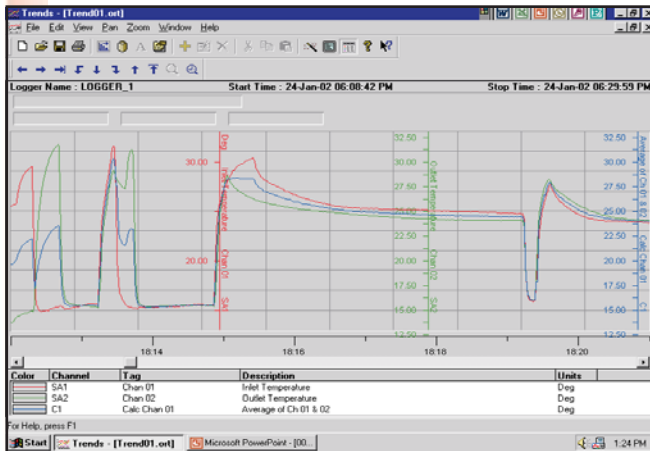


DATA ACQUISITION SYSTEMS



iDAS
INDUSTRIAL DATA ACQUISITION SOFTWARE



- Compatible with both Sigma and IMPS hardware
- Operates under Windows NT, 2000 or XP
- Data monitoring, logging and historical trending
- Real-time calculator for advanced functions
- Alarm processing with multimedia annunciation
- Data export facility to multiple formats
- Full Client-Server architecture
- Internet Server option
- Supports the OPC Data Access Standard

Sigma and IMPS Compatible

By using the appropriate driver, iDAS can be used with both Sigma and IMPS data acquisition modules to monitor, log and display data from a wide variety of sensors. iDAS will automatically locate the different modules on a network and will support the configuration of inputs and outputs within the software.

Channel	Tag	Description	Value	Units	Sig	Event Status
C0001	Secs	Number of Seconds since Midnight	118,906.02			
C0002	Sine Wave		0.95			
C0003	0-10	Zero to Ten Counter	6.02			
C0004	0-6	Zero to Six Counter	0.02			
C0005	0-60	Zero to Sixty Counter	6.02			
C0006	0-100	Zero to Hundred Counter	6.02			
C0007	0-1000	Zero to Thousand Counter	606.02			
C0008	Assign Chans	Assign Channels	0.00			
C0009	1 sec Pulse	One Second Pulse	0.00			
C0010	2 sec Pulse	Two Second Pulse	1.00			
C0011	3 sec Pulse	Three Second Pulse	0.00			
C0012	4 sec Pulse	Four Second Pulse	0.00			
C0013	1st Switch	1st Switch	0.00			
C0014	2nd Switch	2nd Switch	0.00			
C0015	3rd Switch	3rd Switch	0.00			
C0016	4th Switch	4th Switch	0.00			
C0017			0.19			
C0018			66.02			
C0019	DISABLED					
C0020	DISABLED					
C0021	DISABLED					
C0022	DISABLED					
C0023	DISABLED					

Data Monitoring

The iDAS channel monitor application allows users to view the data as it is recorded by the acquisition system modules. The monitor has a fully configurable screen display with independent sort criteria and can be run in full screen mode for ease of viewing.

Data Logging

iDAS's data collection and logging capabilities provide the power to record important process or environmental data. It has multiple independent data loggers with an automatic start facility; period, event and period until event modes with separate logging rates; automatic scheduling, archiving and export of log cycles; continuous checking of disk space and an option to log data directly to Microsoft Access or SQL server databases via OPC standard.

Trending

The iDAS trending display provides a powerful means of displaying, evaluating and selecting data for further processing. Data is displayed in real-time or replayed directly from existing log files and a number of separate trends can be displayed on the screen at the same time. Data can be isolated for further analysis or export to other packages using single click pan and zoom operations. The axes can be labelled and the screen printed for reporting purposes.

Construct A Formula

Functions:

- not - complement
- ctime - seconds since midnight
- ytime - days since January 1 in current year
- stimer - starts timer (n). If timer is running then this has no effect
- etimer - stops timer (n). If timer is stopped then this has no effect
- rtimer - resets timer (n) to zero. Returns the value of timer before reset
- delta - returns time in seconds since last call to this delta timer

Operators:

- power
- * - multiplication
- / - division
- + - addition
- - negation OR subtraction

Constants:

- pi - PI - 3.14159
- me - electron rest mass kg
- u0 - Input channel configuration from
- na - Export configuration to a file
- vm - molat.volum.mol-1

Select a Function, Operator, or Constant and then click on the Insert button to add it to the formula below.
Alternatively, double click on the required item or edit the formula string using the keyboard.

Formula: DSIN(C1-floor(C1/20)*18)

Real-time Calculator

Data can be calculated directly from the signal inputs using the real-time calculator. The calculator has built-in constants and statistical, trigonometric and logarithmic functions. It will also support steam table calculations. Calculations can be cascaded together to form complex logical sequences and the output can be logged, displayed, animated or alarm processed.

Alarm Processing

The software includes advanced alarm processing. Each channel can be given a high and low event alarm, with programmable hysteresis, delays, priority level and display text. Alarms can be linked to a common output channel for annunciation purposes. Multimedia annunciation is supported, allowing alarms to be communicated using e-mail, pagers, mobile SMS or other electronic means. An alarm log records all the alarms triggered.

Data Export

iDAS can export data from log files to standard spreadsheet applications (i.e Excel) for reporting purposes.

Microsoft platform support

iDAS is optimised to use the powerful real-time multi-tasking features of Windows 32-bit platforms. The fully implemented client/server architecture provides the means by which data displays and control can be distributed over a standard network. iDAS Server and iDAS Client will run on Windows NT 4.0, Windows 2000 and Windows XP. The system requires a Server licence as a minimum and additional Client licences can be purchased as required. iDAS Server can be set up as an embedded service to start automatically with no operator interaction. iDAS Client allows the operator to configure and monitor the system locally or over a LAN/WAN.

Connectivity

iDAS uses industry standard open connectivity systems. iDAS comes with an OPC (OLE for process control) client as standard, allowing data to be acquired from 3rd party OPC systems. The optional iDAS OPC server allows 3rd party applications to connect to iDAS data directly. iDAS is OPC Data Access 1.0a and 2.0 compliant. The optional ODBC (Open Database Connectivity) driver allows users to import/export configuration and real-time data from iDAS to standard databases such as Access, Oracle or SQL. iDAS also includes a DDE (Dynamic Data Exchange) server. This allows the transfer of data between Microsoft Win 32 applications.

Internet Support

iDAS trends, alarm and channel monitors can be hosted within Internet Explorer (Version 4 and above). This allows operators to use the web to monitor real-time and historical data from an internet connection. The data server must have iDAS Internet Server installed and the client machine must have iDAS Internet Client which is distributed free of charge.



A PRODUCT OF THE DATA MEASUREMENTS