

Polycrystalline Type

RNG-Poly

290/295/300/305/310P

Key Features

- Top Ranked PTC Rating
- High Module Conversion Efficiency
- Fast and Inexpensive Mounting
- Maximizes System Output by Reducing the Mismatch Loss
- 100% EL Testing on All Renogy Modules, Guaranteed No Hotspot
- Guaranteed Positive Output Tolerance (0+3%)
- Withstand High Wind (2400 Pa) and Snow Loads (5400 Pa)
- Excellent Performance in Low Light Environments

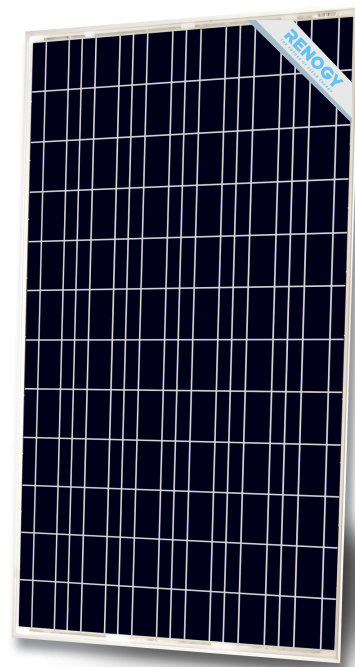
Application

- On-grid Rooftop/Ground Mounted
- Residential/Commercial/Power Stations

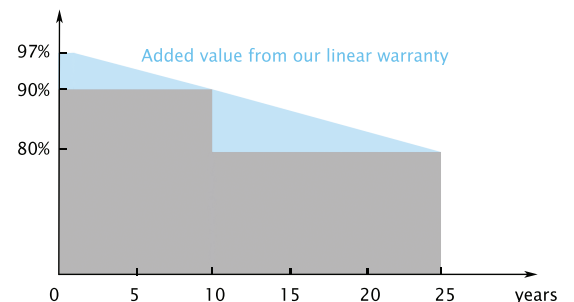
Safety Guide

Only qualified personnel should install or perform maintenance. Please read the Renogy Installation Manual before installation; Be aware of dangerously high DC voltage; Do not install modules when wet or broken.

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Linear Warranty



Renogy modules' performance is guaranteed within 25 years from the time of purchase according to the above chart.

Besides, our warranty also includes:

(1) 25 year transferrable power output warranty:

5 years/95%, 10 years/90%, 25 years/80%

(2) 10 year material and workmanship warranty

Note:

2.5% in the first year, thereafter 0.7% per year, ending with 80.7% in the 25th year after the Warranty Commencement Date



Electrical Characteristics

Maximum Power at STC (Pmax)	290W	295W	300W	305W	310W
PV USA Test Conditions (PTC)	265.3W	270.6W	275.2W	275.6W	280.1W
Optimum Operating Voltage (Vmp)	37.23 V	37.25 V	37.46 V	37.63 V	37.7 V
Optimum Operating Current (Imp)	7.79 A	7.92 A	8.01 A	8.10 A	8.20 A
Open-Circuit Voltage (Voc)	44.72 V	45.62 V	46.12 V	46.33 V	46.46V
Short-Circuit Current (Isc)	8.45 A	8.51 A	8.56 A	8.62 A	8.70A
Module Efficiency	14.9%	15.2%	15.5%	15.7%	16.0%
Cell Efficiency	16.9%	17.1%	17.3%	17.6%	17.9%

STC: Irradiance 1000 W/m², module temperature 25°C, AM=1.5

Mechanical Characteristics

Solar Cell	Polycrystalline 156 x 156 mm (6 inches)
No. of Cells	72 (6 x 12)
Dimensions	1956 x 992 x50 mm (76.9 x 39.0 x 2.0 inches)*
Weight	23.0 kgs (50.6 lbs)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP65/IP67 rated
Output Cables	4.0 mm ² (0.006 inches ²), 1200mm (47.2 inches)
Connectors	MC4 connectors
Fire Rating	Classs C
UL Listed	UL 1703

Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.44%/°C
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Isc	0.04%/°C

Maximum Ratings

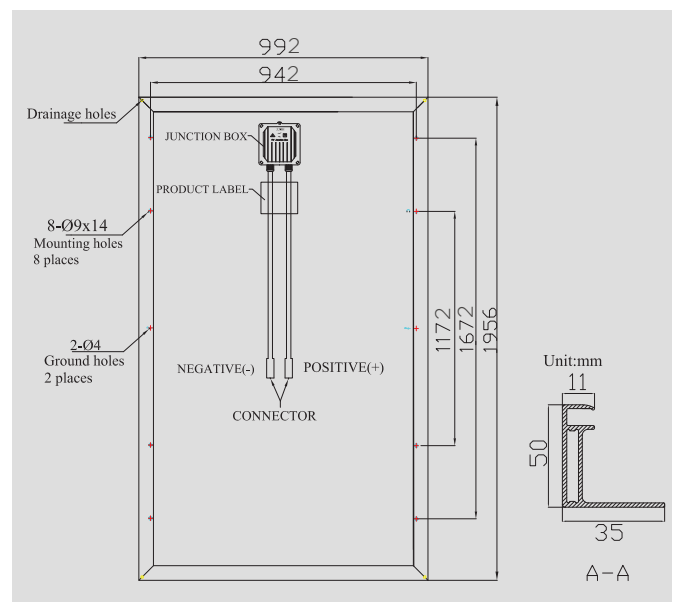
Operating Module Temperature	-40°C to +90°C
Maximum System Voltage	600 V DC (UL)/ 1000 V DC (IEC)
Maximum Series Fuse Rating	15 A

Packaging Configuration

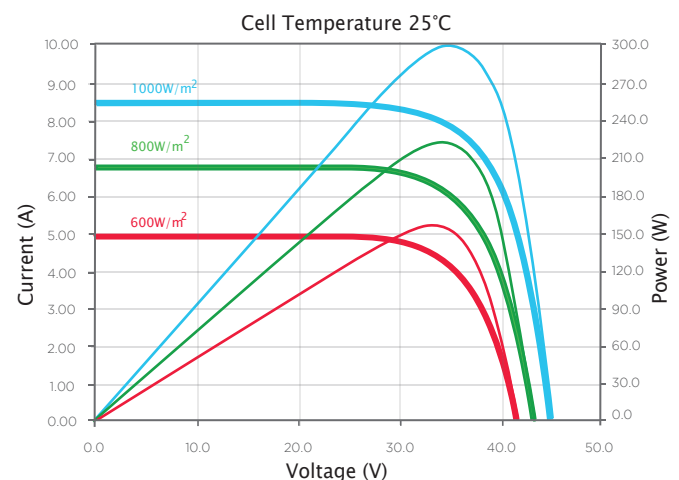
Per Pallet	21 pcs (20' CTN)/23 pcs (40' CTN)
Per Container	252 pcs (20' CTN)/552 pcs (40' CTN)

* Customized Frame Thickness Also Available.

Module Diagram



I-V Curves



Current, Power vs. Voltage Characteristics of RNG-300P

— Current vs. Voltage — Power vs. Voltage