

# Software Clients

## Adds Functionality to RTMC or LoggerNet

### LoggerNet Clients

Baler, PC-OPC Server, LNDB, and LoggerNetData software clients may be purchased to add functionality to our LoggerNet and LoggerNetAdmin software packages. These clients provide an economical solution for distributing data to remote PCs. To use the LoggerNet clients, a licensed copy of LoggerNet or LoggerNetAdmin needs to be running on a PC.

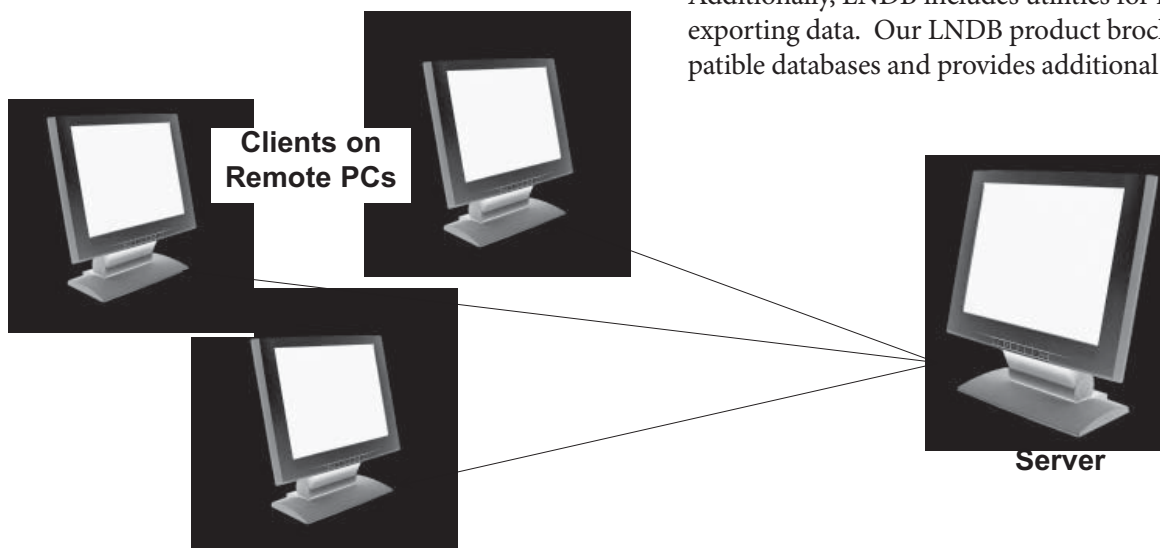
#### *Baler Data File Client Software*

The Baler client is ideal for applications in which the data will be imported to a database or a third-party analysis program.

Specifically, the Baler client:

- Accesses data stored in the data cache of the LoggerNet server
- Bales data into files at regular intervals based on the date/time stamps in the data
- Names the “bales” according to the datalogger, table names, and time of bale
- Stores the data on the client PC
- Logs status of baling events
- Allows the user to run multiple instances of Baler to “bale” data at different intervals
- Offers the option to execute a command line operation after each baling event

Please note that you cannot view or interact with the data using Baler. These functions are provided in our LoggerNetData client (see page 2).



Clients running on remote PCs use TCP/IP to connect to the server of the Datalogger Support Software. For each remote PC, one copy of the client software must be purchased.

### *PC-OPC Server*

The PC-OPC Server provides a standard interface that allows third-party OPC-compatible graphics packages to display the datalogger data. Specifically, the PC-OPC Server:

- Provides data via “data tags” to any SCADA or third-party software that supports OPC
- Updates, or pushes, data to third-party software as the LoggerNet server collects it from the datalogger(s)
- Allows third-party software to set input locations, variables, ports, and flags in our dataloggers
- Supports Data Access Standard 2.05a only

Many software and hardware products support OPC. Products that have been tested by Campbell Scientific include Iconics Genesis, Intellution IFIX, and National Instruments Lookout.

A PC-OPC trial version is available, at no charge, from: [www.campbellsci.com/downloads](http://www.campbellsci.com/downloads). The trial version generates random data instead of retrieving the data.

### *LNDB*

LNDB moves data from one LoggerNet server into a single database. The two main components of LNDB are LNDB Manager and LNDB Engine. LNDB Manager is used to set up a database and select the datalogger data tables that will be stored in the database. LNDB Engine runs as a service and sends the selected data from the LoggerNet data cache to the database. Additionally, LNDB includes utilities for importing and exporting data. Our LNDB product brochure lists compatible databases and provides additional information.

## LoggerNetData Remote Data Access Software

LoggerNetData allows one or more remote PCs to access the same data without triggering a call to the dataloggers. It distributes data stored in the data cache of the LoggerNet server. LoggerNetData includes four clients that support the following functions:

### Data Filer

- Retrieves either a range of data or the data since the last collection
- Creates ASCII data files on remote PCs
- Includes field names and date/time stamps in the ASCII data files

### View Pro

- Graphs historical data in a variety of formats (Line Graph, X-Y Plot, Histogram, Rainflow Histogram, and 2-D and 3-D FFTs)
- Allows multiple data files to be opened and multiple graphs to be created

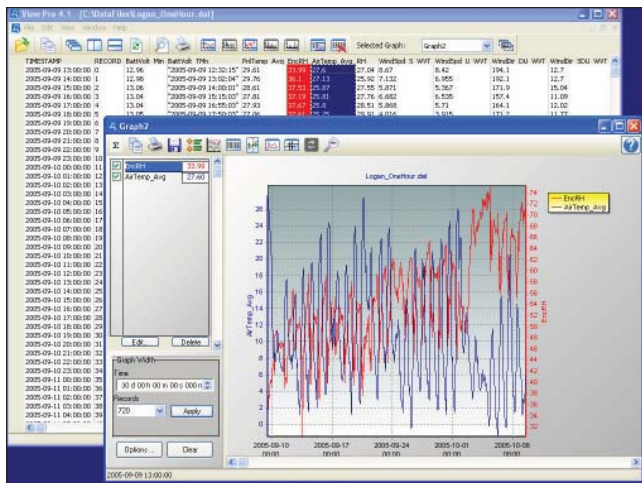
### RTMC

- Graphically displays data as it is collected by LoggerNet or LoggerNetAdmin
- Can perform post-processing on the data being displayed
- Provides developer and run-time modes

Refer to the RTMC discussion on the next column for more information.

### Split

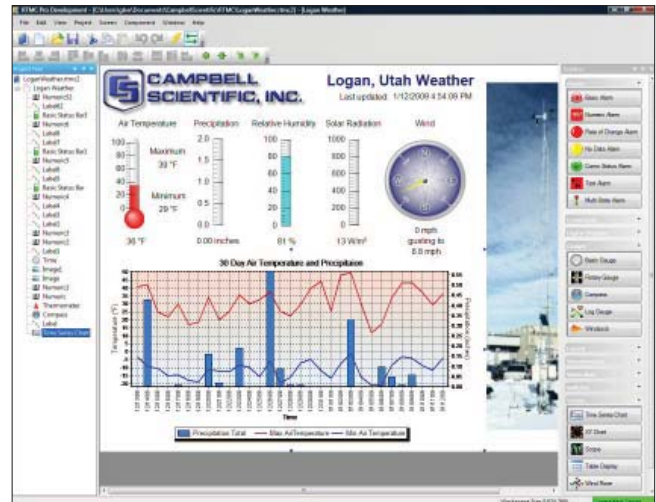
- Post processes data files
- Generates text reports and html files



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

## RTMC-Based Clients

RTMC-based clients add functionality to the standard RTMC application. The standard RTMC application is included in our LoggerNet, LoggerNetAdmin, LoggerNetData, and RTDAQ datalogger support software. To use these clients, a licensed copy of LoggerNet, LoggerNetAdmin, or RTDAQ needs to be running on a PC.



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

The standard RTMC application consists of a development and a run-time program. The development program provides the following tools.

- Point-and-click interface
- Alarm, slider, chart, switch, table, gauge, status bar, numeric, label, image, time, compass, thermometer, and value forwarder components

These tools allow you to create projects that when opened in the run-time program:

- Display data from any number of dataloggers in the network (RTDAQ only allows one datalogger)
- Access statistical data reported by the LoggerNet or RTDAQ server, including the current state of your datalogger network and trigger alarms based on system critical information
- Perform post processing on the data being displayed
- Allows the user to change input locations, public variable values, and toggle ports/flags
- Forward data from one datalogger to another

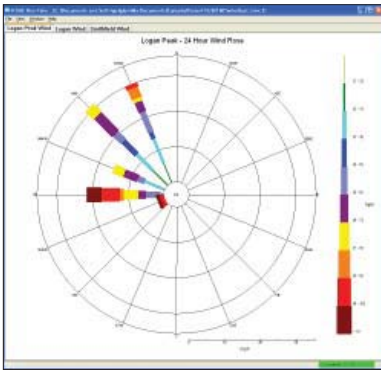
## RTMC Pro\*

RTMC Pro, an enhanced version of RTMC, includes a development and a run-time program. It is purchased separately, but a licensed copy of LoggerNet, LoggerNet-Admin, or RTDAQ software must be running on a PC.

Specifically, RTMC Pro provides:

- The ability to use data files and multiple LoggerNet Servers as data sources
- More graphical components. For example, more alarms, switches, graphs, gauges, and layout components are available
- Components to run/open a file, run a CoraScript command (LoggerNet command), or view a web page.
- Images of the project that can be saved and transferred to a web server automatically
- The ability to send email messages or execute programs when alarms occur. Alarm activity can be logged to a file
- More settings for components existing in both RTMC and RTMC Pro, which enables more design control

Users can go to [www.campbellsci.com/downloads](http://www.campbellsci.com/downloads), and receive a fully-functional 30-day trial version of RTMC Pro.

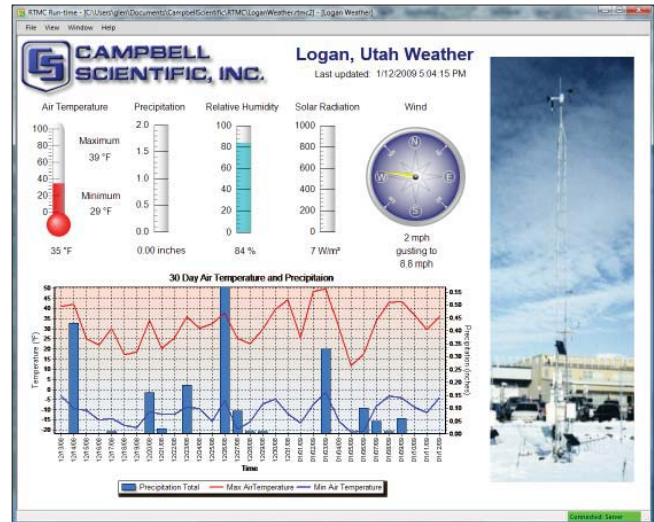


Using RTMC Pro, a wind rose report can be created that displays the distribution of wind directions at various wind speeds.

## RTMC Run-Time (RTMCRT)\*

RTMC projects developed in the standard RTMC application or RTMC Pro are run using RTMC Run-Time. RTMC Run-Time is included with LoggerNet, LoggerNetAdmin, LoggerNetData, RTDAQ, and RTMC Pro. Additional RTMC Run-Time versions can be purchased separately and installed on computers that are networked to a LoggerNet computer. This allows remote PCs to display data in a graphical format from a LoggerNet server.

\*RTMC Run-Time version 3.x and RTMC Web Server version 3.x are optimized for using projects created with the RTMC Pro 3.x development tool. Although RTMC Run-Time version 3.x and RTMC Web Server version 3.x can use projects from the version 2.5 development tool, the run-time display or web display may look different than what's expected. For best performance, RTMC Pro version 3.x should be used to develop projects for RTMC Run-Time version 3.x and RTMC Web Server version 3.x.



The RTMC Run-Time and RTMC Web Server clients run projects created in the developer program of RTMC or RTMC Pro. RTMC is bundled with LoggerNet, LoggerNet Data, and RTDAQ.

As LoggerNet collects data from the datalogger, the displays in RTMC Run-Time are automatically updated. RTMC Run-Time also allows the user to change public variable values or input locations, as well as toggle ports/flags if those capabilities were enabled in the RTMC project during development.

## RTMC Web Server\*

The RTMC Web Server is purchased separately. It converts projects created in RTMC's or RTMC Pro's development program into HTML files. This allows real-time data displays to be shared via an Internet browser. The HTML files created by RTMC Web Server can also show the status of LoggerNet or RTDAQ, and display the newest records for each datalogger setup in LoggerNet or RTDAQ.

For security, the RTMC Web Server is limited to read-only access (i.e., you cannot set input locations or toggle ports/flags using the Internet browser). Users can go to [www.campbellsci.com/downloads](http://www.campbellsci.com/downloads), and receive a fully-functional 30-day trial version of the RTMC Web Server.

## Computer Requirements

All clients run on Windows® XP, Windows® Vista, and Windows® 7. All clients except LNDB also run on Windows® 2000.