



## Key Features

- **Monocrystalline Panels** – Features substantial conversion efficiency and power output.
- High module conversion efficiency
- 10 Year – Material and workmanship warranty
- Top ranked PTC (Production Tax Credit) rating
- **PERC Silicon Solar Cells** – Provides both cost savings and overall better power output performance.
- No hot spots guaranteed
- 25 Year – Power output warranty

# Technical Specifications

	Renogy X 405W	Renogy X 450W
<b>Electrical Data</b>		
Max. Power at STC	405W	450W
Optimum Operating Voltage	31.09V	34.67V
Optimum Operating Current	13.02A	12.98A
Open Circuit Voltage (Voc)	37.31V	34.67V
Short Circuit Current (Isc)	13.87A	13.89A
Module Efficiency	20.5%	20.8%
Max System Voltage	1500 VDC	1500 VDC
Max Series Fuse Rating	25A	25A
<b>Mechanical Data</b>		
Solar Cell Type	PERC Monocrystalline (7.2 x 3.6 in)	PERC Monocrystalline (7.2 x 3.6 in)
Number of Cells	108 (6 x 18), 60 cells in series	120 (6 x 20), 60 cells in series
Dimensions	67.8" x 44.7" x 1.4"	75.2" x 44.6" x 1.4"
Weight	47.4 lbs.	52.7 lbs.
Front Glass	Tempered Glass 0.13"	Tempered Glass 0.13"
Frame	Anodized Aluminum Alloy	Anodized Aluminum Alloy
Connector	Solar Connector	Solar Connector
Fire Rating	Class C	Class C
<b>Thermal Data</b>		
Operating Temp. Range	-40F to 185F	-40F to 185F
Temp Coefficient of Pmax	-0.35 %/C	-0.35 %/C
Temp Coefficient of Voc	-0.26 %/C	-0.28 %/C
Temp Coefficient of Isc	0.048 %/C	0.05 %/C
<b>Certifications</b>		
EN IEC61730	Yes	Yes
EN IEC61215	Yes	Yes
ISO 9001: QMS	Yes	Yes
ETL, UL61730	Yes	Yes