

# RISI5000 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)

## 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

## DC/AC Inverters

### RISI5000 Series Pure-Sinewave

#### Description

This rugged industrial sinewave inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 5000VA 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.

The configuration of modules for the system depends on the input/output required. Each interconnection between modules is made with a single pair of wires.

Full electronic protection eliminates the possibility of failure due to abnormal operating conditions, including application errors.

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

Cooling is by built-in fans, which draw air into the unit.

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

Customized versions are also available.

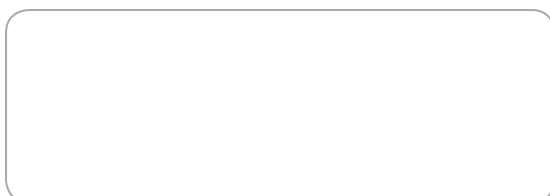
#### Features

- Input is filtered to EN 55022 Class A
- Very low input ripple current
- Modular design
- Sinusoidal wave shape
- Multiple input and output voltages available
- 5000VA of output power
- Full electronic protection
- Field-proven design topology

# Specifications ( Specifications Subject to Change Without Notice)

<b>Input Voltage</b>	24VDC, 36VDC, 48VDC, 125VDC, 250VDC +/-15% are standard Other inputs available, please consult factory
<b>Input Protection</b>	Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than specified input min. will not damage unit
<b>Isolation</b>	According to the input voltage required by the standard Output neutral is connected to the chassis internally Floating output as option
<b>Standards</b>	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
<b>EMI</b>	EN 55022 Class A as a minimum
<b>Output Voltage</b>	115VAC / 60Hz or 400Hz / 43A continuous or 230VAC / 50Hz / 22A continuous Output neutral is connected to the chassis internally. Isolated floating output optional Consult factory for other outputs
<b>Wave Form</b>	Sinusoidal
<b>Total Harmonic Distortion</b>	Less than 5% at full load
<b>Load Regulation</b>	Maximum $\pm 6\%$ from no load to full load. $\pm 2\%$ load regulation option is available
<b>Load Crest Factor</b>	Maximum 2.5 at 90% load
<b>Output Noise</b>	High frequency ripple is better than 500mVrms (20MHz BW)
<b>Output Overload Protection</b>	Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling
<b>Output Overvoltage Protection</b>	140Vac (for 115Vac output) or 280Vac (for 230Vac output) by internal supply voltage limiting
<b>Efficiency</b>	Depends on input and output voltage combination. Typically 76% at full load
<b>Operating Temperature Range</b>	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
<b>Temperature Drift</b>	0.05% per °C over operating temperature range
<b>Cooling</b>	Built-in fan draws air into the unit
<b>Environmental Protection</b>	Basic ruggedizing Full ruggedizing and conformal coating as option
<b>Humidity</b>	5 - 95% non-condensing
<b>MTBF</b>	Min. 95,000 hours at 45°C, demonstrated MTBF is significantly higher Fan excluded
<b>Indicators</b>	None Available as an option
<b>Control Input</b>	None Available as an option
<b>Alarm Output</b>	None Available as an option
<b>Package / Dimensions</b>	Package size varies from 6U x 17" x 16" to a 9U x 19" x 16" modular configuration, depending on input/output combination required. Chassis-mount and rack mount versions are available
<b>Weight</b>	From 20kg to 42kg, depending on the modular configuration
<b>Connections</b>	Input: terminal-block or threaded studs Outputs: terminal block
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

Available from:



## RIPEnergy®

The power conversion company

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