



### Applications include:

- |                          |                         |
|--------------------------|-------------------------|
| Environmental Monitoring | Agricultural Research   |
| Research & Development   | Total Energy Monitoring |
| Weather Stations         | Temperature Profiling   |
| Thermistor Arrays        | Aquaculture             |
| Wind Power Generation    |                         |

**\*FREE Software & Technical Support**

### The Smarter Solution

The *dataTaker* DT82E is a smart data logger designed especially for environmental monitoring. The DT82E is a robust, low power data logger featuring USB memory stick support, 18-bit resolution, extensive communications capabilities and built-in display. The *dataTaker* DT82E's Dual Channel concept allows up to 4 isolated or 6 common referenced analog inputs to be used simultaneously in various combinations. With advanced networking capability (FTP and Web interface), one SDI-12 sensor channel (supporting up to 10 sensors) and switchable 12V regulated output to power sensors, the DT82E is ready to be deployed.

### Versatile Measurement

Inputs include analog and digital channels as well as high-speed counters. Temperature, voltage, current, 4-20mA loops, resistance, bridges, strain gauges, frequency, digital, serial and calculated measurements can all be scaled, logged and returned in engineering units or within statistical reporting. Set up sampling, logging, alarm and control tasks to suit your own requirements, or interface with smart sensors, GPS and other intelligent devices expand the DT82E's flexibility.

### Superior Data Storage & Communications

With the standard unit able to store up to 10 million data points (expandable) you can log as much or as little as you need. Overwrite or stop logging once allocated memory is full, archive data on alarm event, copy to USB memory or transfer via FTP, the choice is yours. Communications features include RS232, USB and Ethernet, connect to the DT80 locally, remotely through a modem or over the Internet. The web interface allows users to configure the DT80, access logged data and see current measurements as mimics or in a list using a web browser. FTP provides data to your office over the internet or mobile phone network, without the need for polling or specific host software.

- » Low power design for remote applications
- » Dual Channel Isolation Technology
- » 1 SDI-12 input
- » Serial 'Smart Sensor' port
- » FTP for automatic data transfer
- » Modbus for SCADA connection
- » Up to 6 Analog ( $\pm 30V$ ) sensor inputs
- » USB memory for easy data and program transfer

**Warranty:** All dataTaker Data Loggers are covered by a 3 year warranty on workmanship and parts. For further information on the dataTaker range, or for useful downloads, visit the dataTaker web site at [www.datataker.com](http://www.datataker.com) or contact your nearest dataTaker office or distributor.

**Quality Statement:** dataTaker operates a Quality Management System complying with ISO9001:2008. It is dataTaker's policy to supply customers with products which are fit for their intended purpose, safe in use, perform reliably to published specification and are backed by a fast and efficient customer support service.

**Trademarks:** dataTaker is a registered trademark.

**Specifications:** dataTaker reserves the right to change product specifications at any time without notice. **Designed and Manufactured in Australia.**

\*Our ability to provide free software and support is dependent on applicable export control laws (including those of the United States) and the export policy from time to time of Thermo Fisher Scientific Inc.

- » Built-in software - no application to install
- » Runs directly from your web browser
- » Accessible by Ethernet or USB<sup>1</sup> connection
- » Intuitive graphical interface
- » Easy-to-use configuration editor
- » Access live and historical data
- » View data as charts, mimics and tables

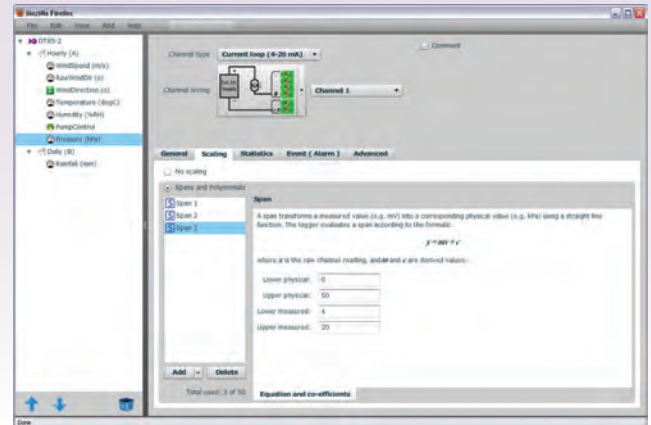
## What is dEX?

dEX is an intuitive graphical interface that allows you to configure your data logger, view real-time data in mimics, trend charts or tables and retrieve your historical data for analysis.

dEX runs directly from your web browser and can be accessed either locally or remotely, anywhere that a TCP/IP connection is available including worldwide over the Internet. You can use any of the logger's built-in communications ports to view dEX including Ethernet, USB<sup>1</sup> and RS-232.

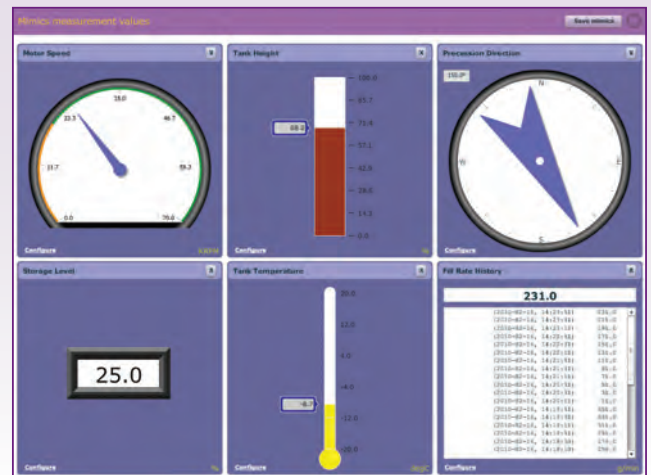
## Easy configuration

The dEX configuration editor allows you to view, edit and save logger configurations in an easy-to-use Windows Explorer style user interface.



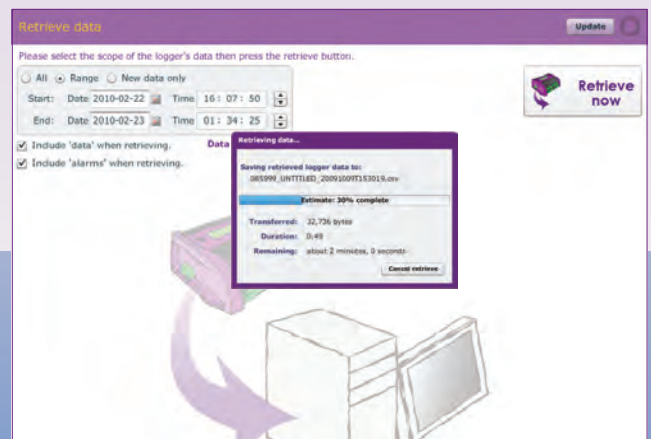
## Real-time monitoring

dEX displays real-time sensor measurements, calculations and diagnostic information using mimics, tables and trend charts.



## Data retrieval

dEX allows you to retrieve your data at the click of a mouse button. Just select either All, Range or New Data Only.



### Browser-based solution

dEX comes pre-installed on every logger in the DT80 range<sup>2</sup>. The software loads in your web browser so there is no need to install cumbersome applications on your computer. Being browser-based, dEX is cross-platform and will work on all major operating systems including Windows, Mac and Linux. To simplify it even further, dEX starts automatically in your default web browser when you connect to your logger using a USB cable<sup>1</sup>.

### Data that is compatible with your applications

Logged data is ready to import into common spreadsheet and data processing applications such as Excel for further analysis and reporting. Data can be saved to your computer in comma separated (.CSV) format or our proprietary binary (.DBD) format.

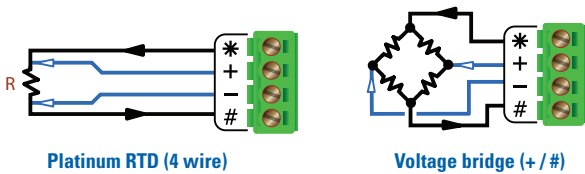
### Command window

The command window provides a terminal interface which allows the built-in command language of the logger to be used. Macro buttons allow common commands to be sent on a button press.

### Configuration editor

The configuration editor allows you to view, edit and save logger configurations in an easy-to-use Windows Explorer style user interface. Tree view of configuration allows definition of measurement schedules and measurements.

Wiring diagrams show available wiring configurations for each sensor type. Configuration can be stored and retrieved on either the logger or a local computer.



### Channel list

Displays name, value, units, alarm state, time stamp and logging state for each measurement.

Run	Name	Value	Units	Alarm	Time stamp	Log
✓	1hr_Humidity	51	%RH		2010-02-02, 12:00:00	✓
✓	1hr_Mean Win	0	m/s		2010-02-02, 12:00:00	✓
✓	1hr_Mean Win	7			2010-02-02, 12:00:00	✓
✓	1hr_Pressure	1006	hPa		2010-02-02, 12:00:00	✓
✓	1hr_Temperatur	23,6	Deg C		2010-02-02, 12:00:00	✓
✓	1min_Humidit	48	%RH		2010-02-02, 12:32:00	✓
○	1min_Mean Win				2010-02-02, 12:32:00	○

### Customisation of the application

The menu options, mimics panels and mimics can be added or removed to suit novice or advanced users. The color and brand name images within dEX can be customised to match corporate requirements or for personal preference.

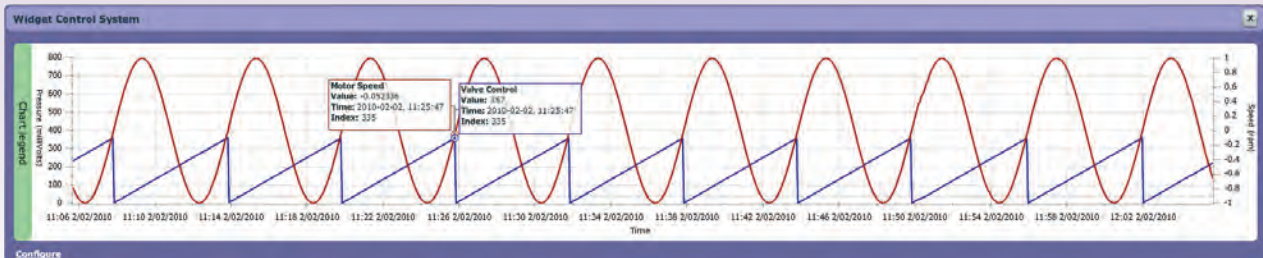
Mimics are organised into panels which can be modified to highlight custom alarm conditions or data grouping. Mimics include dials, bar graphs, thermometers etc. Real-time chart recorder mimic allows you to view trends and historical data over a custom time/date range. Up to 16 mimics can be displayed on up to 5 mimic pages (default is 1 page of 6 mimics).

### Minimum system requirements

- Web Browser (tested with): Internet Explorer V7 and above, Firefox, Safari & Google Chrome
- TCP/IP connection
- Adobe flash player 10 or higher
- Screen resolution of 1024 x 768

### Chart recorder mimic

Real-time trending for sensors, calculations or other data. Supports up-to 5 traces per chart and up-to 2 Y-axes. Backfills with historical data stored in logger.



1. USB port equipped models only.  
 2. dEX operates on all DT80 range Series 2 & Series 3 models (DT80, DT81, DT82E, DT85, DT80G, DT85G). The latest firmware which includes dEX is available for download from the dataTaker website. DT80 range Series 1 models do not support dEX.

*The difference is dEX!*

