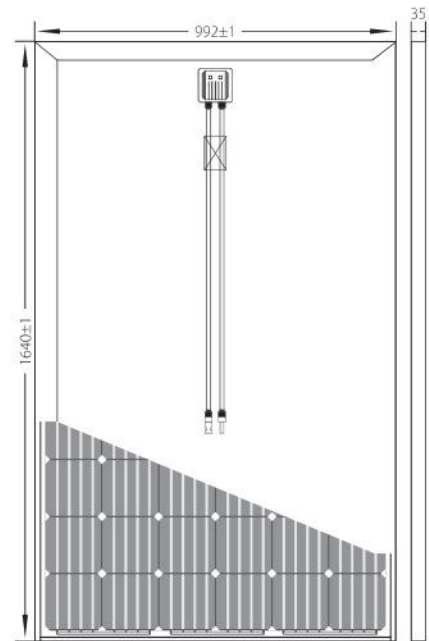
# MONO-CRYSTALLINE MODULE

## Electrical Characteristics under STC\*

Module Type	ECS-270M60	ECS-275M60	ECS-280M60	ECS-285M60	ECS-290M60	ECS-295M60	ECS-300M60
Maximum Power-Pmax (Wp)	270	275	280	285	290	295	300
Voltage at Maximum Power-Vmp (V)	31.5	31.9	32.3	32.7	33.1	33.5	33.9
Current at Maximum Power-Imp (A)	8.57	8.62	8.67	8.72	8.76	8.81	8.86
Open Circuit Voltage-Voc (V)	38.5	38.9	39.3	39.8	40.2	40.6	41.0
Short Circuit Current-Isc (A)	9.35	9.43	9.50	9.55	9.62	9.75	9.83
Module Efficiency-ηm (%)	16.6	16.9	17.1	17.5	17.8	18.0	18.3
Power Tolerance (%)	0/+3	0/+3	0/+3	0/+3	0/+3	0/+3	0/+3

## Mechanical Characteristics

Cell Type	Mono-crystalline	156×156 mm (6 inches)
Number of Cells	60 (6×10)	
Dimension	1640×992×35 mm (64.57×39.06×1.38 inches)	
Weight	20.0 kg	
Front Glass	Low Iron Tempered Glass	
Encapsulant	EVA	
Frame	Anodized Aluminum Alloy	



## Temperature Characteristics

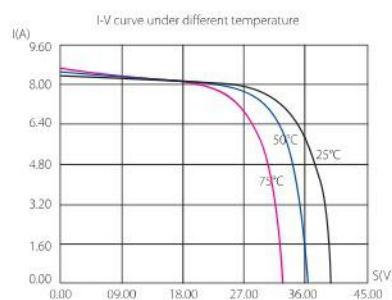
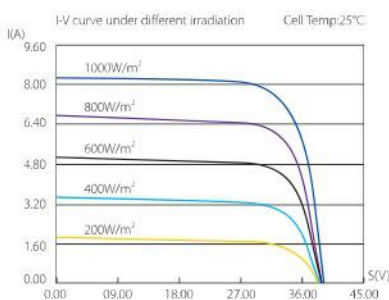
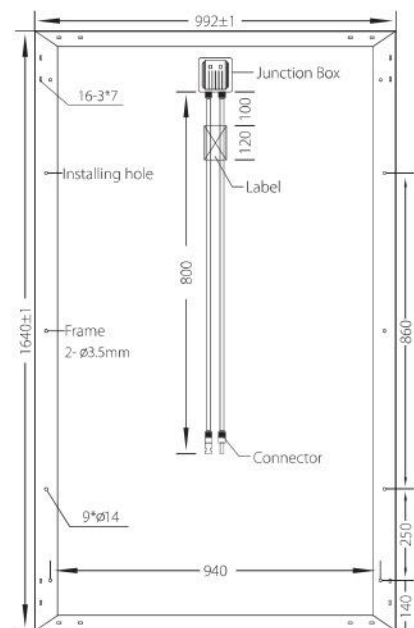
NOCT*	45±2°C
Temperature Coefficient of Pmax (%)	-0.40/°C
Temperature Coefficient of Voc (%)	-0.31/°C
Temperature Coefficient of Isc (%)	0.04/°C

## Maximum System Ratings

Operating Temperature	-40°C to +80°C
Maximum System Voltage	1000V DC
Maximum Series Fuse Rating	16A

## Warranty

12 years product warranty
12 years warranty on 90% power output
25 years warranty on 80% power output



\*STC (Standard Testing Conditions): Irradiance 1000 W/m<sup>2</sup>, cell temperature 25 °C, AM=1.5  
ambient temperature 20 °C, wind speed 1 m/s

\*NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m<sup>2</sup>,  
The specifications in this datasheet are subjected to change without prior notice.

# POLY-CRYSTALLINE MODULE

## Electrical Characteristics under STC\*

Module Type	ECS-250P60	ECS-255P60	ECS-260P60	ECS-265P60	ECS-270P60	ECS-275P60	ECS-280P60
Maximum Power-Pmax (Wp)	250	255	260	265	270	275	280
Voltage at Maximum Power-Vmp (V)	30.1	30.4	30.8	31.0	31.1	31.5	31.8
Current at Maximum Power-Imp (A)	8.32	8.39	8.44	8.55	8.68	8.73	8.81
Open Circuit Voltage-Voc (V)	37.50	37.60	37.80	38.05	38.17	38.3	38.52
Short Circuit Current-Isc (A)	8.73	8.79	8.85	8.96	9.09	8.98	9.1
Module Efficiency-ηm (%)	15.4	15.7	16.0	16.2	16.5	16.9	17.2
Power Tolerance (%)	0/+3	0/+3	0/+3	0/+3	0/+3	0/+3	0/+3

## Mechanical Characteristics

Cell Type	Poly-crystalline	156×156 mm (6 inches)
Number of Cells	60 (6×10)	
Dimension	1640×992×35 mm (64.57×39.06×1.38 inches)	
Weight	20.0 kg	
Front Glass	Low Iron Tempered Glass	
Encapsulant	EVA	
Frame	Anodized Aluminum Alloy	

## Temperature Characteristics

NOCT*	45±2°C
Temperature Coefficient of Pmax (%)	-0.40/°C
Temperature Coefficient of Voc (%)	-0.31/°C
Temperature Coefficient of Isc (%)	0.04/°C

## Maximum System Ratings

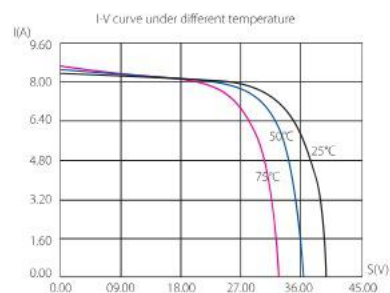
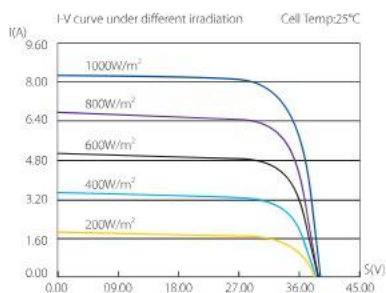
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