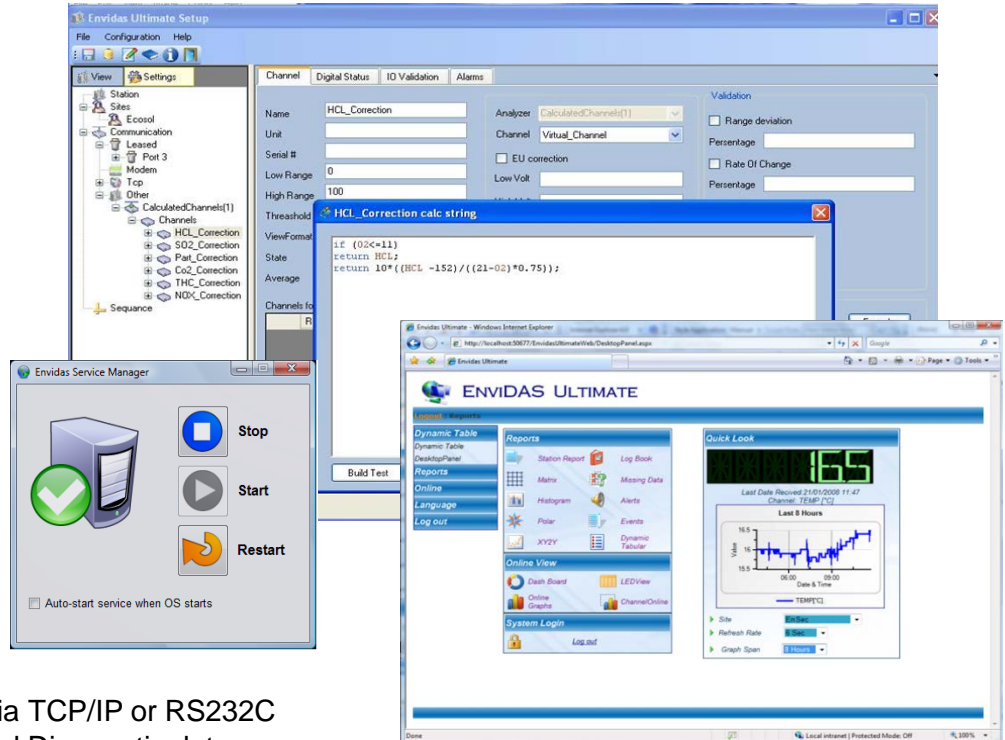


ENVIDAS Ultimate

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

Typical ENVIDAS systems can contain the following in a single industrial chassis:

- PC-based DAS
- Core 2 Duo processor
- 1 - 64 serial ports
- 16 – 256 Measurements
- 16 – 256 digital outputs
- 16 - 256 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 or 4U chassis
- Real Time Charting
- Internal WEB Site
- Analyzers Data collection via TCP/IP or RS232C
- Collect Analyzers Status and Diagnostic data



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.

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.

HARDWARE

The basic ENVIDAS system normally includes 8 analog, 16 digital inputs and 16 digital outputs.

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 I/O modules supporting up to 128 I/O
- Complete set of I/O Modules.
- Built in RS232C Communication
- 2500 VDC Communication Line isolation
- 3000 VDC Communication Power Isolation
- 3000 VDC I/O Module Isolation

IPC-510 ATX RACKMOUNT PC CHASSIS

- 19" rack mount case meets the EIA RS-310C standard
- ATX 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



4 and 8 PORT RS232C BOARD

- 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

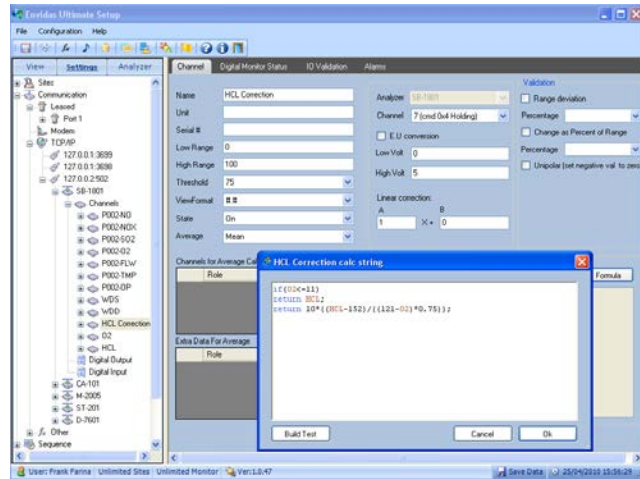


ATX MOTHERBOARD

- CPU: PE Dual Core 2.2 GHz
- RAM: 2 or 4 GB 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
- 4 PCI slots, 1 PCI Express X16 slot
- DVD Read/Write
- Serial ports: Four 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

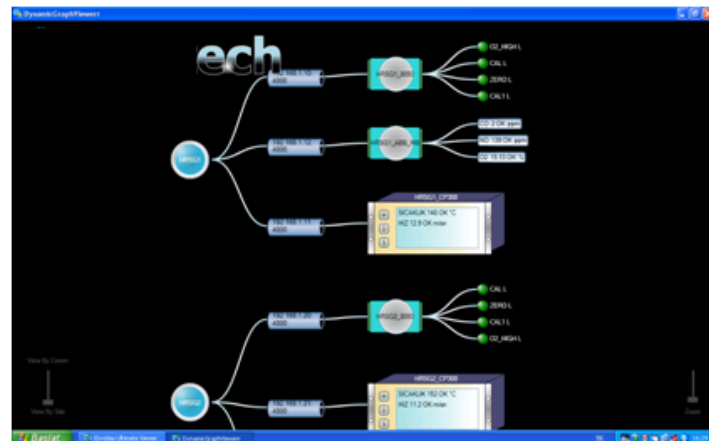
ENVIDAS supports automatic calibration control, recording and correction. The software generates calibration and data reports at different time intervals, and can transfer data via several communication devices.



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.

Features depend on the license purchased:

- Multi tasking software - no data is lost during polling
- Multi-tasking software allows user interaction without interrupting data collection
- Runs under Windows 7/10 and 2008/2012
- Handles up to 256 analog inputs
- Handles up to 256 digital input channels
- Handles up to 256 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



Date & Time	Channel	Units	Instant	Status	1Min	Status	15Min	Status
05/07/2010 10:10:04	PH1	PH	7.3	Ok	7.3	Ok	7.3	Ok
05/07/2010 10:10:04	FLOW	m ³ /h	60.3	Ok	60.3	Ok	60.3	Ok
05/07/2010 10:10:04	TEMP	°C	32.2	Ok	32.2	Ok	32.2	Ok
05/07/2010 10:10:04	TURBIDITY	NTU	13.2	Ok	13.1	Ok	13.1	Ok
05/07/2010 10:10:04	SULF	PPB	17.1	Ok	17.1	Ok	17.1	Ok
05/07/2010 10:10:04	AMINE	PPB	9.4	Ok	9.4	Ok	9.4	Ok
05/07/2010 10:10:04	SO2	PPB	22.9	Ok	22.9	Ok	22.9	Ok
05/07/2010 10:10:04	OPACITY	%	41.1	Ok	41	Ok	41	Ok
05/07/2010 10:10:04	O2	%	7.2	Ok	7.2	Ok	7.2	Ok
05/07/2010 10:10:04	GAS	m ³ /h	80.4	Ok	80.4	Ok	80.4	Ok
05/07/2010 10:10:04	OIL	T/PH	46.3	Ok	46.1	Ok	46.1	Ok
05/07/2010 10:10:04	SO2	mg/m ³	18.7	Ok	18.7	Ok	18.7	Ok
05/07/2010 10:10:04	NDX	mg/m ³	23.8	Ok	23.8	Ok	23.8	Ok

- 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



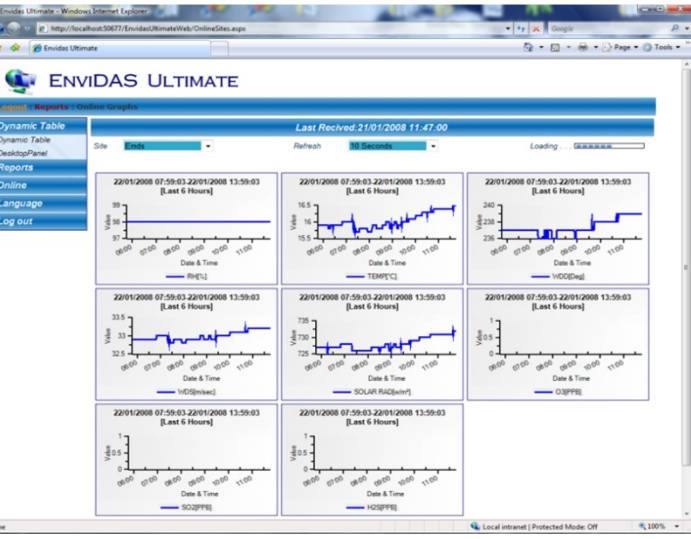
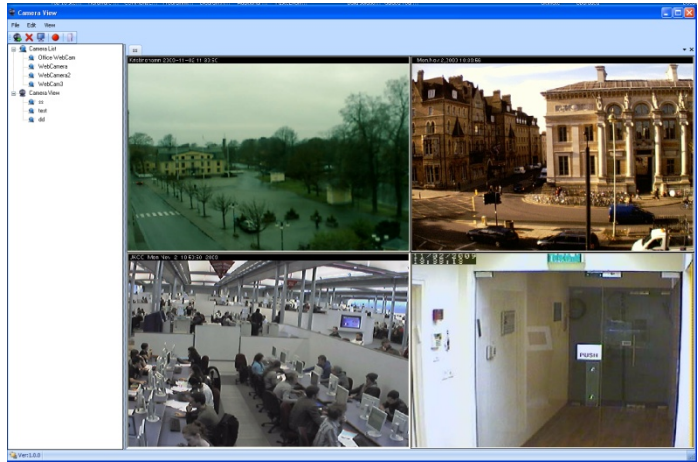
- Daily, weekly, monthly, periodic data listing textual and graphical reports
- Histogram, Wind Rose, Pollution Rose, Polar and Event Analysis reports.
- Calibration report
- System fail report
- Analyzer Digital status information report
- Analyzer Diagnostic Report
- Service Log-Book Writer and Reporter
- 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



- Data push to Sonoma DMS, AIRNow, Envista
- 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

- 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 SMS and/or e-mail transfer.
- Billboard displays
- More than 10 years of Database Information



Example analyzer protocols supported by Ultimate include:

- Teledyne API a, e & t Series
- Monitor Europe 9800 Series
- Thermo Environment c & i Series
- TE-R&P TEOM, FDMS, Partisol+
- Horiba AQM Series
- Ecotech 9800 and Serinus Series
- Environnement S.A. M Series
- MetOne BAM 1020, EBAM & E SAMPLER
- MODBUS Master & Slave
- OPC Server & Client

There are hundreds of protocols already available. Additional protocols available upon request



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