

Description

12V Pro Series High-Frequency Inverter Chargers combine pure sine wave and multi-stage charging in a compact design. They efficiently convert 12VDC power to 230VAC with 91% peak efficiency.

When grid-connected, they easily recharge various battery types, including lithium, GEL, and AGM. With versatile connectors and communication protocols, installation and system integration are quick and simple.

Key Features

■ High Conversion Efficiency

Under 4% total harmonic distortion (THD) for clean, grid-like power. 91% peak conversion efficiency with low standby energy use (<10W within 12 hours).

■ Uninterrupted Power Supply

Switch from the grid to the connected battery within 20ms to ensure critical appliances operate smoothly.

■ Customizable Charging

- Battery types
- Charging current
- Output frequency
- Lithium battery activation

■ Detachable LCD Screen

Removable for easy monitoring and for making adjustments away from the main unit.

■ Residual Current Device (RCD)

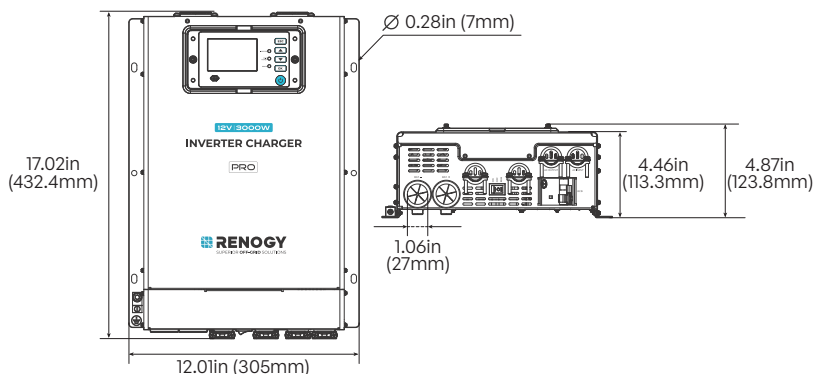
Automatically cuts power during potential leakage faults to prevent shocks, fires, and damage.

■ N-G Bonding

Provides a single grounding point to prevent ground loops and electric shock, minimizing the risk of inverter charger faults.



Product Dimensions



Pro 12V 3kW HF Inverter Charger*

*Pro 12V 2kW HF Inverter Charger is the same size as the 12V 3kW option.

For 2,000W Model:

- Battery Cables: 2/0 AWG
- ANL Fuse: 250A
- Fuse Cables: 2/0 AWG

For 3,000W Model:

- Battery Cables: 4/0 AWG
- ANL Fuse: 400A
- Fuse Cables: 4/0 AWG

Recommended Accessories



BT-2 Bluetooth Module

Enables remote monitoring and control via Bluetooth with the Renogy App.

Technical Specifications

Inverter Data

Model	RIV1220PCH-23S	RIV1230PCH-23S
Continuous Output Power	2,000W	3000W
Surge Rating	4,000W (@100ms)/3,000W(@3s)/2,400W(@35s)	6,000W(@100ms) / 4,500W(@3s) / 3,600W(@35s)
Output Voltage (Configurable)	230VAC	230VAC
Output Frequency (Configurable)	50/60Hz	50/60Hz
Rated Battery Input Voltage	12VDC	12VDC
Inverter Efficiency	91%	91%
Power Consumption	<10W	<10W

Charger Data

Charge Current	5-80A	5-120A
Nominal Input Voltage	230VAC	230VAC
Input Voltage Range	187-265VAC	187-265VAC
Charger Efficiency	85% Peak	85% Peak

Transfer Relay Data

Transfer Relay Rating	16A	16A
Transfer Time	20ms	20ms

General Data

Battery Types	GEL, AGM, SLA, FLD, CAL, LI, and USER	GEL, AGM, SLA, FLD, CAL, LI, and USER
Operating Temperature	-4°F to 122°F / -20°C to 50°C	-4°F to 122°F / -20°C to 50°C
Storage Temperature	-22°F to 158°F / -30°C to 70°C	-22°F to 158°F / -30°C to 70°C
Cooling	Fans	Fans
Dimensions (LxWxH)	17.02 x 12.01 x 4.87in / 432.4 x 305 x 123.8mm	17.02 x 12.01 x 4.87in / 432.4 x 305 x 123.8mm
Weight	16.1 lbs / 7.3kg	17.4 lbs / 7.9kg
Certification	CE, R10, UKCA	CE, R10, UKCA
Warranty	3-Year	3-Year

Package Contents

RJ12 Cable	Yes (x1)	Yes (x1)
Self-Tapping Screws	Yes (x8)	Yes (x8)
Manual	Yes (x1)	Yes (x1)
Dry Contact Relay Connector	Yes (x1)	Yes (x1)

Renogy and any of its affiliates have reserved the right to make any modifications to the information on this data sheet without notice. It is our goal to supply our customers with the most recent information regarding our products.

These data sheets can be found in the downloads section of our website, www.renogy.com.