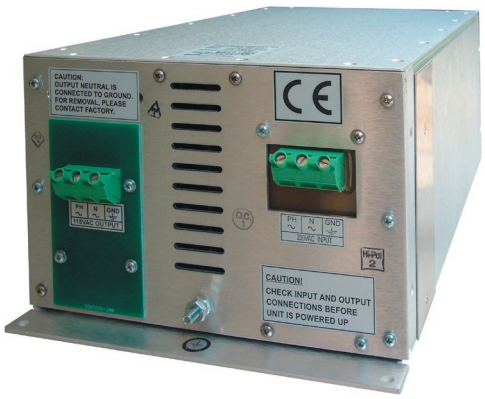
RISI1000 Series DC/AC Pure-Sinewave Inverter



- Pure sinewave
- High frequency technology
- Light weight, compact size
- Full electronic protection
- Optional extended temperature range
- Optional output fail alarm (Form C)

DC/AC Inverters

RISI1000 Series Pure-Sinewave

Description

This rugged industrial sinewave inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 1000VA output power.
It is a mature product with a track record in numerous applications.
The DC/DC input stage boosts the input voltage to a higher DC voltage, which feeds the DC/AC inverter to generate the required AC output.
The use of high frequency conversion ensures a compact construction and low weight.
It features full electronic protection, high efficiency and low output noise.
Built-in fans provide sufficient airflow for operation without de-rating to the specified temperature.
The use of components with established reliability results in a high MTBF.
The unit is manufactured at our plant under strict quality control.

Applications

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

Features

- Input is filtered to EN 55022 Class A
- Very low input ripple current
- Compact size, light weight
- Sinusoidal wave shape
- Multiple input and output voltages available
- 1000VA of output power
- Full electronic protection
- Field-proven design topology

Specifications *(Specifications Subject to Change Without Notice)*

Input Voltage	24VDC, 36VDC, 48VDC, 125VDC, 250VDC +/-15% are standard Other inputs available, please consult factory
Input Protection	Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than specified input min. will not damage unit
Isolation	500Vdc input to chassis for input voltages up to 48Vdc 1700Vdc input to chassis for input voltage 125Vdc 2250Vdc input to chassis for input voltage 250Vdc 2250Vdc input to output Output neutral is connected to the chassis internally Floating output as option
Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
EMI	EN 55022 Class A as a minimum
Output Voltage	115VAC / 60Hz or 400Hz / 8.7A continuous or 230VAC / 50Hz / 4.35A continuous Output neutral is connected to the chassis internally. Isolated floating output optional Consult factory for other outputs
Wave Form	Sinusoidal
Total Harmonic Distortion	Less than 5% at full load
Line / Load Regulation	Maximum ± 6% from no load to full load. ± 2% load regulation option is available
Load Crest Factor	Maximum 2.5 at 90% load
Output Noise	High frequency ripple is better than 500mVrms (20MHz BW)
Output Overload Protection	Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling
Output Overvoltage Protection	140Vac (for 115Vac output) or 280Vac (for 230Vac output) by internal supply voltage limiting
Efficiency	Depends on input and output voltage combination. Typically 76% at full load
Operating Temperature Range	0°C to +50°C for full specification without derating derating linearly 2.5% per °C rise above +50°C to +70°C max. Extended temperature range available
Temperature Drift	0.05% per °C over operating temperature range
Cooling	Built-in fan draws air into the unit
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating as option
Humidity	5 - 95% non-condensing
MTBF	Min. 95,000 hours at 45ºC, demonstrated MTBF is significantly higher Fan excluded
Indicators	None
Control Input	None Remote shutdown as option
Alarm Output	None Optional output fail alarm (Form C)
Package / Dimensions	3U3: 187 x 132 x 407 mm including connectors Mounting holes are clear 19” rack-mount version as option
Weight	6 Kg
Connections	Input: Compression-type terminal-block For 24Vdc input -copper studs with nuts Outputs: 115Vac – standard AC receptacle; 230Vac – IEC receptacle
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:

RIPEnergy®

The power conversion company

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Version 1.10.12