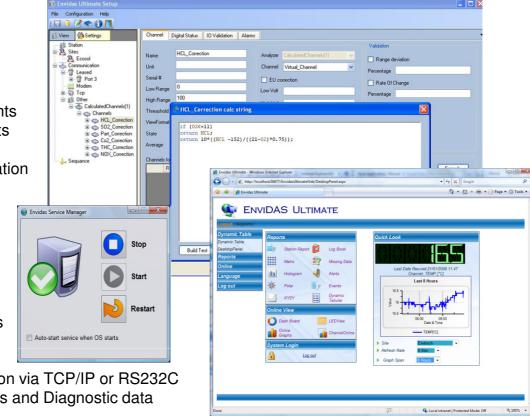
## **ENVIDAS Ultimate**

The Ultimate Solution for Emission, Air and Water Quality Monitoring System

A typical ENVIDAS system contains the

following in a single industrial chassis:

- PC-based DAS
- Core 2 Due processor
- 1 64 serial ports
- 16 2560 Measurements
- 16 2560 digital outputs
- 16 2560 digital inputs
- Site Oriented Configuration
- Rugged platform
- SQL Data Base
- 6 USBx2 Ports
- SVGA video display
- Real Time clock
- Flexible easy-to-use
- Menu driven software
- 1U/2U/3U & 4U chassis
- Real Time Charting
- Internal WEB Site
- Analyzers Data collection via TCP/IP or RS232C
- \*Collect Analyzers Status and Diagnostic data



#### INTRODUCTION

ENVIDAS is an intelligent, multi function, high performance data acquisition and reporting system. It is designed with affordability and versatility in mind.

ENVIDAS is a state-of-the-art system that uses nonproprietary desktop or industrial PC computer components to run flexible, environmental data acquisition software. A wide variety of data acquisition modules may be installed.

ENVIDAS software features pull-down windows based menus. Only basic knowledge of PC software operations is required for system operation.

All hardware components are open stock items available from multiple suppliers.

As the name implies, ENVIDAS is designed to help you automate your environmental data acquisition system projects and make your job easier.

The system requires an initial setup. Then it starts to run automatically, acquiring measurements, controlling processes and transferring data to the central computer room. The system has the capability of detecting errors and autonomously transmitting alarms to the central. Data values can be filtered and collected according to user-defined criteria. Local on screen display, printing and alerts transfer by e-mails and text messages (SMS) supported.

ENVIDAS has been used in support of data acquisition and control in the following areas:

- Continuous Emissions Monitoring.
- Ambient Air Quality Monitoring.
- Meteorological Monitoring.
- Water Quality Monitoring.
- Toxic Gas Monitoring.
- Radiation Monitoring.
- Noise Monitoring.

#### **HARDWARE**

The basic ENVIDAS system include 8 analog, 16 digital inputs, 16 digital outputs and 5 RS232C communication ports.

#### ADAM-5000/485 4-Slot Distributed DA&C System

The ADAM-5000/485 and ADAM-5000E systems conform to the EIA RS-485 communication standard. This is the industry's most widely used, balanced, bidirectional transmission line standard. RS-485 was specifically developed for industrial applications to transmit and receive data at high rates over long distances.



- Supports ADAM ASCII protocol
- RS-485 Communication for easy installation and networking
- 4 or 8 slots for up to 128 points data monitoring card control in one module
- Complete set of I/O Modules.
- Build in RS232C Communication
- 2500 VDC Communication Line isolation.
- 3000 VDC Communication Power Isolation
- 3000 VDC I/O Module Isolation

#### Envidas IPC-510 ATX RACKMOUNT PC CHASSIS

- 19" rack mount case meets the EIA RS-310C standard
- ATX or Back plane mother board
- Field-replaceable 350-watt power supply
- Shock-absorbing mounts cushion disk drives
- Dual push-pull cooling fans generate positive air pressure inside the chassis
- Filtered cooling air reaches all cards
- Removable air filter
- Lockable door for rustproof integrity and running security
- Hold-down clamp protects plug-in cards from vibration
- Full line of industrial CPU cards



#### C104H 4 PORT'S RS232C BOARD

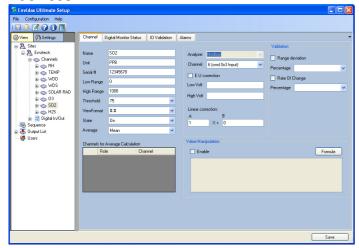
- Number of ports: 4
- I/O address: 0x0000-0xFFFF
- IRQ: 2, 3, 4, 5, 7, 10, 11, 12, 15
- Data bits: 5, 6, 7, 8
- Stop bits: 1, 1.5, 2
- Parity: none, even, odd, space, mark
- Speed (BPS): 50-115.2K

#### GIGABYTE ATX GA-EP45-DS3LR

- CPU: PE Dual Core 2.2 GHz
- RAM: 2048 MB DDRAM 633MHz
- Cache Memory: 4 MB
- Features SATA 3Gb/s interface with RAID function (2 ports with RAID function supported by GIGABYTE SATA2)
- Northbridge: Intel® P45 Express Chipset
- Supports 1333/1066/800/533 MHz FSB
- Supports DDR2 1333/1200/800/667 memory
- Parallel port: One enhanced parallel port, supports SPP/EPP/ECP modes
- ATX form factor, 305 x 210mm
- 2 PCI slots, 1 PCI Express X16 slot, 4 PCI Express X1 slot
- DVD Read/Write
- Serial ports: One RS-232 on-board
- 8 USB 2.0/1.1 ports
- 2 USB 2.0/1.1 connectors for additional 4 ports by cable
- Use of licensed AWARD BIOS(Dual Bios)
- PS2 Mouse Port
- Realtek 8111C Gigabit LAN Controller
- Option industrial CPU with Watch Dog system
- 15",17" or 19" LCD SVGA screen

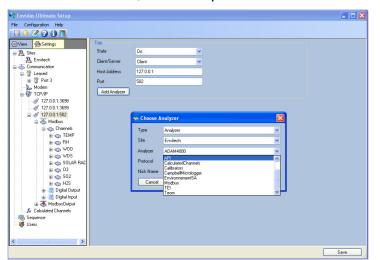
### ENVIDAS SOFTWARE MAIN SPECIFICATIONS & FEATURES

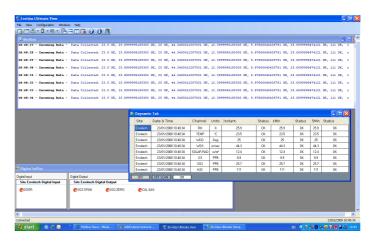
ENVIDAS supports automatic calibration control, recording and correction. The software generates calibration and data reports at different time intervals, and can transfer data via several communication devices.



ENVIDAS software is a flexible, easy-to-use, turnkey application software that turns a PC with a data acquisition module into an intelligent environmental data acquisition system. It has the following features:

- Multi tasking software no data is lost during polling
- Multi-tasking software allows user interaction without interrupting data collection
- Run under Windows XP Pro., Vista Business, Windows 2003/8 Server
- Handles up to 2,560 analog inputs
- Handles 64 2,560 digital input channels
- Handles 64-2,560 digital output channels
- Supports up to 64 RS232C channels
- Remote access for edit or check configuration, calibration start/stop, viewing current measurements, and complete remote control



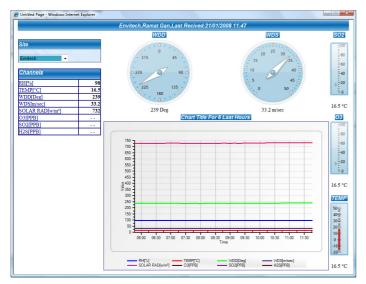


- Measuring rate: every 1, 2, 5, 10 sec' or any requested rate
- User selected average: 1, 5, 6, 15 or 60 min are typical
- Dynamic display of instantaneous values in engineering units, voltages, or any calculation
- Password protection, 3 users levels
- Calculations for math and meteorological statistics
- n Sec' sample data storage for pre configured amount of days
- Automatic calibration correction and control via relays, calibrators or analyzer remote commands

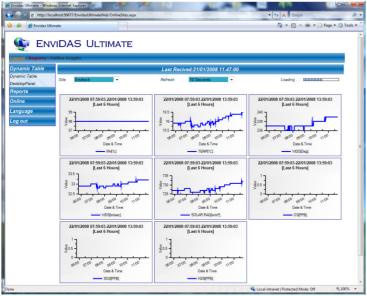


- Daily, weekly, monthly, periodic data listing textual and graphical reports
- Histogram, Wind Rose, Pollution Rose, Polar and Event Analysis reports.
- Calibration report
- System fail report
- Analyzer Digital status information report
- Analyzer Diagnostic Report
- Service Log-Book Writer and Reporter
- Complete Internal Web Site for remote reporting and On-Line Display's
- Manual data transfer by using a USB Key
- SQL Database 2005/8 Express Edition.

- Real-Time instantaneous values graph
- Communication via RS232C to the smart analyzers (Multi-drop & Star connection available)
- Collection and reporting of analyzer status information



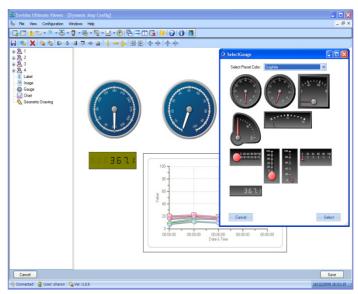
- Remote access feature allows the user to have direct analyzer connection from a remote location
- Calibration sequence control via RS232C, TCP/IP and Digital Outputs
- Automatic alarm messages via GSM SMS and/or e-mail transfer.
- Optional Bill Boards display support
- More than 10 years of Data Base Information



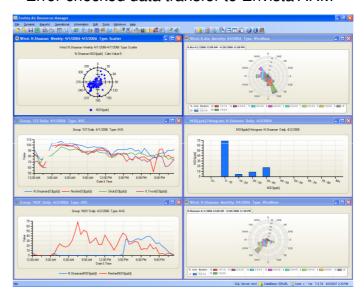
### LSaΩ

#### Lear Siegler Australasia Pty. Ltd

5A/2 Resolution Drive, Caringbah, NSW 2229, Sydney Australia Tel (02) 9531 5444, Fax (02) 95315411 Web Site: http://www.learsiegler.com.au



- Connection with Envista ARM data management system via telephone line (POTS, cellular, or leased line), Internet, direct serial or radio
- Error checked data transfer to Envista ARM



# The following smart analyzers are supported by ENVIDAS's RS232C communication protocols:

Teledyne API a & e Series

Monitor Europe 9800 Series

Thermo Environment c & i Series

TE-R&P Teom, FDMS, Partisol+

Horiba AQM Series

Environment S.A. M Series

MODBUS Master & Slave

Other RS232C protocols available upon request

Server & Client

OPC