

# RISI500 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

### RISI500 Series Pure-Sinewave

#### Description

This rugged industrial sinewave inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 500VA output power.

It is a mature design with a track record in numerous applications. The inverter is built with internal power modules.

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 built-in fan provides sufficient airflow for operation without de-rating to the specified temperature.

High frequency conversion enables a compact construction, low weight and high efficiency.

The unit has full electronic protection.

The input and output are filtered for low noise.

The use of components with established reliability results in high MTBF.

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

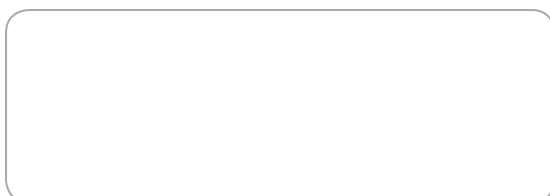
#### Features

- 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
- 500VA 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>	Input to chassis/output: min. 1000Vdc corresponding to the input voltage 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 / 4.34A continuous or 230VAC / 50Hz / 2.17A 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>Line Regulation</b>	± 0.5% max.
<b>Load Regulation</b>	Maximum ± 6% from no load to full load. ± 2% load regulation option is available
<b>Load Crest Factor</b>	Maximum 3.0 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>	Typically 78% 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>Shock/Vibration</b>	IEC 61373 Cat 1 A&B
<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
<b>Control Input</b>	None Remote shutdown as option
<b>Alarm Output</b>	None Optional output fail alarm (Form C)
<b>Package / Dimensions</b>	3U2: 132 x 132 x 407mm including connectors, excluding flanges
<b>Weight</b>	4.5 Kg
<b>Connections</b>	Input: compression type terminal block Output: standard AC receptacle Option: compression type terminal block
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

Available from:



## RIPEnergy®

The power conversion company

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