

# 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

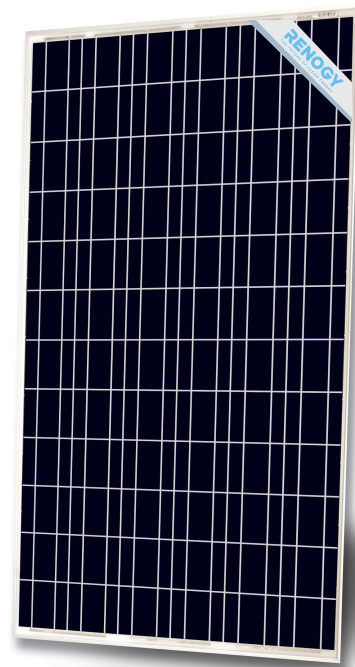
### Application

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

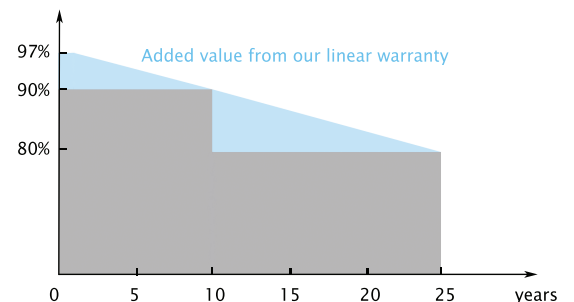
### Safety Guide

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

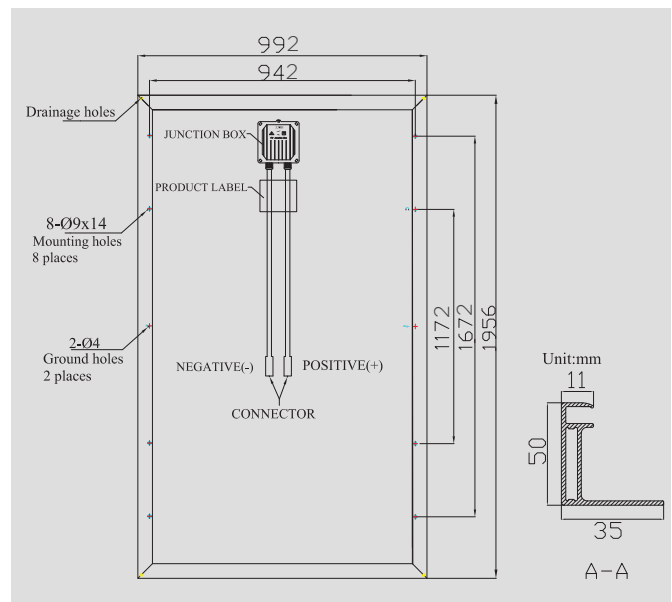
Maximum Power at STC (Pmax)	290W	295W	300W	305W	310W
PV USA Test Conditions (PTC)	265.3W	270.6W	275.2W	275.6W	280.1W
Optimum Operating Voltage (Vmp)	37.23 V	37.25 V	37.46 V	37.63 V	37.7 V
Optimum Operating Current (Imp)	7.79 A	7.92 A	8.01 A	8.10 A	8.20 A
Open-Circuit Voltage (Voc)	44.72 V	45.62 V	46.12 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/m<sup>2</sup>, 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 <sup>2</sup> ( 0.006 inches <sup>2</sup> ), 1200mm ( 47.2 inches )
Connectors	MC4 connectors
Fire Rating	Classs C
UL Listed	UL 1703

## Module Diagram



## 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

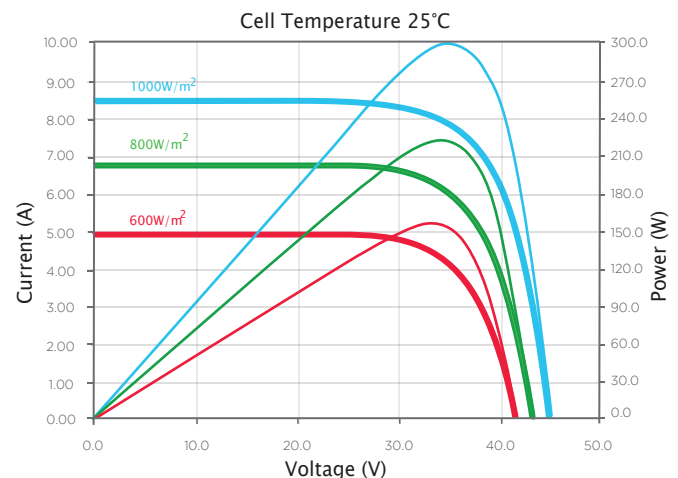
Operating Module Temperature	-40°C to +90°C
Maximum System Voltage	600 V DC (UL)/ 1000 V DC ( IEC )
Maximum Series Fuse Rating	15 A

## 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.

## I-V Curves



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

— Current vs. Voltage — Power vs. Voltage