



## RISI4000 INDUSTRIAL SINEWAVE INVERTER

### SERIES RISI4000

This rugged, modular, DC/AC inverter system uses a microprocessor controlled field proven design to generate 4000VA 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.

### APPLICATIONS

- Industrial Controls
- Mining
- Oil Rigs
- Steel Mills
- Marine & other rugged environments
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power
- Telecom Power Plants
- Railway / Transportation
- Military Applications
- Manufacturing Location
- OEM Applications

### FEATURES

- Sine wave output voltage
- Up to 250Vdc input voltage
- Field-proven rugged design
- Cooling by internal fans
- Filtered input and output
- Full electronic protection
- Compact size
- 4000VA of output power



Pure Sinewave



High frequency technology



Light weight, compact size



Full electronic protection



Optional Control input



Optional Extended temperature range



Optional Output fail alarm (Form C)

# SPECIFICATIONS

Input Voltage	24Vdc 36Vdc 48Vdc 125Vdc 250Vdc ± 15% are standard Consult factory for other inputs	Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN 60950
Input Protection	Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit	EMI	EN 55022 Class A as a minimum
Isolation	According to the input voltage required by the standard	Operating Temperature	0 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 on request
Output Voltage	230Vac @ 50Hz/17A rms continuous or 115Vac @ 60Hz or 400Hz/35A rms continuous Output neutral is connected to the chassis internally Isolated floating output optional Consult factory for other output requirements	Humidity	5 - 95% non-condensing
Output Wave Form	Sinusoidal	Temperature Drift	0.05% per °C over operating temperature range
Total Harmonic Distortion	Less than 5% at full load	Cooling	Built-in fans drawing air into the unit
Line/Load Regulation	Maximum ± 6% from no load to full load. A ± 2% load regulation option is available.	Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating as option
Load Crest Factor	2.5 at 90% load	Dimensions	4x3U3: 6U x 19" rack-mount or chassis mount assembly 432 x 266x 407 mm (W x H x L) including connectors
Output Ripple Noise	High frequency ripple is less than 500mVrms (20MHz BW)	Weight	14 to 20 Kg depending on the configuration
Efficiency	Depends on input and output voltage combination. Typically 76% at full load	Connections	Input: Terminal-block or threaded studs Output: Terminal block
Output Overload Protection	Current limiting with short circuit protection Thermal shutdown with automatic recovery in case of insufficient cooling	MTBF	95,000 hours at 45°C Demonstrated MTBF is significantly higher Fan excluded
Output Overvoltage Protection	140Vac (for 115Vac output) or 280Vac (for 230Vac output) by internal supply voltage limiting	Indicators	None Available as an option
		Control Input	None Available as an option
		Alarm output	None Optional output Fail Alarm (Form C)
		RoHS Compliance	Fully compliant
		Warranty	2 years

