

# RTDAQ version 1.1

## Real-Time Data Acquisition Software



RTDAQ is Campbell Scientific's Datalogger Support Software targeted for industrial and other high-speed data acquisition applications. This versatile software supports a variety of telecommunication options, manual data collection, and extensive data display. It includes easy-to-use program generators as well as full-featured program editors. RTDAQ is compatible with our CR9000X, CR5000, CR1000, CR3000, CR800, and CR850 dataloggers. A fully-functional 30-day trial version is available from our website.

### Features/Benefits

- Includes EZSetup Wizard that simplifies station setup
- Compatible with CRBasic dataloggers (except the CR200(X)-series and CR9000\*)
- Uses Short Cut, ProgGen, or CRBasic to develop and edit datalogger programs that measure sensors and control multiplexers, SDM devices, and relays
- Provides non-invasive field calibration of sensors—incorporating the appropriate multipliers and offsets into the datalogger program
- Retrieves data via direct connect, phone modems, TAPI, TCP/IP, radios (UHF, VHF, or spread spectrum), short-haul modems, or multidrop modems\*\*
- Monitors real-time data using the Graph, Fast Graph (similar to PC9000's virtual oscilloscope), Histogram Viewer, Fast Fourier Transform (FFT) Viewer, Rainflow Viewer, Table Monitor (similar to the PC9000 Field Monitor), and XY Plot Viewer
- Displays historical data files including specialized engineering data such as FFTs and histograms
- Contains Device Configuration Utility (DevConfig) for setting up Campbell Scientific hardware

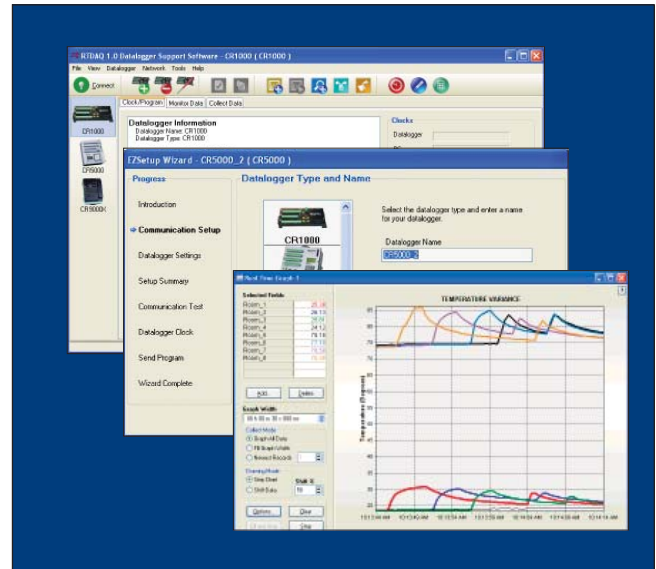
### RTDAQ Tools

#### *EZ Setup Wizard*

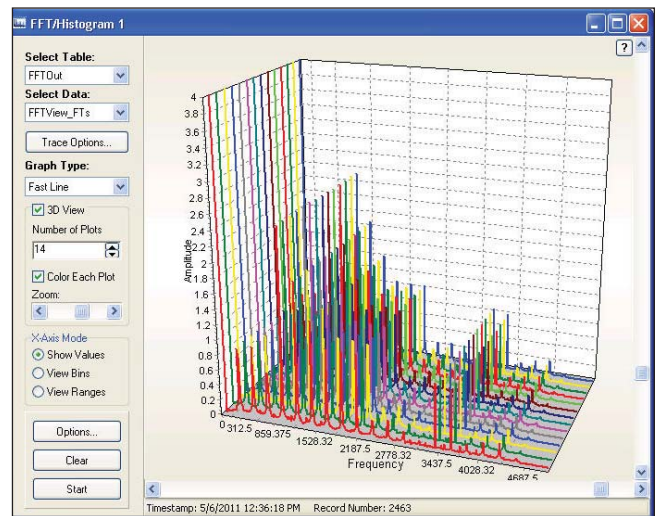
This simple station-oriented wizard walks you through the datalogger setup process. It can also be used to modify settings for an existing datalogger station.

#### *Clock/Program, Monitor Data, Collect Data*

These tools are used to set a datalogger's clock, send programs from the computer to the datalogger, display real-time datalogger measurements in several different formats, and collect data on demand.



RTDAQ is an ideal solution for industrial and real-time users desiring to use reliable data collection software over a single telecommunications medium, and who do not rely on scheduled data collection.



The FFT is an example of the many real-time data displays that allow you to view the measurements instantly.

#### *Short Cut, ProgGen, and CRBasic*

RTDAQ provides a choice of programming tools. Short Cut (SCWIN) is an easy-to-use program generator that creates straight-forward programs in five steps. It supports over 100 sensors (including generic measurements) and multiplexers.

\*You can upgrade a CR9000 datalogger to a CR9000X by replacing the CR9031 Module with a CR9032 Module.

\*\*RTDAQ does not support combined communication options (e.g., phone-to-RF), PakBus routing, or scheduled data collection. LoggerNet software is recommended for applications that require these capabilities.

ProgGen is an updated version of the detailed program generator contained in PC9000 software (RTDAQ's predecessor). ProgGen contains many measurement and setting windows for configuring almost any type of sensor. It is compatible only with the CR5000 and CR9000X dataloggers.

The CRBasic Editor provides sophisticated program editing capabilities. Programs generated by Short Cut and ProgGen can be edited in CRBasic.

### View Pro

View Pro lets you view data files (\*.DAT files) in a tabular format. It can create graphs that display multiple traces of data (Figure 1). View Pro also supports the viewing of specialized data storage such as FFTs and histograms.

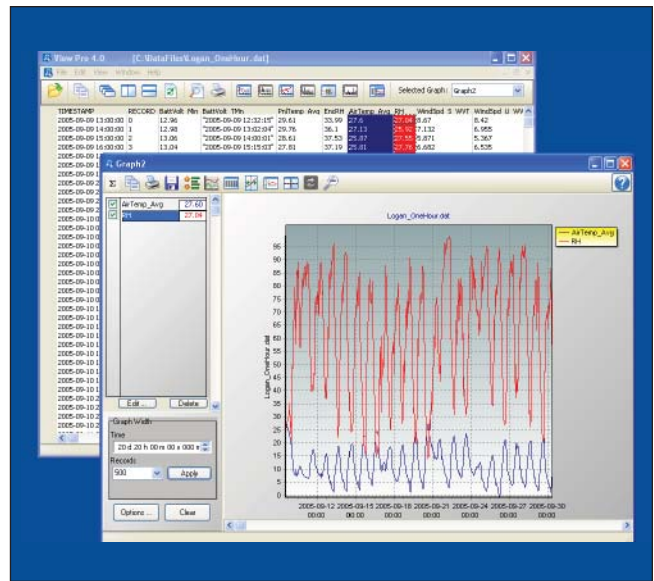


Figure 1. Using View Pro, you can display historical data in a tabular or graphical format.

### Real-Time Monitoring and Control (RTMC)

RTMC is used to create customized displays of real-time data, flags, and ports. It provides digital, tabular, graphical, and Boolean data display objects, as well as alarms. Sophisticated displays can be organized on multi-tabbed windows (Figure 2). Users who want additional capabilities and more flexibility can purchase RTMC Pro—an enhanced version of RTMC.

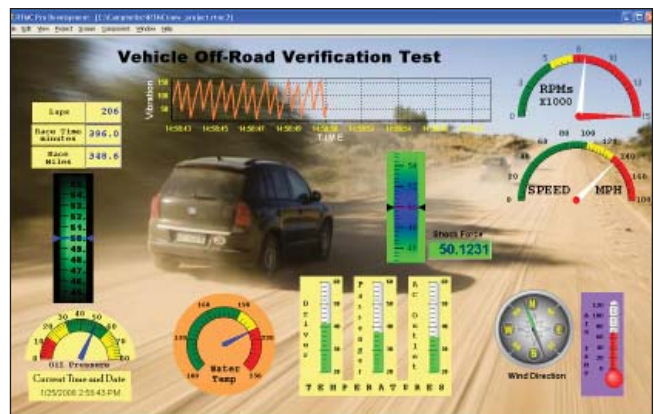


Figure 2. With its point-and-click interface, RTMC is a simple solution for generating real-time displays.

### Device Configuration Utility (DevConfig)

DevConfig allows you to send new operating systems to dataloggers and other devices with FLASH memory, configure various PakBus® settings in dataloggers, and edit settings for communication peripherals such as the MD485 and RF401. Updates to DevConfig can be downloaded from our website.

### LogTool, PakBus Graph

In the Tools pull-down menu, you can select LogTool and PakBus Graph. These tools can help you discover the cause of communication problems.

### Card Convert

CardConvert is used to convert and save binary data from a PC Card or CompactFlash® card. It can also perform other conversions. PC Cards are compatible with our CR5000 and CR9000X dataloggers. CompactFlash cards are compatible with our CR1000, CR3000, CR5000, and CR9000X dataloggers.

### Split

Split is used to post-process data files and create reports. It sorts and combines data based on time or conditions, performs calculations on data values, converts “Day of Year” calendar dates into more traditional date/time stamps and allows variable column widths for printable reports.

### Computer Requirements

Compatible Operating Systems are Windows XP, Windows Vista, and Windows 7.