

# RSI300-FT SERIES

DC / AC Sine Wave Inverters: 300 VA



## General Specifications

<b>Input Voltage</b>	<b>24VDC</b> , ( 15-34 ) <b>36VDC</b> ( 22-51 ) <b>48VDC</b> ( 28-67 ) <b>72VDC</b> ( 43-101 ) <b>96VDC</b> ( 58-135 ) <b>125VDC</b> ( 66-154 )
<b>Input Protection</b>	Inrush current limiting Internal safety fuse, Reverse Polarity Protection
<b>Isolation</b>	Input – Output: 3000vdc Input – Chassis: 1500vdc
<b>EMI</b>	EN50121-3-2 Conducted & Radiated
<b>Immunity</b>	EN50155 ( Surge ) EN50121-3-2, EN61000-4-2 ( ESD ), EN61000-4-3 ( RF ) EN61000-4-4 ( Fast Transients ) EN61000-4-6 ( Conducted Immunity ) EN50155 ( Voltage Variations )
<b>Output voltage</b>	115VAC / 230VAC options Output neutral connected to chassis internally. Isolated / Floating output option.
<b>Output Waveform</b>	Sinusoidal
<b>Harmonic Distortion</b>	Less than 5% at 100% load.
<b>Output Freq.</b>	50Hz, 60Hz, 400Hz options
<b>Load Crest Factor</b>	Maximum 3% at 90% load
<b>Output Power</b>	300VA
<b>Regulation</b>	Load: $\pm 2\%$ from 10% to 100% load step. Line: $\pm 1.0\%$ over input range
<b>Output Noise</b>	High Frequency ripple is better than 500mVrms ( 20MHz BW )
<b>Protection</b>	Current limiting with short circuit protection Self re-setting thermostat for thermal protection
<b>Output Over Voltage Protection</b>	Output voltage is limited by internal supply voltage
<b>Efficiency</b>	Input voltage / model dependent typically 80% at 100% load
<b>Operating Temp</b>	-25°C to +50°C at rated load. Other options on request
<b>Cooling</b>	Convection / Conduction cooled
<b>Shock &amp; Vibration</b>	Designed to meet IEC61373 Cat 1 A & B
<b>Humidity</b>	5-95% non-condensing
<b>MTBF</b>	>150,000 hrs at 45°C
<b>LED Indicator</b>	Optional
<b>Connector</b>	Terminal block, other options on request
<b>Dimensions</b>	153 x 67 x 357mm ( FX ) ( 2.5kg )

## Features

- Designed for Rail applications to EN 50155
- Sinusoidal output waveform
- 300VA output power
- Convection cooled – No Fans
- Frequency options 50Hz / 60Hz / 400Hz
- Wide range of input options: 24 ~ 125VDC
- Optional output fail alarm on some models
- Low profile 57mm
- Rugged design for harsh environments
- Full electronic protection
- Non standard input voltage options

## Description

The **RSI300** is rugged DC/AC inverter is designed for a variety of Rail applications and designed to meet EN 50155.

It uses field proven, microprocessor controlled high frequency PWM technology to generate 300VA output power with pure sine wave output voltage.

It is a mature design with a track record in numerous Rail & Industrial 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 enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. Cooling is via baseplate to a heatsinking surface and by natural convection.

## Options ( may not be available on all combinations )

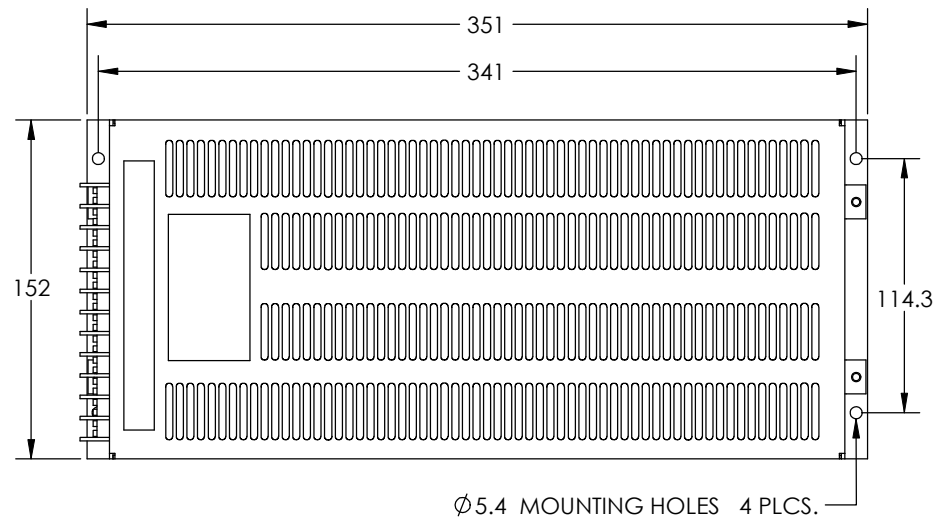
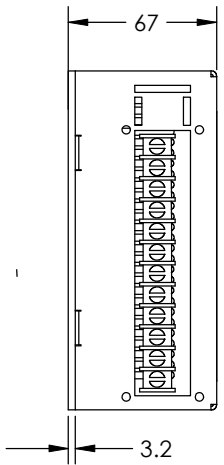
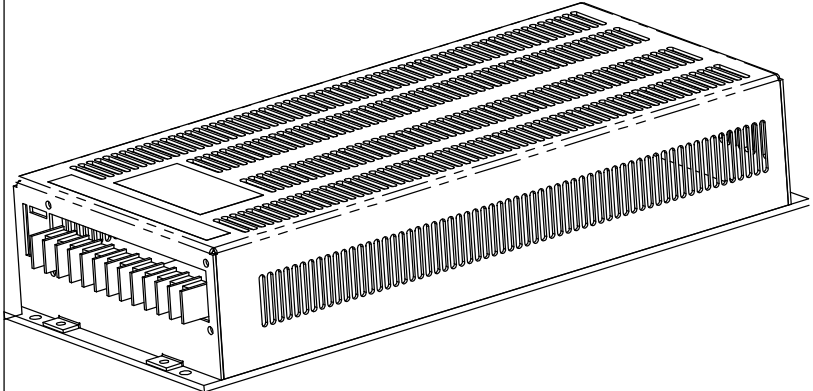
<b>Alarms</b>	Output Fail Alarm: voltage free relay contacts
<b>Remote Inhibit</b>	Remote ON / OFF
<b>Ruggedized</b>	Conformal coating and Ruggedization for use in harsh environments.
<b>Slow Start</b>	Slow start up option for powering fans
<b>Connector</b>	A variety of terminals / connectors available to suit special customer requirements
<b>Rack Mount</b>	2U x 19in Rack Mount

## Model No Example:

**RSI300-4E-FT** ( 48VDC / 230VAC 50Hz )

RSI	Power	Input Vdc	Output	Factory Allocated
RSI	300	2 = 24V	A = 115V/60Hz	
		3 = 36V	E = 230V/50Hz	
		4 = 48V		
		7 = 72V	M = 115V/400Hz	
		9 = 96V		
		5 = 125V		

1. Standard input / Output combinations are illustrated.
2. Non standard combinations are available on request
3. Final Part no will be allocated at time of order to reflect customer specifications and options.



Case material: Aluminum 5052-H32  
 Finish: clear Iridite as per MIL-C-5541E Class 3  
 Typical weight: 2Kg [4.4 lbs.]

DIMENSIONS ARE IN MILLIMETERS  
 [Inches] TOLERANCES ON  
 DECIMALS: XXX ± 0.2mm  
 XX ± 0.3mm  
 ANGLES: ± 2°  
 FRACTIONS: ± 0.4mm  
 UNLESS OTHERWISE STATED

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Title:		OUTLINE DRAWING	
Model No:		FL Package	
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