

# " Polycrystalline PV module 72 cells

# **Key Features**





- **Reinforced Module Warranty**
- Reinforced Structure (thicker glass, stronger frame)
- **Ideal for ground mounted systems**
- **Salt Mist and Ammonia Resistant**

















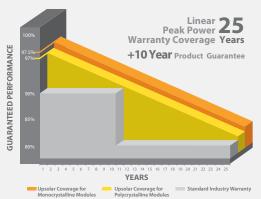




#### Secure Investment

Upsolar provides industry-leading product coverage for all our modules to ensure our customers achieve superior long-term value from their solar installations. In addition to a 10-year product warranty, which covers unanticipated module damage, Upsolar implements a 25-year performance guarantee known as the Reinforced Module Warranty.

Whereas traditional warranties feature a singular trigger point that results in drastic coverage reductions after just 10 years, our Linear Peak Power Warranty offers a gradual ramp that more accurately corresponds to system performance over 25 years.



Upsolar has teamed up with AIG Energy Warranty, a division of AIG, to provide system owners with a second layer of warranty protection through a deductible-free protection plan\*\* that insures up to 90 percent of equipment costs and delivers peace of mind for years to come.

#### Electrical Characteristics @ STC\*

| MODEL                         | UP-M295P           | UP-M300P | UP-M305P | UP-M310P | UP-M315P |  |
|-------------------------------|--------------------|----------|----------|----------|----------|--|
| Max Power Pm (Wp)             | 295                | 300      | 305      | 310      | 315      |  |
| Max Power Voltage Vm (V)      | 35.7               | 35.9     | 36.1     | 36.3     | 36.5     |  |
| Max Power Current Im (A)      | 8.26               | 8.36     | 8.45     | 8.54     | 8.63     |  |
| Open-Circuit Voltage Voc (V)  | 45.4               | 45.6     | 45.8     | 46.0     | 46.2     |  |
| Short-Circuit Current Isc (A) | 8.58               | 8.66     | 8.74     | 8.82     | 8.90     |  |
| Module Efficiency             | 15.2%              | 15.5%    | 15.70%   | 16.0%    | 16.2%    |  |
| Maximum System Voltage (V)    | 1000(IEC)/1000(UL) |          |          |          |          |  |
| Power Tolerance               | 0/+3%              |          |          |          |          |  |
| Series Fuse Rating (A)        | 20A                |          |          |          |          |  |
|                               |                    |          |          |          |          |  |

<sup>\*</sup>STC: Irradiance 1000 W/m², Module temperature 25°C, AM=1.5

#### Components & Mechanical Data

| Front Glass            | High Transparency Tempered Glass 0.157" // 4.0 mm             |
|------------------------|---|
| Junction Box           | IP 65 or above  |
| Bypass Diode           | 3 diodes  |
| Output Cables          | 1.0 m // IEC, UL approved (4 mm², 12AWG) (PV Wire Type)       |
| Connectors             | MC4 compatible (IP67, IEC and UL approved)                    |
| Frame                  | Anodized aluminium alloy type 6063-T5                         |
| Encapsulation Material | EVA (0.018" // 0.45 mm $\pm$ 0.001" // 0.03 mm thickness)     |
| Back Sheet             | White multilayer polymer film                                 |
| Temperature Range      | -40°F to +194°F // -40°C to +90°C                             |
| Max Load               | 75 lbs / ft² (UL Standard) // 5400 Pa (IEC Standards)         |
| Impact Resistance      | Steel ball - 1.18 lbs // 535 g dropped from 51" // 1.3 m high |
|                        |   |

#### **Specifications**

Cells Polycrystalline silicon solar cells 6" x 6" // 156 mm x 156 mm

Number of Cells 72 (6 x 12)

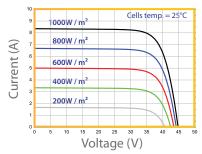
Dimensions ( in // mm )  $77.01 \times 39.06 \times 1.57$  //  $1956 \times 992 \times 40$ 

Weight (lb // kg) 58.4 // 26.5

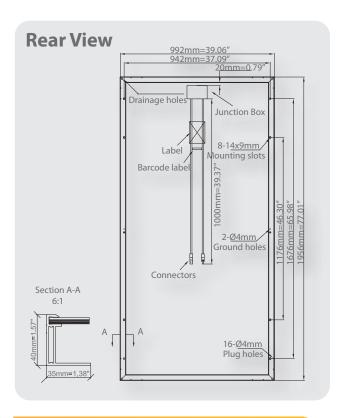
## Temperature Coefficients

| NOCT (°C)                                 | $45 \pm 2$       |
|---|------------------|
| Temperature Coefficients of Isc (% / °C)  | $0.05 \pm 0.01$  |
| Temperature Coefficients of Voc (% / °C ) | $-0.30 \pm 0.02$ |
| Temperature Coefficients of Im (% / °C)   | $-0.02 \pm 0.02$ |
| Temperature Coefficients of Vm (% / °C)   | $-0.42 \pm 0.03$ |
| Temperature Coefficients of Pm (% / °C)   | -0.43 + 0.05     |

#### IV Curves



• Deviation of Vm (V), Im (A), Voc (V) and Isc (A) of ±2.5%



## Options Available

SolarEdge Integrated Tigo Integrated

UP-EN-US-052015-V