



# ANALYTIC SYSTEMS

Power Conversion Solutions

DC/AC Pure Sine  
Inverters

Model  
IVS500



## Description

The IVS500 Series is a highly compact 500VA DC/AC pure sinewave inverter that uses established design techniques to ensure high reliability.

Suitable for a wide range of applications, the IVS500 features full electronic protection, high efficiency and low output noise. The built-in fan provides sufficient airflow for operation without de-rating up to 50°C ambient temperature. Extended operating temperature (-40 °C to +65°C) is available.

The inverter can be loaded with a fluorescent lamp load up to the full-specified output power.

## Benefits

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

## Design Features

- ◆ Input is filtered to EN 55022 Class A
- ◆ Very low 60Hz 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

## 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 Pure Sinewave Inverters IVS500

|                               |  |
|-------------------------------|--|
| Input Voltage                 | 24V, 36V, 48V, 125V, 250VDC +/-15% are standard<br>Other inputs available, please consult factory  |
| Input Protection              | Thermal fuse, Inrush current limiting, Reverse polarity protection, Varistors, Lower voltage than specified input min. will not damage unit                                |
| Isolation                     | Input to chassis 1000VDC for < 60V input,  |
| Output Voltage                | 115VAC/60Hz or 400Hz @4.34A<br>230V/50Hz @2.17A continuous with grounded neutral<br>Isolated floating output optional (Consult factory for other voltages and frequencies) |
| Wave Form                     | Sinusoidal   |
| Total Harmonic Distortion     | Less than 5% at full load  |
| Efficiency                    | Min 78% at full load   |
| Line Regulation               | Maximum 0.5%   |
| Load Regulation               | Maximum $\pm$ 6% from no load to full load   |
| Output Protection             | Current limiting with short circuit protection, thermal shutdown with automatic recovery in case of continuous overload or insufficient cooling                            |
| Output Overvoltage Protection | 140/280 V 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 500m Vrms (20MHzBW)   |
| Operating Temperature Range   | 0° C to +50° C   |
| Humidity                      | 5 - 95% non-condensing   |
| Temperature Drift             | 0.05% per °C over operating temperature range  |
| Cooling                       | Built-in fan   |
| Environmental Protection      | Basic ruggedizing  |

Note: Specifications are subject to change without notice.

Warranty: Twenty four months subject to application within good engineering practice  
Enhancements to these general specifications can be accommodated upon request  
Designed to meet common approval requirements. Specifications Subject to Change Without Notice  
Designed and Manufactured in Canada



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8128 River Way, Delta B.C. V4G 1K5 Canada T. 604.946.9981 F. 604.946.9983 TF. 1.800.668.3884 (US/CANADA)

[www.analyticsystems.com](http://www.analyticsystems.com)