

RCH300 Series AC Battery Charger



Benefits

- Quiet operation
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation
- Fast & Accurate Charging

Applications

- Oil drilling and transport sites
- Pipeline Industry
- Marine & other Rugged Environments
- Steel mills
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- OEM Applications
- Field Work / Construction Sites
- Solar Power Systems
- Emergency Power Backup (UPS)
- Security Systems

Battery Chargers

RCH300 Series

Description

The RCH300 is a compact DC output UPS system with external battery.

The built-in battery charger provides 300W total power for the output and for float charging the battery.

A built-in charger fail alarm (Form C) indicates either failure of the charger circuit or loss of AC input power.

The battery input is protected against accidental reverse battery connection by a crossbar diode.

The battery must be fused externally directly to the battery.

Low component count and the use of components with established reliability result in a high MTBF.

The unit is manufactured at our plant under strict quality control.

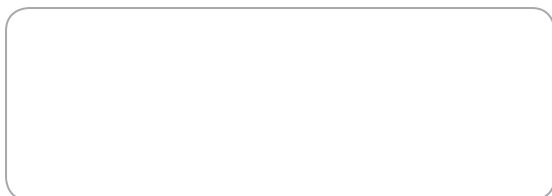
Features

- Compact size
- 300W output power with convection/conduction cooling
- Full electronic protection
- Telecom quality
- Field-proven design
- Low battery disconnect circuit
- 2 years parts and labour warranty

Specifications (Specifications Subject to Change Without Notice)

Input Voltage range	115/230VAC +/- 15%, 47 - 420Hz Voltage selection by internal jumper
Input Protection	<p>AC Input: Inrush current limiting Varistors Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p>Battery input: Crossbar Diode Internal battery safe fuse Warning: Battery must be fused externally, directly at the battery</p>
Isolation	2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis
Standards	Designed to meet EN 60950 and related standards
Switching Frequency	47KHz +/- 2KHz
Output Voltages	Any output voltage from 12VDC to 125VDC Consult factory for other voltages
Output Separation Diode	Installed internally
Line / Load Regulation	±1.5% combined from no load to full load including output separation diode
Output Overvoltage Protection	Double regulator loop, stable and independent of main feedback loop
Output Overload Protection	Rectangular current limiting with hiccup mode short circuit protection Thermal shut-down with automatic recovery in case of insufficient cooling Internal battery safety fuse on battery input
Efficiency	Typical 80% -90% at full load (depending on output)
EMI	EN 55022 Class B
Output Ripple/Noise	Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)
Operating Temperature	0 to 50°C for full specification without de-rating, Extended temperature range available
Temperature Drift	0.03% per °C over operating temperature range
Cooling	Conduction to customer heatsink or chassis and natural convection
Environmental Protection	Basic ruggedizing, Optional conformal coating
Shock/Vibration	Designed to meet IEC 61373 Cat 1 A&B
Humidity	5 – 95% non-condensing
MTBF	150,000 hours @ 45°C (calculated), Demonstrated MTBF is significantly higher
Indicators	Visible through cooling slots
Control Input	None
Alarm Output	Charger fail Form C
Connections	12 pole barrier type terminal block with 3/8" spacing for all connections. No separate terminals for battery.
Dimensions	F3: 13.2x6.2x 30cm including mounting flanges and terminals
Weight	2 kg
Standards	Designed to meet EN60950 and related standards
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



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The power conversion company

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