

IVS500-F Series DC/AC Pure-Sinewave Inverter



Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

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

IVS500-F Series Pure-Sinewave

Description

The IVS500-F Series rugged, compact DC/AC Inverter uses field proven topology to generate 500W output power.

It is a mature design with a track record in hundreds of 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.

Suitable for a wide range of applications, the IVS500-F features full electronic protection and low output noise.

Cooling is by conduction to the customer chassis, and additional air convection. This chassis-mount design is optimized for low component count and high efficiency.

The use of components with established reliability results in a high demonstrated MTBF. The IVS500-F is manufactured at our plant under strict quality control. Customized versions are also available.

Features

- Filtered input
- Very low input ripple current
- Conduction/convection cooling
- 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)

Specifications

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 the specified minimum input will not damage the unit
Isolation	Input to chassis: min. 1000Vdc corresponding to the input voltage Output neutral is connected to the chassis, internally Floating output as option
Output Voltage	115VAC / 60Hz or 400Hz / 4.34A or 230VAC / 50Hz / 2.17A with grounded neutral. Isolated floating output optional (Consult factory for other output requirements)
Wave Form	Sinusoidal
Total Harmonic Distortion	Less than 5% at full load
Efficiency	Typically 78% at full load
Line Regulation	Maximum $\pm 0.5\%$
Load Regulation	Maximum $\pm 6\%$ from no load to full load ($\pm 2\%$ option available)
Output Overload Protection	Current limiting with short circuit protection, thermal shutdown with automatic recovery in case of continuous overload or insufficient airflow
Output Overvoltage Protection	140/280V by internal supply voltage limiting
EMI	Meets EN 55022 Class A as a minimum
Load Crest Factor	Maximum 3.0 at 90% load
Output Noise	High frequency ripple is better than 500mVrms (20MHz BW)
Operating Temperature Range	0° C to +50° C
Humidity	5 - 95% non-condensing
Temperature Drift	0.05% per °C over operating temperature range
Cooling	Conduction via base plate to customer heatsink or chassis and natural convection
Environmental Protection	Basic ruggedizing
Dimensions	6.6 x 25.4 x 35.1 cm (H x W x L) including terminal block and flanges Mounting holes are clear
Connections	Input: Compression-type terminal Output: Standard AC receptacle
Weight	4.2 Kg
Safety	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
MTBF	Min. 140,000 hours at 45°C
Indicators	None
Control Input	None Remote shutdown as option
Alarm output	Output fail alarm (Form C)
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



RIPEnergy®

The power conversion company

RIPEnergy AG
Talstrasse 2
CH-8702 Zollikon
Switzerland

Ph +41-(0)43-818 53 85
Fax +41-(0)43-818 53 87
www.ripenergy.ch