



Enviro Energy Solutions Ltd
Your Gateway to the Sun

POLYCRYSTALLINE SOLAR MODULES
EAVN and ESK6612P SERIES

...BECAUSE WITH ENVIROENERGY SOLUTIONS THE SUN SHINES FOR EVERYONE...



Version 010618

The EAVN series solar modules are produced in the European Union under the strictest quality standards, in state-of-art manufacturing facilities and undergo several major inspection procedures throughout the production phase including:

- > 3 times EL testing to ensure end product without micro cracks,
- > 3 times appearance inspection to ensure no defects,.
- > 1 time power testing and inspection to ensure expected power output is being delivered from each and every solar panel.

Backed up by a solid 12 year product quality warranty and a linear performance warranty of 25 years at 80%, the outstanding, European made, EAVN series is available in a wide power range from 100Wp to 310Wp and configurations of 36 54, 60 and 72 cells.

Combining excellent quality with high performance and positive power tolerance, the EAVN series is the perfect choice for every solar project , small medium or large, in which every detail counts.



EAVN - 290/295/300/305/310 72 Cell, Polycrystalline Modules

Module Features:

High Conversion Efficiency

High Output efficiency up to 15.93%, 0~5% - Only Positive Power Tolerance

Excellent Low-irradiance and Temperature Stability

The Excellent low-irradiance and temperature stability of the EAVN series ensure high output and high profits for users

Anti-PID Design

Products satisfy IEC62804 tests by anti-PID cell and module technology, and are more suitable for extremely hot and humid environments.

Harsh Environment Adaptability

The EAVN series provide resistance to harsh environmental factors, and are tested for resistance to salt spray, ammonia, dust and sand. They can be used in environments including seaside, mountains, open farms and deserts.

Excellent Mechanical Durability

With an extremely sturdy torsion and corrosion resistant frame, and AR coated front glass, EAVN series modules have a strong mechanical durability of 5400Pa snow load and 2400Pa wind load.

Product Certifications:

IEC 61215 and IEC 61730



EAVN Series Modules Technical Specifications:

Electrical Parameters (STC)		EAVN				
Module Series						
Module Reference	290EP-72	295EP-72	300EP-72	305EP-72	310EP-72	
Open-Circuit Voltage - Voc (V)	44.70	44.80	45.10	45.30	45.40	
Optimum Operating Voltage - Vmp (V)	36.10	36.20	36.50	36.60	37.00	
Short-Circuit Current - Isc (A)	8.70	8.73	8.82	8.85	8.91	
Optimum Operating Current - Imp (A)	8.11	8.17	8.29	8.37	8.40	
Max Power at STC - Pmax (W)	290	295	300	305	310	
Module Efficiency	14.90%	15.16%	15.41%	15.67%	15.93%	
Power Tolerance	0 to +5W					
Temperature Coefficient (Pmax)	-0.41% /°C					
Temperature Coefficient (Voc)	-0.29% /°C					
Temperature Coefficient (Isc)	-0.05% /°C					

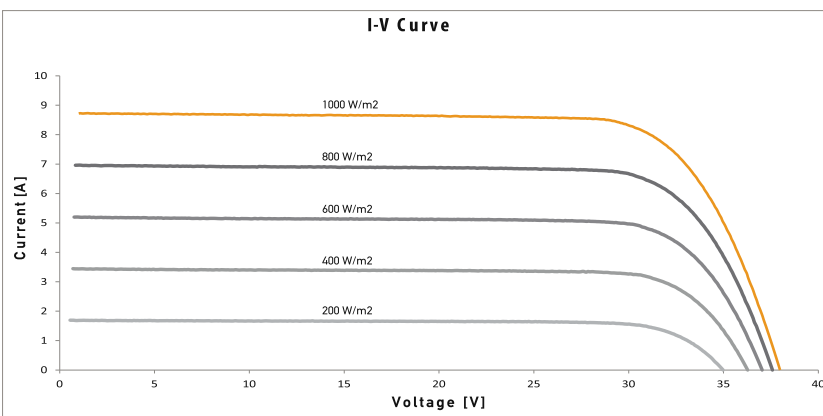
Mechanical Characteristics	
Type	Polycrystalline Cell 156 x 156 mm
Cells Arrangement	6 x 12 (72 cells)
Module Dimensions (LxWxH)	1962 x 992 x 40 mm
Weight	22.5 kg
Front Cover	AR coated 3.2mm Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated, 3 bypass diodes
Cable / length	4.0mm ² / 900mm



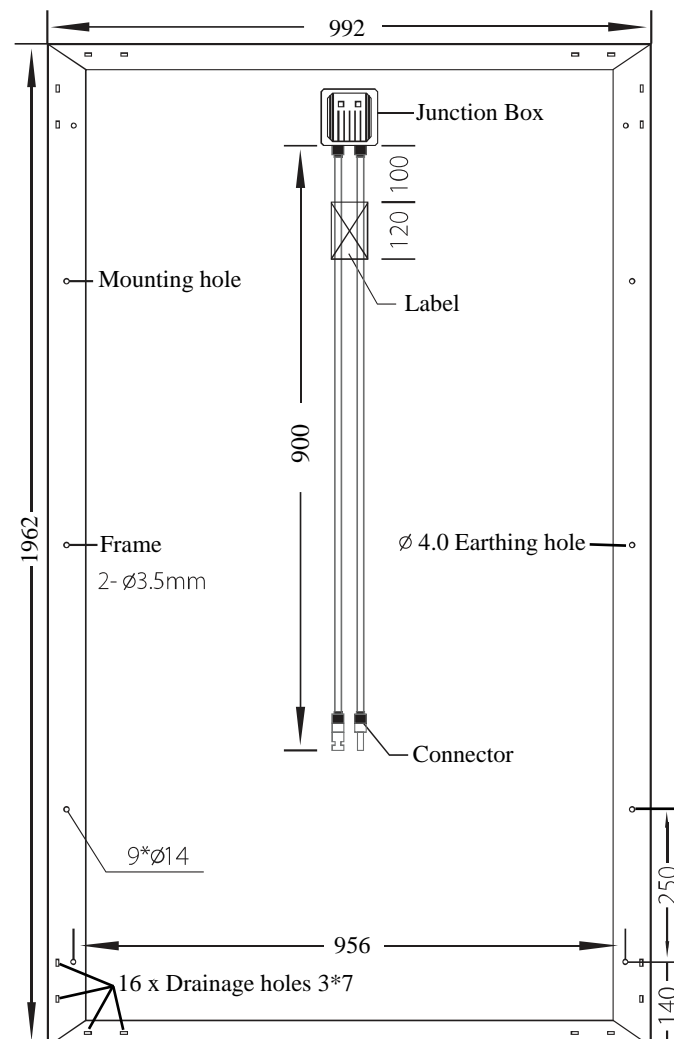
Working Conditions	
Max. System Voltage (V)	1000 DC
Max. Series Fuse Rating (A)	15
Operating Temperature	-40°C to +85°C
Nominal Operating Cell Temperature (NOCT)	50°C ± 2°C
Max. Wind Load/ Max. snow Load (pa)	2400/5400
Application Class	Class A
Fire rating	Class C

Packaging Information	
Standard Packaging	26 pcs/pallet
Weight per pallet	510kg
Pallets per 40HC container	28
Total Modules per 40HC container	728 pcs

I-V Curve



Engineering Drawing



Enviroenergy Solutions ES Ltd applies rigorous design and advanced technology to constantly improve the quality and power output of our solar modules.

The new Enviroenergy ESK 6612P, 72 cell, 5-Busbar, polycrystalline modules are manufactured in Asia, following all European and International norms and standards, with a fully automated production line with machinery made in Germany, grade A raw material and with strict specifications and quality inspection in all phases, from cell to complete module, achieving zero product defect, while ensuring high product reliability and maximal efficiency.

ESK6612P - 320/325/330 72 Cell, 5-Busbar, Polycrystalline Modules

Module Features:

High Conversion Efficiency

Output efficiency up to 17.0%, 0~3% positive power tolerance, 5-busbar has better collected current capability

Excellent Low-irradiance and Temperature Stability

The Excellent low-irradiance and temperature stability of the SK 6612P series insure high output and high profits for users

Anti-PID Design

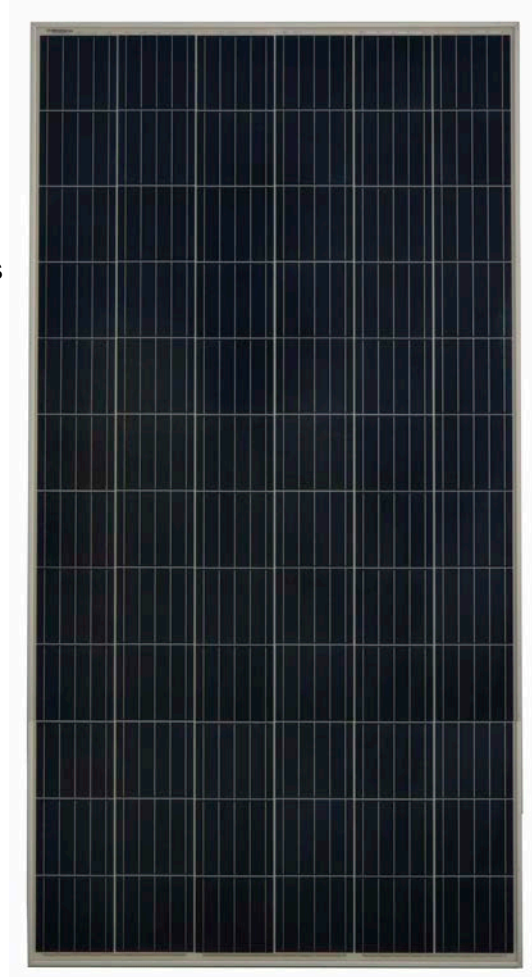
Products satisfy IEC62804 tests by anti-PID cell and module technology, and are more suitable for extremely hot and humid environments.

Harsh Environment Adaptability

The SK6612P series provide resistance to harsh environmental factors, and are tested for resistance to salt spray, ammonia, dust and sand. They can be used in environments including seaside, mountains, open farms and deserts.

Excellent Mechanical Durability

ESK6612P module series have a strong mechanical durability of 5400Pa snow load and 2400Pa wind load.



Product Certifications:

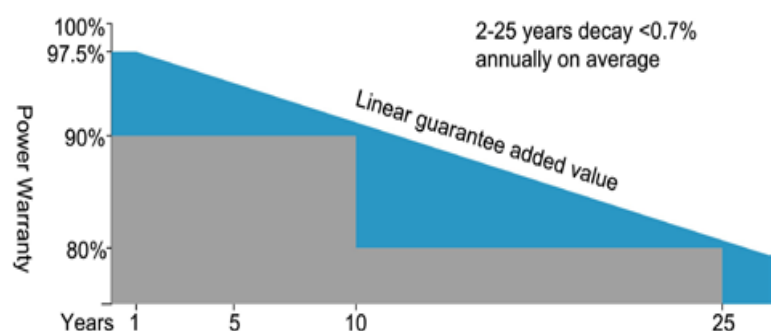
IEC 61215 and IEC 61730



Power Output Guarranty

Product quality assurance for 10 years

Linear power guarantee for 25 years



ESK6612P Series Modules Technical Specifications:

Electrical Parameters (STC)

Module Series	ESK6612P		
Module Reference	320	325	330
Open-Circuit Voltage - Voc (V)	45.5	45.7	45.7
Optimum Operating Voltage - Vmp (V)	36.7	36.9	37.1
Short-Circuit Current - Isc (A)	9.32	9.36	9.38
Optimum Operating Current - Imp (A)	8.72	8.81	8.89
Max Power at STC - Pmax (W)	320	325	330
Module Efficiency	16.5	16.7	17.0
Power Tolerance	0 to +3W		
Temperature Coefficient (Pmax)	-0.40% /°C		
Temperature Coefficient (Voc)	-0.31% /°C		
Temperature Coefficient (Isc)	-0.05% /°C		

Mechanical Characteristics

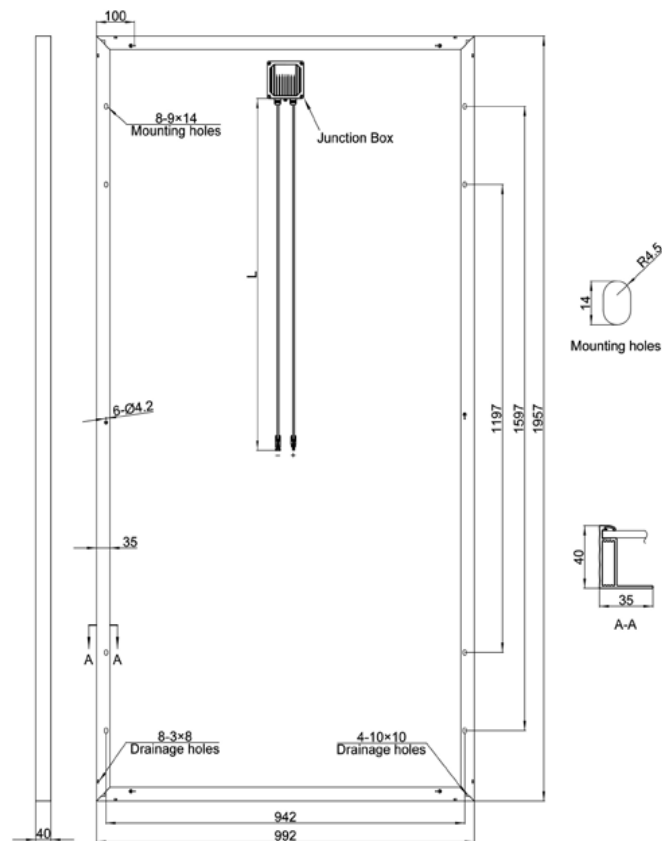
Type	Polycrystalline Cell 156 x 156 mm
Cells Arrangement	6 x 12 (72 cells)
Module Dimensions (LxWxH)	1957 x 992 x 40 mm
Weight	22.5kg
Front Cover	AR coated 3.2mm Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated, 3 by-pass diodes
Cable / length	4.0mm ² / 900mm

Working Conditions

Max. System Voltage (V)	1000DC
Max. Series Fuse Rating (A)	15
Operating Temperature (°C)	-40 to +85
Nominal Operating Cell Temperature (NOCT)	45°C ± 2°C
Max. Wind Load/ Max. snow Load (pa)	2400/5400
Application Class	Class A
Fire rating	Class C

Packaging Information

Standard Packaging	22 pcs/pallet
Weight per pallet	510kg
Pallets per 40HC container	26
Total Modules per 40HC container	572 pcs



I-V Curve

