

# 156 Series Polycrystalline Solar Module

220W -230W



High Module Conversion Efficiency (Up to 14.14% )



Easy Installation and Handling for Various Applications



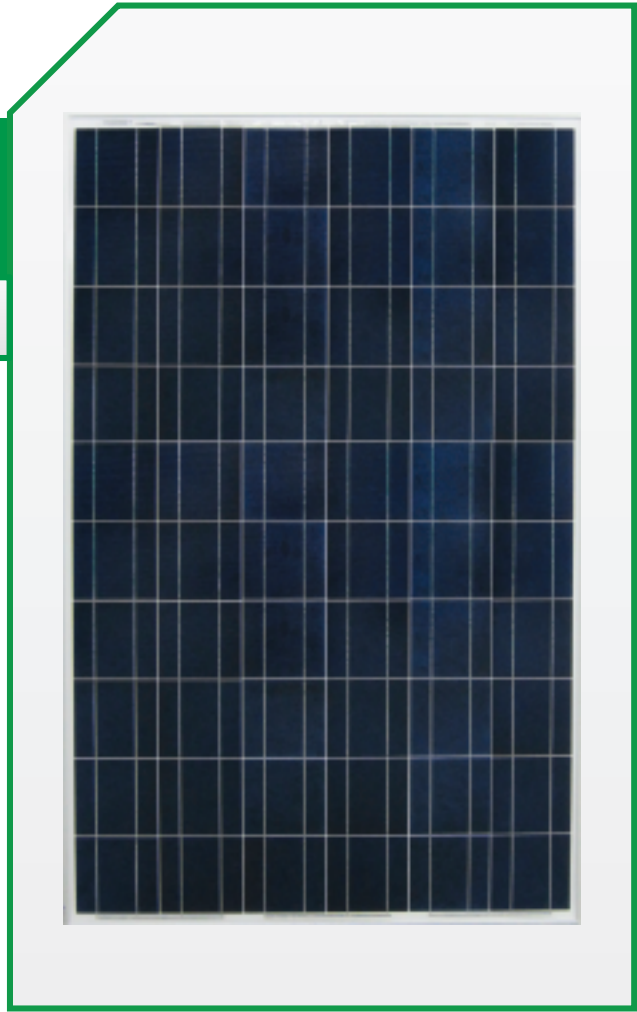
Meet Strong Wind-pressure(2400Pa)&Snow Load (5400Pa)



Conform with PV Standards:IEC61215,IEC61730 and UL1703



QC System Meets ISO 9001:2008



## Warranty

5 Years Manufacturing Warranty

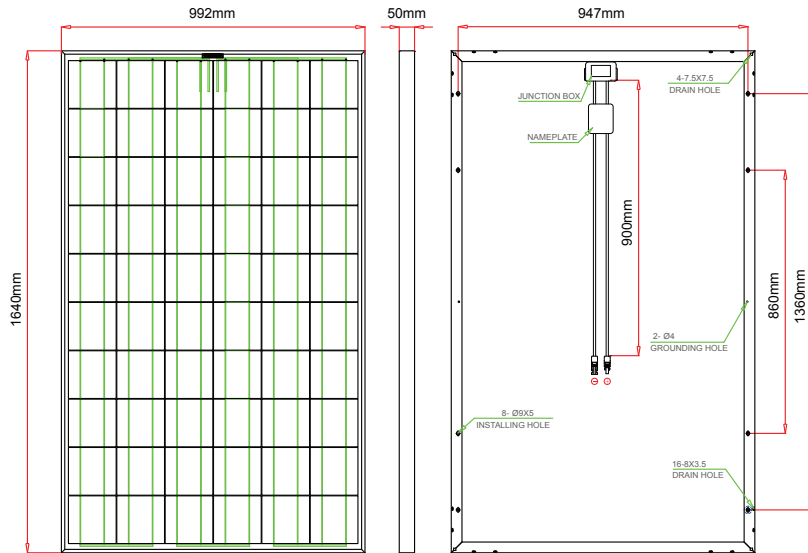
10 Years Warranty ,90% Power Output

25 Years Warranty ,80% Power Output

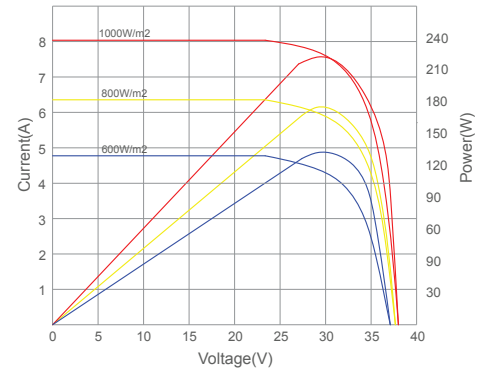
ReneSola is a global leading manufacturer of solar wafers and provider of solar module OEM services. It provides solar products throughout the entire solar industry chain, including polysilicon feedstock (Sichuan Renesola), monocrystalline and Polycrystalline ingots and wafers (Zhejiang Yuhui), solar cells and modules(Jiangsu Jiacheng) ,which enhances a high popularity in markets of Europe and America.



#### Dimension of PV Module JCM-24/Bb



#### I-V Curves of PV Module JCM-24/Bb



#### Packing Information

	20'GP	40'GP
Container	20'GP	40'GP
Pieces per Pallet	20	20
Pallets per Container	12	28
Pieces per Container	240	560

#### Electrical Data at STC

	JC220M-24/Bb	JC225M-24/Bb	JC230M-24/Bb
Maximum Power (Pmax)	220W	225W	230W
Power Tolerance	±3%	±3%	±3%
Efficiency of Module	13.52%	13.83%	14.14%
Optimum Operation Current (Imp)	7.64A	7.76A	7.90A
Optimum Operation Voltage (Vmp)	28.8V	29.0V	29.1V
Short Circuit Current (Isc)	8.01A	8.14A	8.27A
Open Circuit Voltage (Voc)	37.1V	37.2V	37.3V

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C)

#### Temperature Rating

Temperature Coefficient of Voc	-0.34%/ °C
Temperature Coefficient of Isc	0.07%/ °C
Temperature Coefficient of Pmax	-0.47%/ °C
Nominal Operating Cell Temperature (NOCT)	45 °C

#### General Data

Cell Type	156 x 156mm Polycrystalline, 60(6x10) pcs in series
Glass	High Transmission, Low Iron, Tempered Glass 4mm
Frame	Anodized Aluminum Alloy, 20 Draining Holes in Frame
Junction Box	TUV Certified, IP65 rated connector

#### Mechanical Configuration

Dimension	1640x992x50mm
Installation Hole Dimensions	1360x860x947mm
Cable Length	900mm
Weight	23Kg

#### Maximum Ratings

Operating Temperature	-40 ~ +85°C
Storage Temperature	-40 ~ +85°C
Maximum System Voltage	1000V (IEC) / 600V (UL)
Number of Bypass Diodes	6pcs
Maximum Series Fuse	20A