



# AD310-72S

AD305-72S AD300-72S  
AD295-72S AD290-72S



IEC 61215.2  
IEC 61730

## Module

ADxxx-72S series is a medium-powered module product ideal for roof top or ground mounted large, medium or small sized off-grid and on-grid solar power systems where long term economics, reliability and environmental issues are of a real concern.

ADxxx-72S have gone through various rigorous in-house reliability tests, i.e., LID under natural sunlight as well as artificial sunlight to guarantee the rated power output.

## KEY FEATURES

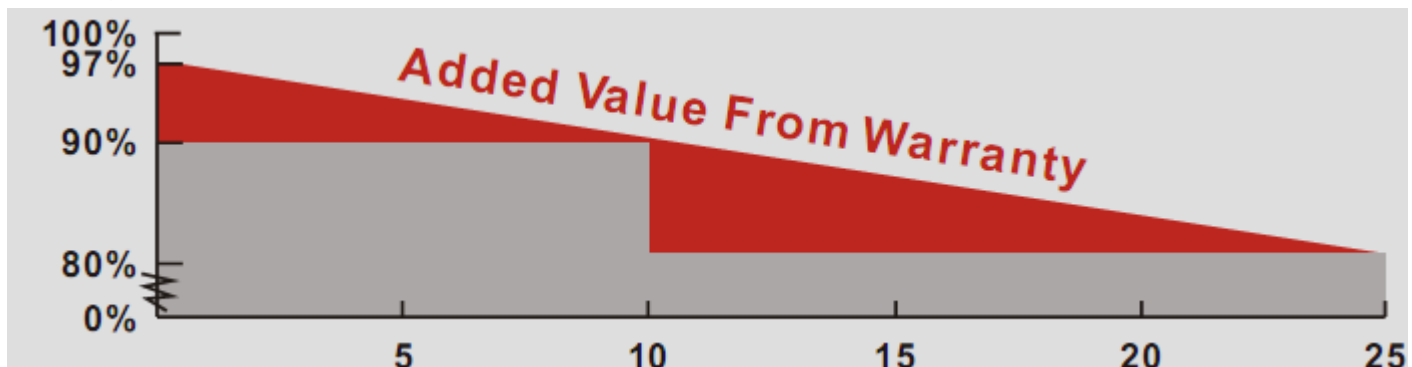
- 72 Mono-Crystalline solar cells
- Unique frame design to reinforce sealing and to prevent freezing and warping
- Strong aluminum frames to strengthen the load hold and to stand against high wind
- Special mounting holes on the frames for long and short side mounting
- High transparency low iron tempered glass with enhanced stiffness and impact resistance
- Advanced EVA encapsulation system with multilayer backsheets to better product modules

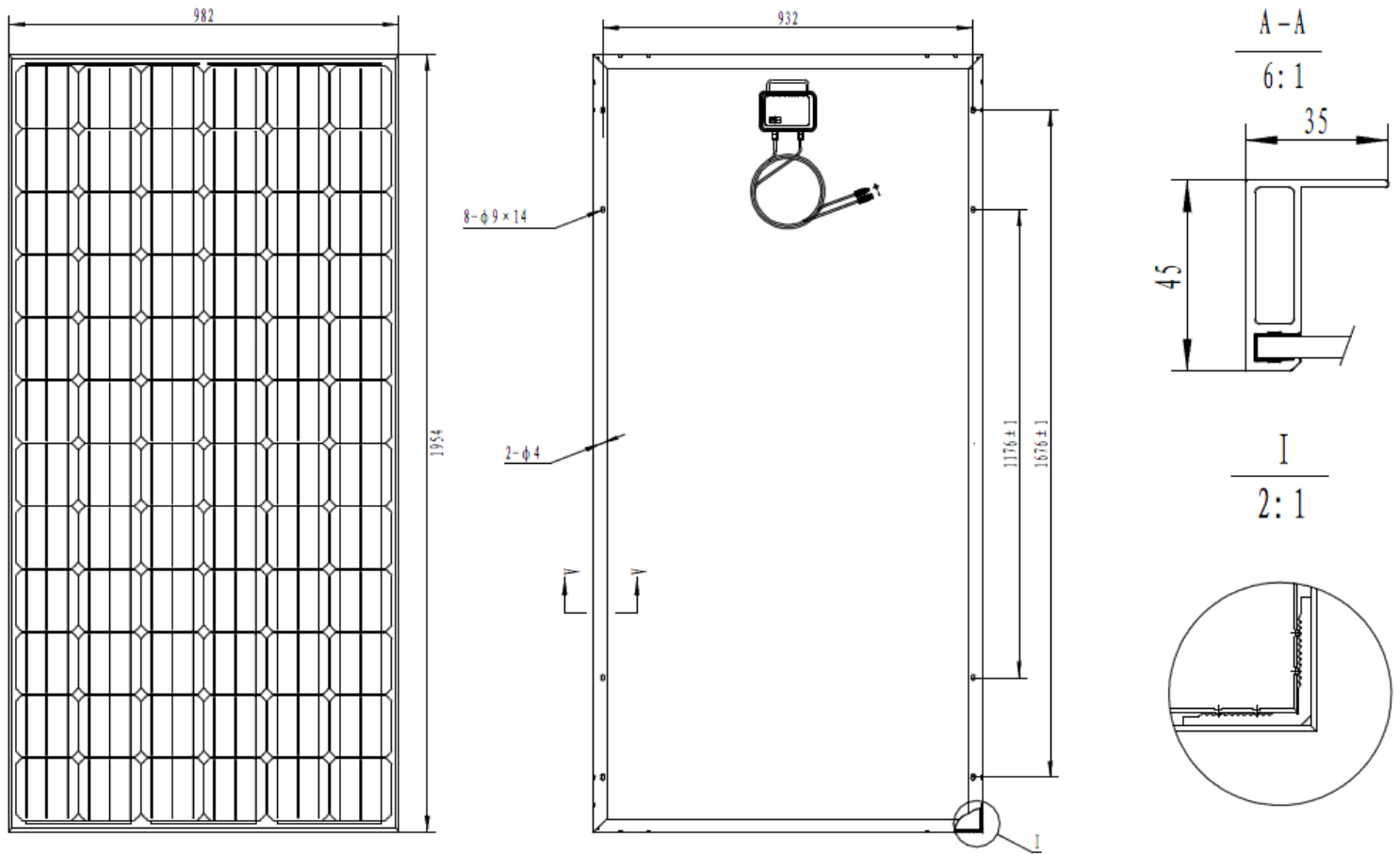
## APPLICATIONS

- Large on and off-grid solar power stations
- Commercial/industrial building roof-top systems
- Residential roof-top systems
- Other industrial and commercial applications

## LIMITED WARRANTY

- 25 year linear power output warranty
- 15 year product warranty on materials and workmanship





## Electrical Characteristics

All specified Parameters are at STC 25°C Ambient, 1000W/ m<sup>2</sup> irradiance and AM 1.5

Type		AD290-72S	AD295-72S	AD300-72S	AD305-72S	AD310-72S
Max-Power	P <sub>m</sub> (W)	<b>290</b>	<b>295</b>	<b>300</b>	<b>305</b>	<b>310</b>
Module Power Range	(W)	<b>295 &gt; P<sub>m</sub> ≥ 290</b>	<b>300 &gt; P<sub>m</sub> ≥ 295</b>	<b>305 &gt; P<sub>m</sub> ≥ 300</b>	<b>310 &gt; P<sub>m</sub> ≥ 305</b>	<b>P<sub>m</sub> ≥ 310</b>
Power Tolerance	(W)	<b>+0~+5</b>	<b>+0~+5</b>	<b>+0~+5</b>	<b>+0~+5</b>	<b>+0~+5</b>
Max-Power Voltage	V <sub>m</sub> (V)	<b>36.3</b>	<b>36.4</b>	<b>36.5</b>	<b>36.6</b>	<b>36.7</b>
Max-Power Current	I <sub>m</sub> (A)	<b>8.00</b>	<b>8.11</b>	<b>8.22</b>	<b>8.34</b>	<b>8.45</b>
Open-Circuit Voltage	V <sub>oc</sub> (V)	<b>44.7</b>	<b>44.8</b>	<b>44.9</b>	<b>44.9</b>	<b>45.0</b>
Short-Circuit Current	I <sub>sc</sub> (A)	<b>8.50</b>	<b>8.61</b>	<b>8.72</b>	<b>8.83</b>	<b>8.95</b>
Max-System Voltage	(VDC)	<b>1000V(IEC)</b>				
Cell Efficiency	(%)	<b>16.9</b>	<b>17.1</b>	<b>17.4</b>	<b>17.7</b>	<b>18.0</b>
Module Efficiency	(%)	<b>15.1</b>	<b>15.4</b>	<b>15.6</b>	<b>15.9</b>	<b>16.2</b>
Max.Series Fuse	(A)	<b>15</b>				
P <sub>m</sub> Temperature Coefficients	(%/°C)	<b>-0.5141</b>				
I <sub>sc</sub> Temperature Coefficients	(%/°C)	<b>0.0814</b>				
V <sub>oc</sub> Temperature Coefficients	(%/°C)	<b>-0.3910</b>				
NOCT Nominal Operating Cell Temperature		<b>45 ± 2°C</b>				

Maximum load rating:5400Pa(112.78lbf/ft<sup>2</sup>)

## Mechanical Characteristics

Cable type,Diameter and Length	<b>4mm<sup>2</sup>,TUV certified,900mm</b>
Type of Connector	<b>Compatible with MC4 plug</b>
Number,type and arrangement of cells	<b>72pcs,Mono-Crystalline Silicon(6×12)</b>
Cell Size (mm)	<b>156×156(D200)</b>
Dimension (mm)	<b>1954×982×45</b>
Weight (Kg)	<b>28</b>
Glass,Type and Thickness	<b>High Transmission,Low Iron,Tempered Glass 4.0mm</b>

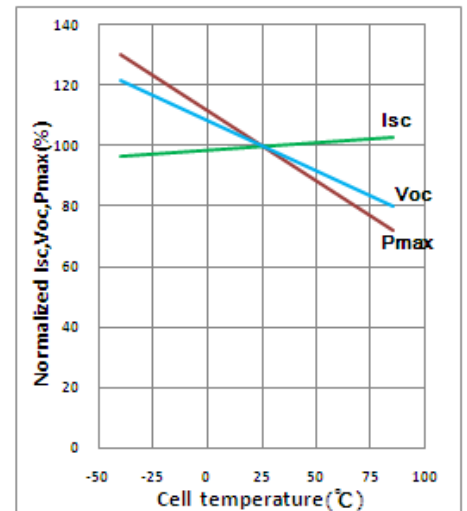
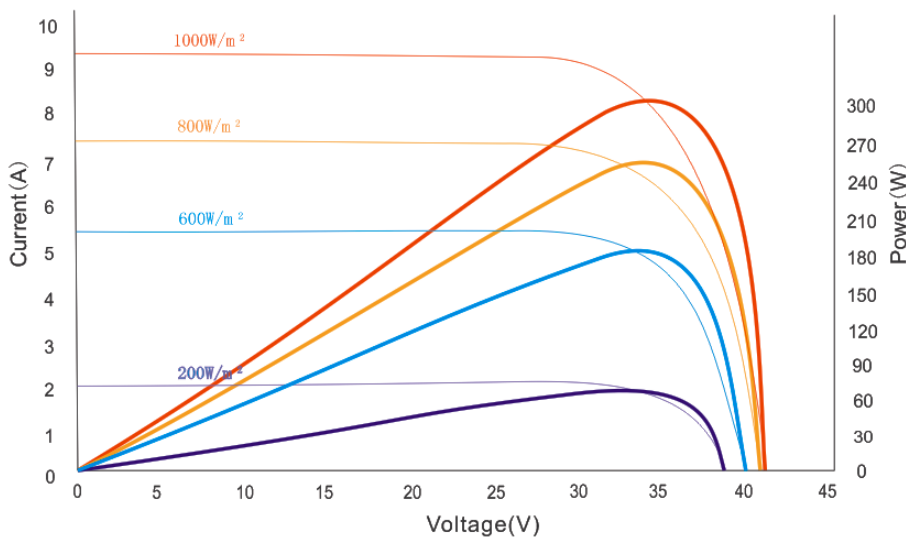
## Packaging Configuration

Packing Configuration	<b>22 pcs/box</b>
Quantity/Pallet	<b>44 pcs/pallet</b>
Loading Capacity	<b>484 pcs/40ft(H)</b>

## Absolute Ratings

Dielectric Insulation Voltage	<b>3000V</b>
Operating Temperature (°C)	<b>-40~+85</b>
Storage Temperature (°C)	<b>-40~+85</b>

## I-V Curves



### I-V Curves at different Irradiances (AM1.5 25°C)

Specifications included in this datasheet are subject to change without prior notice

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