







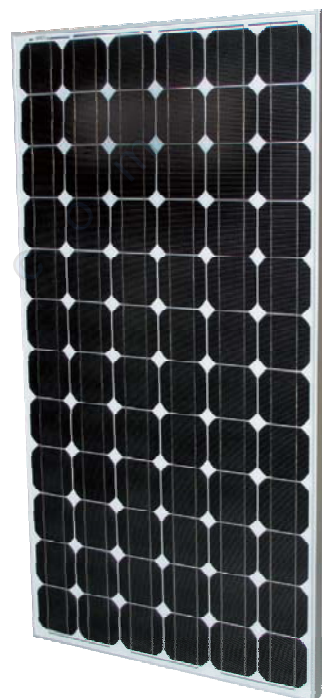


180W-200W Monocrystalline Solar Module

RS-M180 RS-M185 RS-M190 RS-M195 RS-M200

-  Easy and flexible installation for various applications
-  Module with sturdy aluminum frame to withstand wind loads (2400 Pascal) and snow loads (5400 Pascal)
-  Anti-reflective coating improves light absorption for both cells and module
-  High-performance EVA and back sheet meet the highest requirement of module sealing
-  Aesthetic design and environment-friendly packing
-  Meeting the highest international standards: ISO9001 and ISO14001
Independently certified with TUV, IEC61215, IEC61730, CE and UL
-  Guaranteed 0~5W positive power output tolerance
-  10 years manufacturing warranty
12 years warranty, 90% power output
25 year warranty, 80% power output



**Come with us
for a greener future**

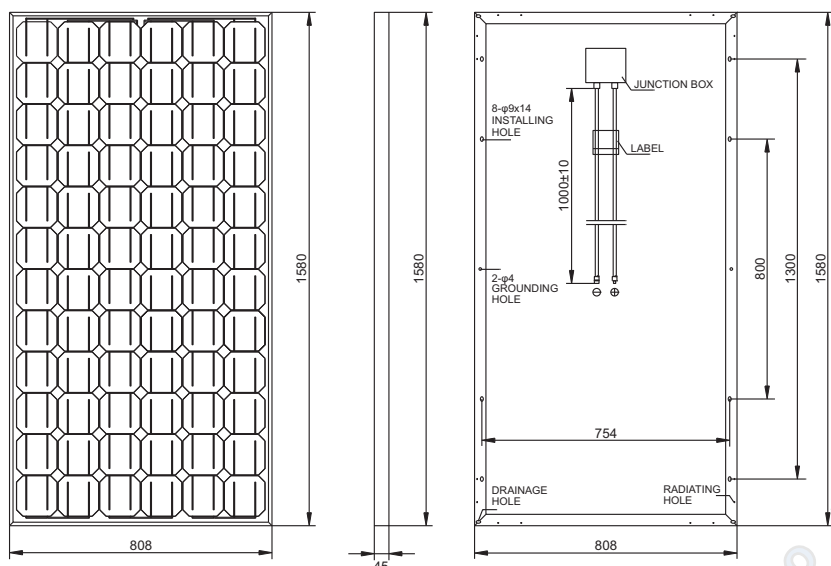
Founded in 2005, RICH SOLAR is a reliable photovoltaic manufacturer, producing both monocrystalline and polycrystalline solar cells and solar modules with the most exquisite technology. By the year 2010, RICH SOLAR reaches a total capacity of 200MW. RICH SOLAR holds a harmonious relationship cooperating with the solar power companies worldwide. Its products could be used in residential, commercial, industrial and public utility applications. RICH SOLAR aims to bring the most profitable value for our customers by providing world-class products and service, which, in return, gives us favorable reputation.

With the philosophy of **R**esponsibility, **I**nnovation, **C**redibility and **H**onesty, RICH SOLAR welcomes more passionate partners to join us and create a greener future.

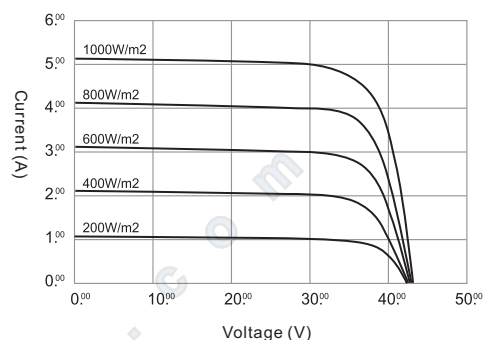
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Dimensions of Solar Module RS-M180-200 (Unit: mm)



I-V Curves



Electrical Characteristics

	RS-M180	RS-M185	RS-M190	RS-M195	RS-M200
Peak Power Watts-Pmax (WP)	180	185	190	195	200
Maximum Power Voltage-Vmp (V)	36.3	36.4	36.6	36.8	37.4
Maximum Power Current-Imp (A)	4.96	5.08	5.19	5.30	5.35
Open Circuit Voltage-Voc (V)	44.4	44.6	44.8	45.2	45.4
Short Circuit Current-Isc (A)	5.31	5.45	5.53	5.62	5.78
Encapsulated Cell Efficiency η_c (%)	16.9	17.3	17.7	17.5	17.9
Module Efficiency η_m (%)	14.1	14.5	14.9	15.3	15.7

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C)

General Data

Cell Type	125 x 125mm Monocrystalline silicon, 72pcs in series
Glass	High Transmission, Low Iron, Tempered Glass 3.2mm
Frame	Anodized Aluminum Alloy
Junction Box	MC4 connector, TUV Certified

Temperature Ratings

Nominal Operating Cell Temperature (NOCT)	47±2°C
Temperature Coefficient of Pmax	-0.45%/°C
Temperature Coefficient of Voc	-0.35%/°C
Temperature Coefficient of Isc	0.05%/°C

Mechanical and Packing Configuration

Dimensions	1580 x 808 x 45mm
Weight	15.5kg
Cable Length	1000mm
Loading Capacity	672pcs/40ft, 288pcs/20ft

Maximum Ratings

Operating Temperature	-40 ~ +85°C
Maximum System Voltage	1000VDC
Number of Bypass Diodes	3pcs
Maximum Series Fuse	15A