

RISI2500 Series DC/AC Pure-Sinewave Inverter



3U7: chassis-mount



3U7: rack-mount



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

RISI2500 Series Pure-Sinewave

Description

This rugged industrial sinewave inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 2500VA 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, light weight
- Sinusoidal wave shape
- Multiple input and output voltages available
- 2500VA 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	According to the input voltage required by the standard 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 / 22A continuous or 230VAC / 50Hz / 11A 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
Load Regulation	Maximum $\pm 6\%$ from no load to full load. $\pm 2\%$ 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 45°C, demonstrated MTBF is significantly higher Fan excluded
Indicators	None Available as an option
Control Input	None Available as an option
Alarm Output	None Available as an option
Package / Dimensions	Package size varies from 3U x 17" x 16" to a 6U x 19" x 16" modular configuration, depending on input/ output combination required. Chassis-mount and rack mount versions are available
Weight	From 14kg to 20kg, depending on the modular configuration
Connections	Input: terminal-block or threaded studs Outputs: terminal block
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



RIPEnergy®

The power conversion company

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