

Stand-alone Clients

Stand alone clients offered by Campbell Scientific include Baler, CSI OPC Server, RTMC Pro, RTMC Run Time, RTMC Web Server, and LoggerNetData. These stand-alone clients provide an economical solution for distributing data to remote PCs. To use these clients, a licensed copy of a Datalogger Support Software Package needs to be running on a PC.

Baler Data File Client

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

Specifically, the Baler client:

- Requires a licensed copy of LoggerNet or LoggerNetAdmin running on a PC
- 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 can not view or interact with the data using Baler. These functions are provided in our LoggerNetData client (see page 3).

CSI OPC Server

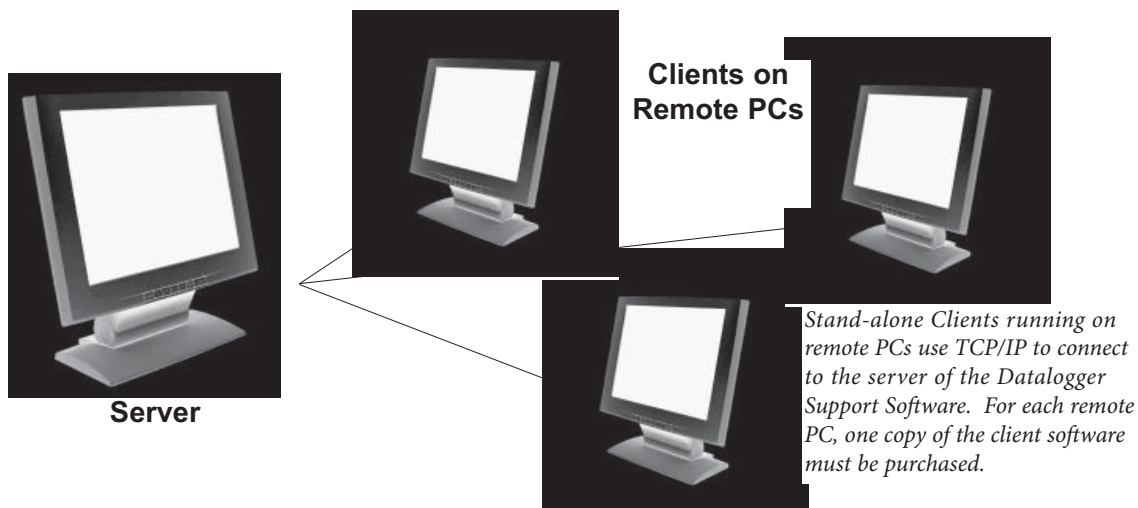
The CSI OPC Server provides a standard interface that allows third-party OPC-compatible graphics packages to display the datalogger data.

Specifically, the CSI OPC Server:

- Requires a licensed copy of LoggerNet or LoggerNetAdmin to be running on the same machine or on a remote PC
- 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 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.

By using a demonstration version, customers can "test drive" the CSI OPC Server prior to purchasing Campbell Scientific software or hardware. The demonstration version generates random data instead of retrieving the data. The PC-OPC demonstration version is available, at no charge, from: www.campbellsci.com/downloads



RTMC-Based Clients

RTMC Real-time Monitor and Control

RTMC is an application included in our LoggerNet, LoggerNet Admin, LoggerNetData, and RTDAQ software, and is therefore not purchased separately. It consists of a development and a run-time program.

The development program provides the following tools.

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

These tools allow you to create projects that:

- Display data from any number of dataloggers in the network
- Access statistical data reported by the LoggerNet server, including the current state of your datalogger network and system-critical information used to trigger alarms
- Perform post processing on the data being displayed
- Change input location and public variable values
- 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, LoggerNetData, or RTDAQ software must be running on a PC.

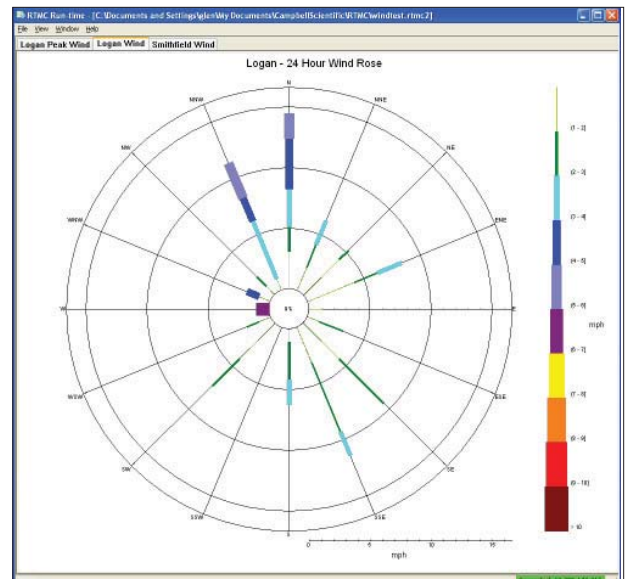
Specifically, RTMC Pro provides:

- More of the same types of graphical components found in RTMC. 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. These components are accessed by clicking a mouse. Images of the project can be saved and transferred to a Web server automatically and alarm activity can be logged to a file
- The ability to send email messages or execute programs when alarms occur
- More settings for components existing in both RTMC and RTMC Pro, which enables more design control

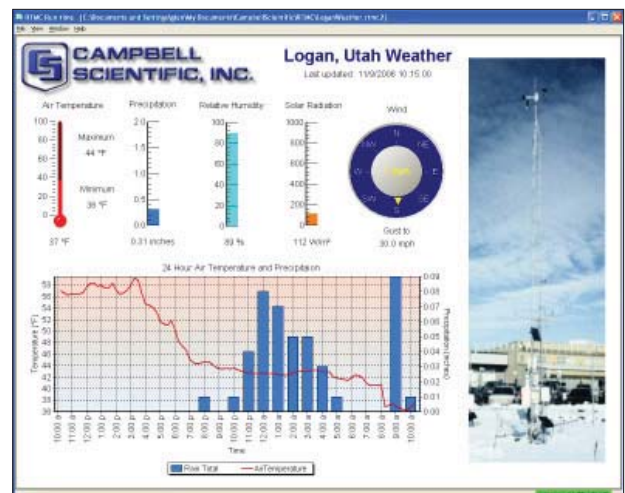
A limited run-time demonstration version of RTMC Pro is available, at no charge, from: www.campbellsci.com/downloads



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



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



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.

RTMC Run-Time (RTMCRT)

Additional RTMC Run-Time versions can be purchased separately and installed on computers that are networked to the LoggerNet or RTDAQ computer. RTMC Run-Time is intended for applications in which one or more remote PC need to display in a graphical format data from the LoggerNet or RTDAQ server.

Remote PCs running RTMC Run-Time can view and print RTMC displays created with the development program of RTMC or RTMC Pro. As LoggerNet or RTDAQ 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 location, 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 programs 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 record for each table in the LoggerNet or RTDAQ network map.

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). A limited-time demonstration version of RTMC Web Server is available, at no charge, from: www.campbellsci.com/downloads

LoggerNetData Software

To use LoggerNetData, a licensed copy of LoggerNet or LoggerNet Admin must be running on a remote PC. 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

- Provides information on the oldest and newest records stored in the LoggerNet data cache
- Retrieves either a range of data or the data since the last collection using Data Filer
- Creates ASCII data files on remote PCs
- Includes field names and date/time stamps in the ASCII data files

View

- Provides a tabular display of data
- Graphs up to two fields

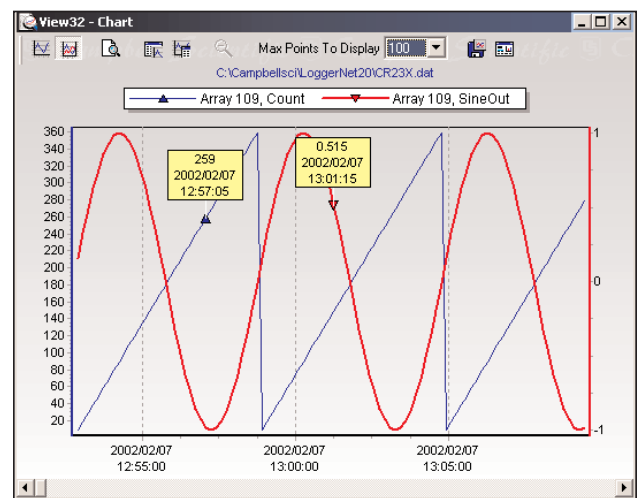
RTMC

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

Refer to the RTMC discussion on the previous page for more information.

Split

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



View allows you to use the mouse pointer to zoom in on a range of data or a single point.

Report Heading	Hourly Data					
Column#	1	2	3	4	5	6
Element/Field#	smp(l:1)	smp(v:1)	smp(h:1)	smp(Le:1)	smp(Le:1)*1.8	
Filename	MSTSPLIT.dat	MSTSPLIT.dat	MSTSPLIT.dat	MSTSPLIT.dat	MSTSPLIT.dat	
Line 1	Temp	Wind	H	Wind	Wind	
Line 2	deg C	Speed		Chill	Chill	
Line 3		m/s		deg C	deg F	
Decimal						
Width						

Split sorts and combines data based on time or conditions, performs calculations on data values, and converts "Day of Year" calendar dates into more traditional date/time stamps.

Computer Requirements

- Minimum recommended hardware—Pentium II processor with 128 Mbytes of RAM and a screen resolution of at least 800 x 600 resolution.
- Recommended computer operating systems—Windows Vista, 2000, or XP.

