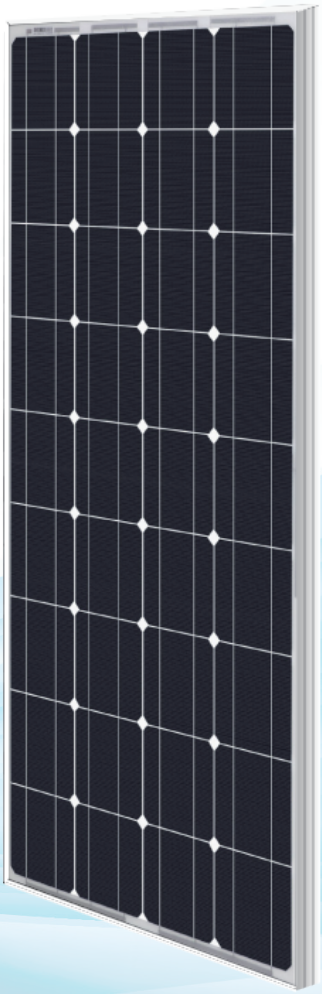


Renogy
Lightweight ETFE Solar Panel

RNG-100DX-H

Key Features

- **ETFE Surface** — The molecules that composes the ETFE polymer are chemically very stable and therefore can withstand high levels of thermal stress and chemical aggression. It is also a self-cleaning material with high UV permeability, which makes it great material for solar panel.
- **Ultra Lightweight** — Thanks to advanced polymer materials, this product weighs 50% less than conventional solar panels, making transportation and installation a breeze.
- **Highly Durable** — Rigorously tested, the panel was designed to withstand extreme wind of up to 2400 Pa and snow loads of up to 5400 Pa.

Potential Uses

Boat / Yacht

RV / VAN

Home / Cabin

Renogy | www.renogy.com | techsupport@renogy.com | T: 800-330-8678
2775 E. Philadelphia St., Ontario, CA 91761

Renogy
100W 12V Lightweight ETFE Solar Panel

RNG-100DX-H

Electrical Data

Maximum Power (P_{max})	100 W
Maximum Power Voltage (V_{mp})	18.9 V
Maximum Power Current (I_{mp})	5.29 A
Open-circuit Voltage (V_{oc})	22.5 V
Short-circuit Current (I_{sc})	5.75 A
Operating Temperature (℃)	-40℃ to +80℃
Maximum System Voltage	600V DC（IEC）
Maximum Series Fuse Rating	20A
Application Class	Class A
Power Tolerance	0/+5W

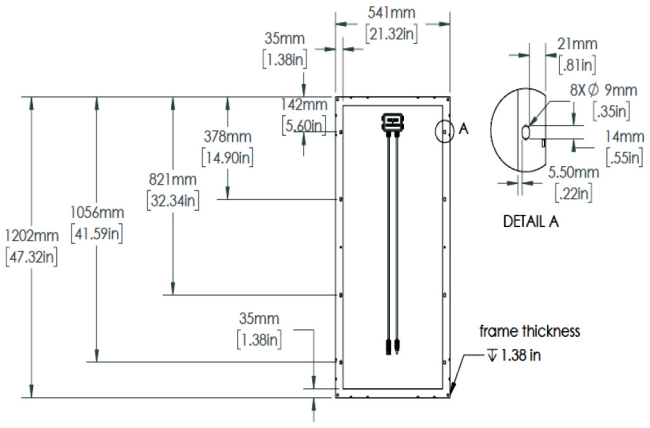
Mechanical Data

Product	RNG-100DX-H
Solar Cell	Monocrystalline cells
No. of Cells	36(4×9)
Module Dimensions	1186x535x35mm
Weight	3.2 kg
Backsheet	White
J-box	IP68 rated (each j-box have one bypass diodes)
Output Cables	Photovoltaic technology cable 4.0mm², (+)150/(-)450mm
Connector	MC4 Connectors

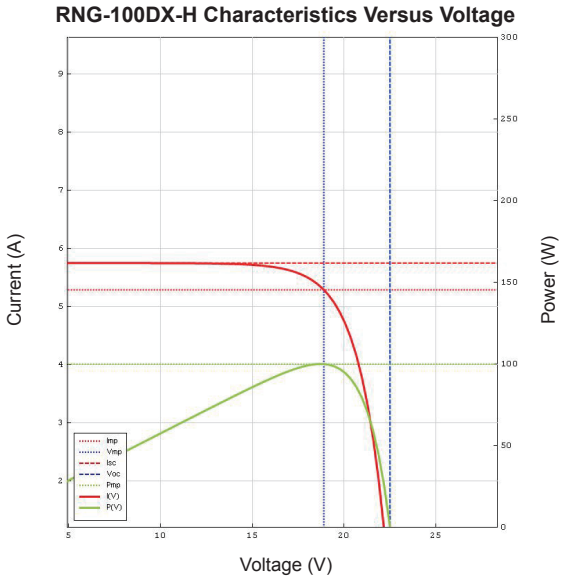
Certifications

Quality Control Verified

Module Diagram



IV-Curve



RENOGY

FAQ for Lightweight ETFE Solar Panel

How does temperature affect solar panel output efficiency?

Temperature affects solar panel output power. Use 25℃ as the baseline, solar panel output power decreases 0.3% to 0.5% when average temperature increases 1℃.

Panel surface has ETFE (strongest fluorine-based plastic material on the market) patent coating. It offers extreme tearing resistance, tension resistance, shock resistance abilities. ETFE also has better heat reflecting rate than glass, which offers superior cooling effect and increase solar panel efficiency.

How do clouds and shadowing affect solar panel output efficiency?

Solar panel output power will decrease in cloudy weather or when the panel is partially covered. This is normal. Output power will increase when sunlight recovers. Please do not cover solar cell completely, or the output power will decrease sharply. When solar panel is partially covered, the output power will change accordingly. Vertically divide solar panel evenly into two sections. When only one section is covered, solar panel output power will only decrease about 10% even if this section is covered by 80%. When both sections are covered at the same time, there will be almost no output power even if the solar panel is covered less than 10%. Thus, it is not recommended to cover both sections at the same time.

Disclaimer of liability