

## 60 Watt Monocrystalline Photovoltaic Module

### Made with high efficiency back-contact solar cells

Copia Solar's 60 watt monocrystalline module has multiple advantages. These solar modules are made with back-contact monocrystalline solar cells which are aesthetically pleasing in appearance. The cells have a unique structure, different from conventional cells, they yield an average conversion efficiency up to 20.6%.

Copia Solar uses the highest quality materials in the manufacturing of our solar modules, and also maintains excellent quality control levels at our ISO 9001 qualified factory.



### Features

- Photovoltaic modules made with unique back-contact cells.
- Cells with high conversion efficiency up to 20.6%.
- Due to higher efficiency the modules are smaller in size than modules made with conventional cells.
- Black modules are available on special request.
- Copia Solar modules are made with high quality materials which qualifies the high reliability of the module.
- Designed to charge 12 to 48 volt batteries for off-grid remote power systems.
- Manufactured in ISO9001 certified factory.

### Limited Warranty

10 years limited power warranty of 90% of the minimum specified power rating, please refer to warranty details issued by Copia Solar/Manufacturer.

### Applications

- Telecommunication
- Water pumping for various agriculture and aquaculture applications
- Cathodic protection
- Lighting systems for emergency use and railroad
- Desalination systems
- Electricity for remote villages
- Security cameras
- Remote sensors
- Telemetry equipment

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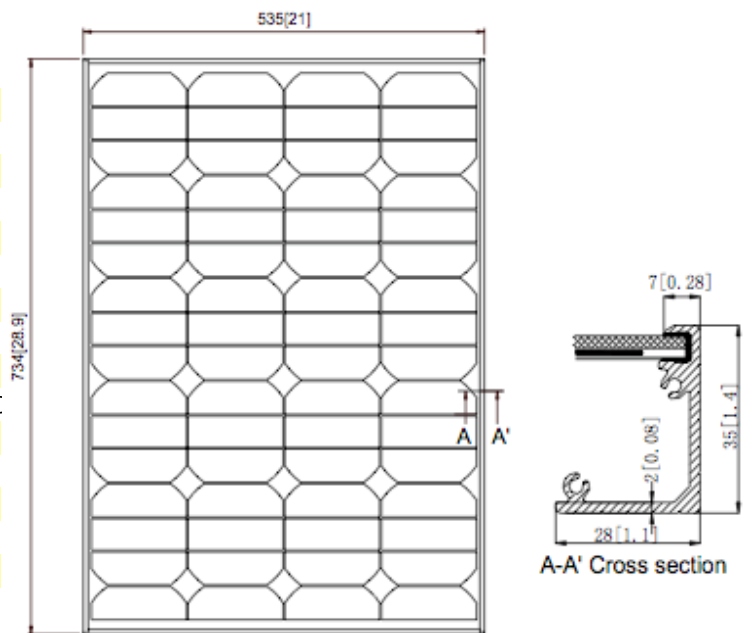
### Electrical Characteristics

Model Number: COS-60-22

Max Power	Pmax	60W
Max Power Voltage	Vmp	16.9V
Max Power Current	Imp	3.56A
Open Circuit Voltage	Voc	20.3V
Short Circuit Current	Isc	3.99A
Maximum System Voltage		70V
Series Fuse Rating		9A
Temperature Co-efficients		
	Power	-0.38%/°C
	Voltage	-58.7mV/°C
	Current	3.5mA/°C
Cell Efficiency		19.70%
Number of Cells in Series		32
Number of Strings in Parallel		2
Max Power Tolerance		+/-5%

### Dimensions

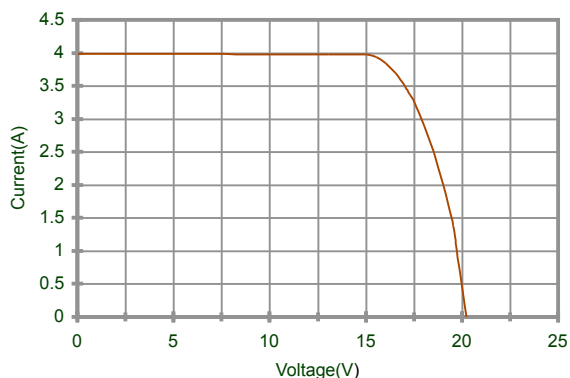
Unit: mm [in]



### Mechanical Characteristics

Weight	5.20kg, 11.5lbs
Dimension	734 x 535mm [28.9*21in]
Thickness, including junction box	35mm [1.38in]
Frame	>15µm clear anodized

### IV Curve



Note: All electrical parameters are rated at standard test conditions (irradiance of 1000W/m<sup>2</sup>, AM 1.5G, cell temperature 77°F/25°C)

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