

# ESUN320M-72 300-320 Watt

Mono Crystalline Module



#### **Key Features**



Full square poly crystalline modules designed for residential and utility applications, rooftop or ground mountings



High power output of more than 320W and module efficiency up to 16.5%



Anti-reflective and anti-soiling surface reduces power loss from dirt and dust



Outstanding performance in low-light irradiance environments



Excellent mechanical load resistance: certified to withstand high wind loads(2400Pa) and snow loads(5400Pa)

## **Reliable Quality**

## Raw Material Control

- Only the materials certified by TUV officially will be approved.
- Strict material inspection before storehouse acceptance&production.

## 100% EL Double Test

- Front EL test before lamination to find revisable defect.
- Rear EL test before packing to avoid hidden quality threat.

# **Superior Warranty**

- √ 10-year limited product warranty for replacement or compensation.
- ✓ 25-year power output warranty for replacement or compensation.

# **Comprehensive Certification**

- ✓ TUV-NORD (IEC61215&61730) CE-NORD (2006/95/EC)
- ✓ ISO9001/14001:Quality/Environmental management systems

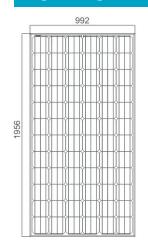


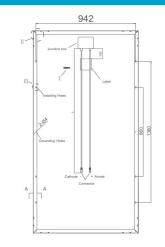




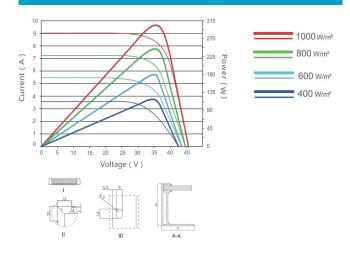


## **Engineering Front&Back Side Drawings**





## C-V&P-V Curves (305W)



Mechanical Characteristics					
Cell Type	Mono 156×156 mm (6')				
Number of Cells	72 (6×12)				
Dimension	1956×992×40mm				
Weight	26.5 kg				
Front Glass	Low iron Tempered Glass, 3.2mm				
Junction Box	IP67, 4 diodes				
Connector	MC4 Compatible				

Temperature Characteristics					
NOCT	45 <u>+</u> 2℃				
Temperature coefficient of Pmax	-0.44%/℃				
Temperature coefficient of Voc	-0.34%/℃				
Temperature coefficient of Isc	0.06%/℃				
NOCT(Nominal Operating Cell Temperature):					

Irradiance  $800W/m^2$ , Ambient temperature  $20^{\circ}\text{C}$ , AM 1.5, Wind speed 1m/s

<b>Electrical Characteristics Under</b>	r STC						
Module Type	ESUN300M-72	ESUN305M-72	ESUN310M-72	ESUN315M-72	ESUN320M-72		
Maximum Power-Pmax (Wp)	300	305	310	315	320		
Voltage at Maximum Power-Vmp (V)	37.0	37.2	37.4	37.6	37.8		
Current at Maximum Power -Imp (A)	8.11	8.20	8.29	8.38	8.47		
Open Circuit Voltage-Voc (V)	45.5	45.7	45.9	46.1	46.4		
Short Circuit Current-Isc (A)	8.64	8.72	8.80	8.87	8.98		
Module Efficiency-η <sub>m</sub> (%)	15.5	15.7	16.0	16.2	16.5		
Power Tolerance (W)	0/+5	0/+5	0/+5	0/+5	0/+5		
Maximum System Voltage	1000VDC (IEC)						
Operating Temperature	-40℃ ~ +85℃						
Maximum Series Fuse	15A						

STC (Standard Testing Conditions) : Irradiance  $1000/m^2$ , Cell temperature  $25^{\circ}C$ , AM 1.5

## **Packing Configuration**

Pallet: 25 PCS

20'GP/40'GP: 250PCS / 550 PCS

Pallet Size: 1990×1130×1130 MM

Pallet Gross Weight: 613 KGS

## **Superior Warranty**

\* 10-year product warranty

10-year warranty for 90% power output

\* 25-year warranty for 80% power output

