

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



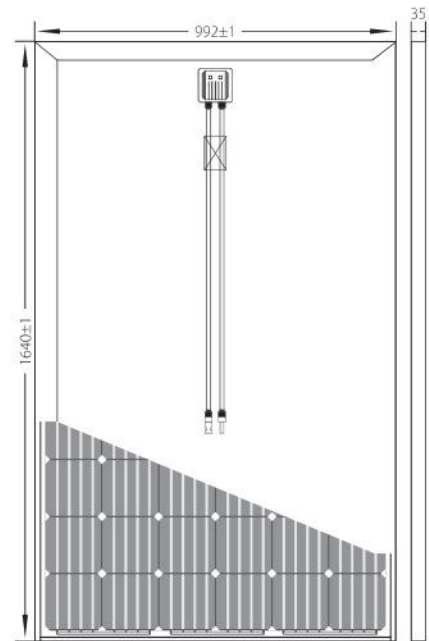
MONO-CRYSTALLINE MODULE

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

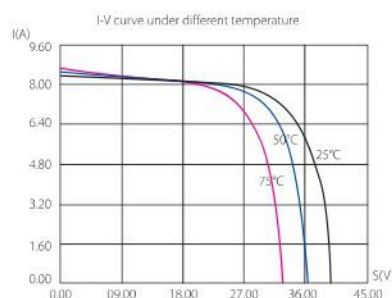
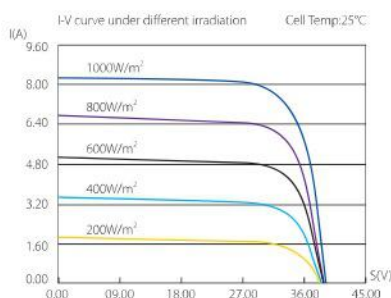
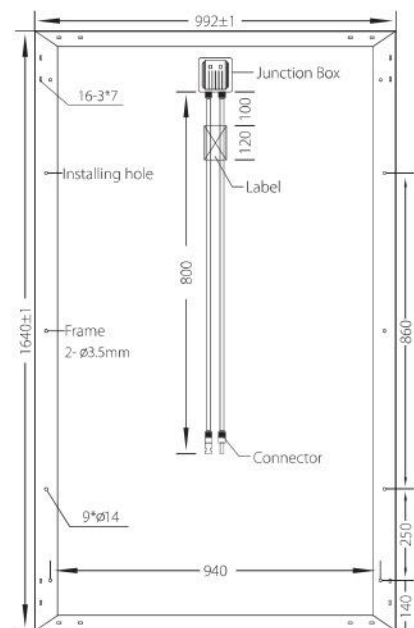
NOCT*	45±2°C
Temperature Coefficient of Pmax (%)	-0.40/°C
Temperature Coefficient of Voc (%)	-0.31/°C
Temperature Coefficient of Isc (%)	0.04/°C

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/m², cell temperature 25 °C, AM=1.5
ambient temperature 20 °C, wind speed 1 m/s

*NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m²,
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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- η m (%)	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	156x156 mm (6 inches)
Number of Cells	60 (6x10)	
Dimension	1640x992x35 mm (64.57x39.06x1.38 inches)	
Weight	20.0 kg	
Front Glass	Low Iron Tempered Glass	
Encapsulant	EVA	
Frame	Anodized Aluminum Alloy	

Temperature Characteristics

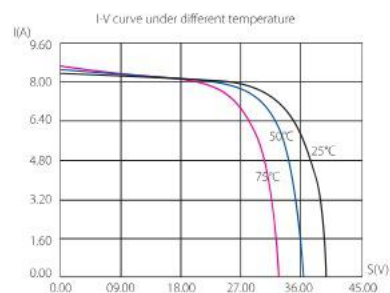
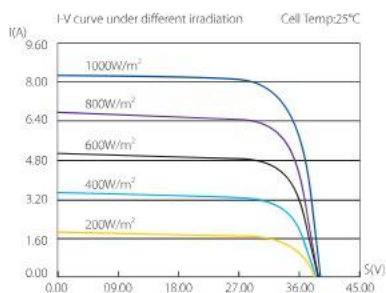
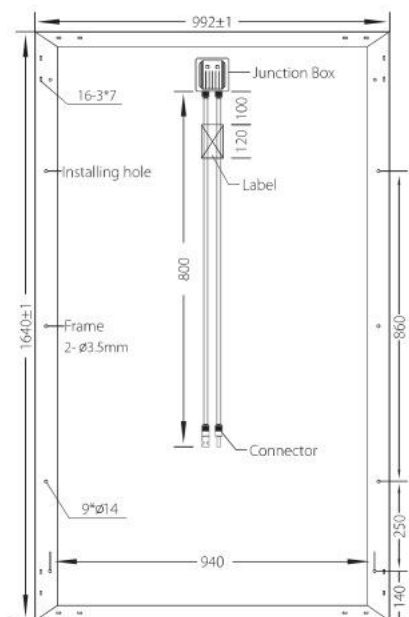
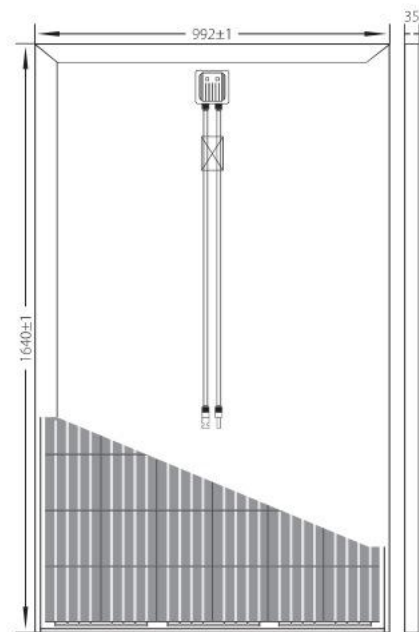
NOCT*	45±2°C
Temperature Coefficient of Pmax (%)	-0.40/°C
Temperature Coefficient of Voc (%)	-0.31/°C
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Maximum System Ratings

Operating Temperature	-40°C to +80°C
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MONO-CRYSTALLINE MODULE

Electrical Characteristics under STC*

Module Type	ECS-315M72	ECS-320M72	ECS-325M72	ECS-330M72	ECS-335M72	ECS-340M72	ECS-345M72
Maximum Power-Pmax (Wp)	315	320	325	330	335	340	345
Voltage at Maximum Power-Vmp (V)	36.9	37.1	37.4	37.8	38.2	38.6	38.9
Current at Maximum Power-Imp (A)	8.54	8.63	8.71	8.73	8.77	8.81	8.87
Open Circuit Voltage-Voc (V)	45.3	45.4	46.3	46.6	46.9	47.4	47.8
Short Circuit Current-Isc (A)	8.84	8.93	9.07	9.44	9.52	9.56	9.62
Module Efficiency-ηm (%)	16.2	16.5	16.8	17	17.3	17.5	17.8
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	72 (6×12)	
Dimension	1956×992×40 mm (77.01×39.06×1.57 inches)	
Weight	23.0 kg	
Front Glass	Low Iron Tempered Glass	
Encapsulant	EVA	
Frame	Anodized Aluminum Alloy	

Temperature Characteristics

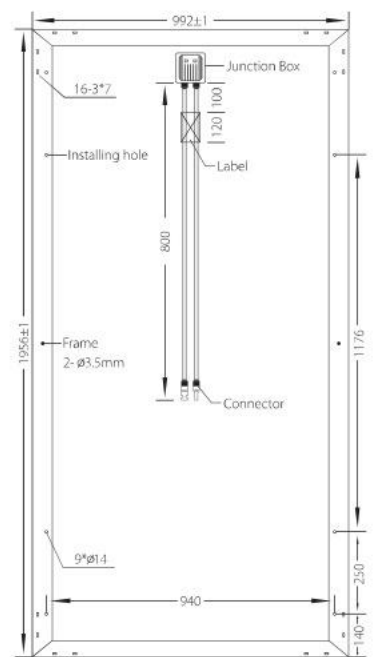
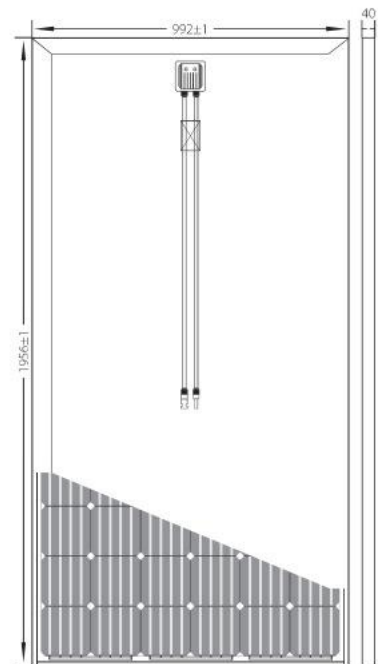
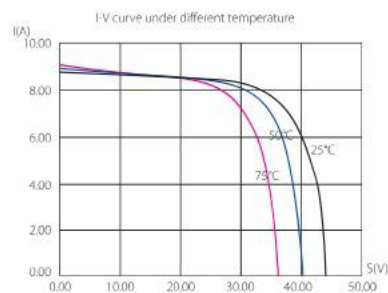
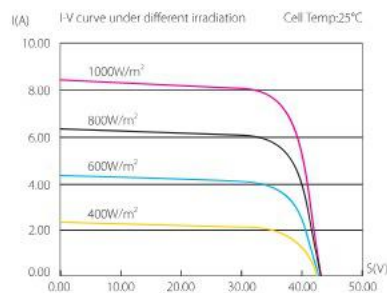
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POLY-CRYSTALLINE MODULE

Electrical Characteristics under STC*

Module Type	ECS-310P72	ECS-315P72	ECS-320P72	ECS-325P72	ECS-330P72	ECS-335P72
Maximum Power-Pmax (Wp)	310	315	320	325	330	335
Voltage at Maximum Power-Vmp (V)	36.9	37.2	37.5	37.00	37.08	37.2
Current at Maximum Power-Imp (A)	8.40	8.47	8.53	8.79	8.9	9.01
Open Circuit Voltage-Voc (V)	45.3	45.4	45.7	45.3	45.4	45.5
Short Circuit Current-Isc (A)	8.86	8.88	8.94	9.29	9.4	9.51
Module Efficiency-ηm (%)	16.0	16.3	16.5	16.7	17	17.3
Power Tolerance (%)	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	72 (6×12)	
Dimension	1956×992×40 mm (77.01×39.06×1.57 inches)	
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Front Glass	Low Iron Tempered Glass	
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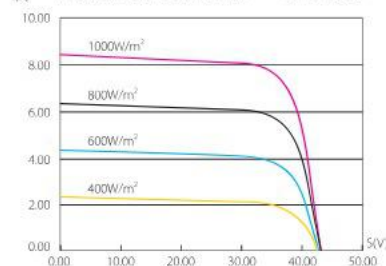
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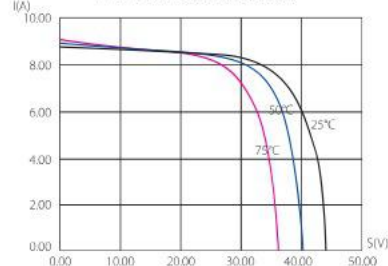
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I(A) I-V curve under different irradiation Cell Temp:25°C



I(A) I-V curve under different temperature



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