RD SERIES | INVERTER/CHARGER

Introduction

The RD Series Inverter/Charger is a new generation modified sine wave inverter designed specifically for renewable energy use. The RD Series is powerful, easy-to-use, and best of all, cost effective. Power Factor Corrected (PFC) Charger: Our PFC charger is built into all of our inverter chargers. It uses less energy from a generator than a standard charger – using 25-30% less AC current than standard chargers. Safe and reliable: The RD Series is ETL Listed to the stringent requirements of UL 1741 (USA only), ensuring that the inverter is safe and reliable. Easy-to-install: Install the RD Series in four easy steps: simply connect the inverter's output to your distribution circuits or electrical panel, connect your power cable (AC) to the inverter's easy-to-reach terminal block, connect the batteries, and switch on the power.

Features

- Choices – The RD Series comes in four power models and 12 and 24 volt models, allowing you to choose the model that is right for you.
- Versatile mounting – Mount the RD Series on a shelf or wall.
- Lightweight – The lightweight aluminum base and cover also provides noise reduction and corrosion resistance.
- Multiple ports – The RD Series provides multiple ports, including an RS485 communication port for network expansion, and a remote port.
- Accessible design – The extra large AC access cover with terminal screw block and 360° DC connection terminals with covers make this inverter more accessible when it needs to be.
- Convenient switches – The RD Series comes with an on/off inverter-mounted switch with an easy-to-read LED indicator.
- Expanded transfer relay – 60 Amp transfer service is available on all models.
- Buy with ease – The RD Series is backed by a two-year (24-month) limited warranty.

Model Numbers

- RD2212
- RD1824
- RD2824
- RD3924

Available For

- Renewable Energy Systems
  - Off-grid Power
  - Back-up Power

Available Accessories

- Auto Generator Start
- Battery Monitor Kit
- Conduit Box
- DC Load Disconnect
- Fuse Blocks
- MagWeb
- Remote - ME-ARC
- Remote - ME-RC
- Remote Switch Adapter

Modified Sine Wave

12, 24 Battery Voltage Options

1800-3900 VA Continuous Output Options

SPECIFICATIONS

	RD2212	RD1824	RD2824	RD3924
INVERTER SPECIFICATIONS				
Input battery voltage range	9 - 16 VDC	18 - 32 VDC	18 - 32 VDC	18 - 32 VDC
Nominal AC output voltage	120 VAC ± 5%	120 VAC ± 5%	120 VAC ± 5%	120 VAC ± 5%
Output frequency and accuracy	60 Hz ± 0.1 Hz	60 Hz ± 0.1 Hz	60 Hz ± 0.1 Hz	60 Hz ± 0.1 Hz
1 msec surge current (amps AC)	60	70	100	150
100 msec surge current (amps AC)	37	40	60	90
5 sec surge power (real watts)	3700	4000	6000	8000
30 sec surge power (real watts)	3450	3300	4800	6400
5 min surge power (real watts)	3100	2850	3950	5800
30 min surge power (real watts)	2400	2400	3500	4750
Continuous power output at 25° C	2200 VA	1800 VA	2800 VA	3900 VA
Maximum continuous input current	293 ADC	120 ADC	186 ADC	260 ADC
Inverter efficiency (peak)	95%	94%	93%	93%
Transfer time	16 msecs	16 msecs	16 msecs	16 msecs
Search mode (typical)	5 watts	5 watts	5 watts	5 watts
No load (120 VAC output, typical)	20 watts	12 watts	19 watts	25 wattts
Waveform	Modified Sine Wave	Modified Sine Wave	Modified Sine Wave	Modified Sine Wave
CHARGER SPECIFICATIONS				
Continuous output at 25° C	110 ADC	50 ADC	80 ADC	105 ADC
Charger efficiency	85%	85%	85%	92%
Power factor	> 0.95	> 0.95	> 0.95	> 0.95
Input current at rated output (AC amps)	15	15	21	29
GENERAL FEATURES AND CAPABILITIES				
Transfer relay capability	2 legs at 30 A for 120 V/30 A or 240 V/60 A service			
Five stage charging capability	Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™			
Battery temperature compensation	Yes, 15 ft Battery Temp Sensor standard			
Internal cooling	0 to 120 cfm variable speed drive using dual 92mm brushless DC fans			
Overcurrent protection	Yes, with two overlapping circuits			
Overtemperature protection	Yes on transformer, MOSFETS, and battery			
Corrosion protection	Yes, PCB's conformal coated, powder coated chassis/top, and stainless steel fasteners			
Listings	ETL listed to UL1741 (USA only)			
Warranty	Two years			
ENVIRONMENTAL SPECIFICATIONS				
Temperature (Operating/Non-operating)	-20° C to +60° C (-4° F to 140° F) to -40° C to +70° C (-40° F to 158° F)			
Operating humidity	0 to 95% RH non-condensing			

PHYSICAL SPECIFICATIONS				
Dimensions (h x w x d)	13.75" x 12.65" x 8.0" (34.9 x 32.1 x 20.3 cm)			
Mounting	Shelf or wall (vents up)			
Weight	37 lb (16.9 kg)	35 lb (15.9 kg)	42 lb (19 kg)	53 lb (24 kg)
Shipping weight	46 lb (20.9 kg)	44 lb (20.0 kg)	51 lb (23.2 kg)	62 lb (28.1 kg)
Max operating altitude	15,000' (4570 m)			

GENERAL NOTES

Testing for specifications at 25° C.
Specifications subject to change without notice.

AGENCY APPROVALS & CERTIFICATIONS

- ETL listed to UL1741 (USA only)

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