

Data Station Plus

The Complete
Data Management Solution

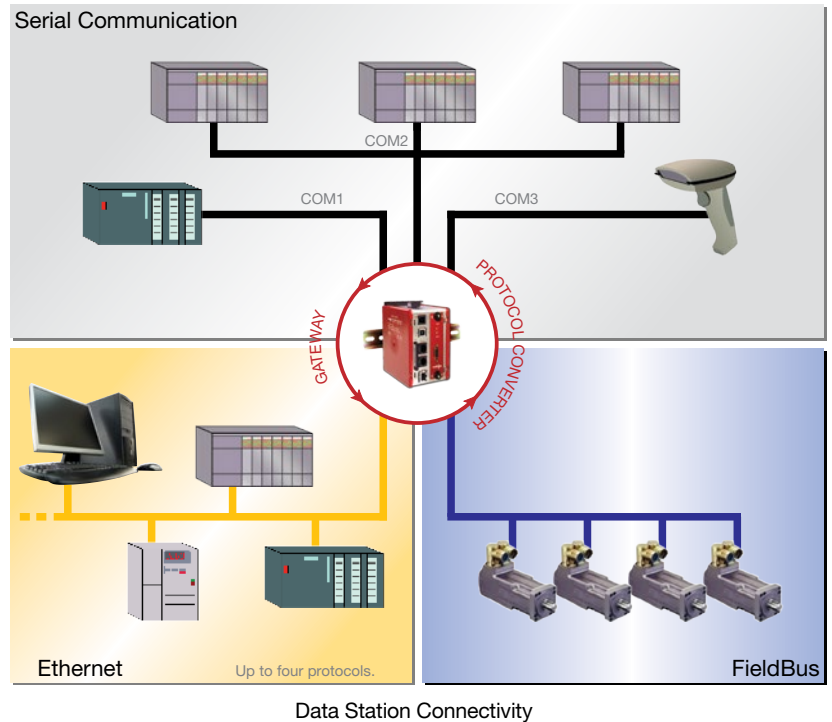
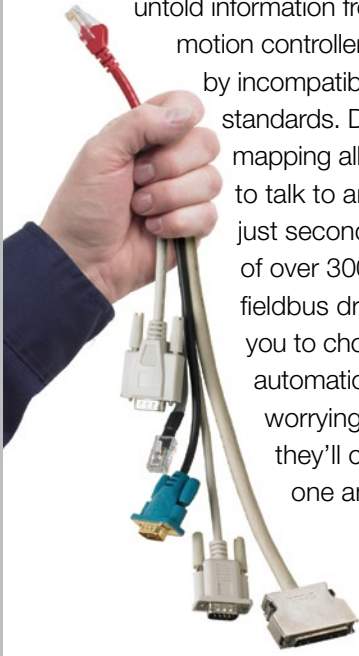


- > Multiple protocol converter allows complete system integration
- > IT-ready data logging for process tracking and improvement
- > Remote asset management and control via built in web server
- > Reduce downtime with email and SMS alarm capability

▶▶▶ Seamless integration of multi-vendor systems

Now it's easy to get all your devices on the same page.

Red Lion's Data Station Plus is the single-device solution for **protocol conversion**. The DSP bridges the communication gap between disparate serial, Ethernet and fieldbus devices—unlocking untold information from PLCs, drives, motion controllers, etc., orphaned by incompatible communications standards. Drag and drop register mapping allows a Siemens PLC to talk to an Allen Bradley drive in just seconds. With a growing list of over 300 serial, Ethernet and fieldbus drivers, the DSP allows you to choose the best-in-class automation components, without worrying over whether or not they'll communicate with one another.

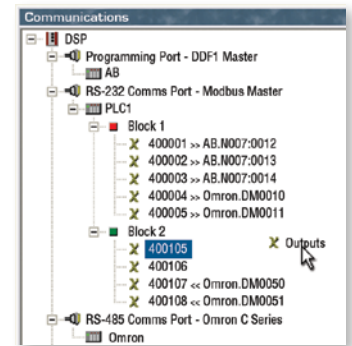


Network your existing equipment to avoid risk.

Getting legacy machines onto a common communications backbone used to be largely impossible, sometimes requiring a complete replacement of the automation components. The Data Station Plus allows you to convert your old PLC's and drive's proprietary protocol into a modern and open standard. By unlocking information hidden in these legacy devices, you save money while avoiding a risky upgrade to equipment that is otherwise working perfectly.

OEMS—Add Ethernet and OPC connectivity to all of your machines.

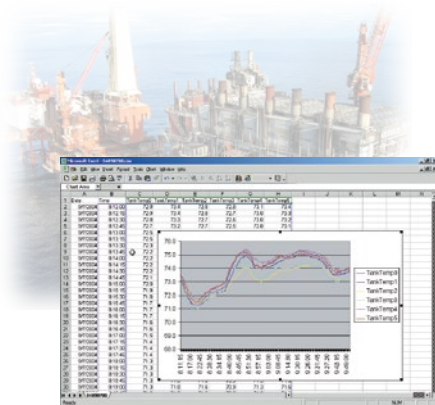
Add a Data Station Plus to your equipment, and you can offer your customers out-of-box connectivity to their SCADA systems, while providing yourself the means to remotely support the machine. The DSP's ability to support ten Ethernet protocols simultaneously, while offering OPC compatibility, means you don't have to worry about how the system will be integrated at the user's facility. And that's just the beginning. The "port sharing" facility allows the Data Station Plus to act as a remote serial port to your PC, meaning you can reprogram any connected serial device from virtually anywhere in the world.



Drag and Drop Gateway Blocks in Crimson 3.0



▶▶▶ Reduce costs using data management.



Data Logging

Monitor the vital signs of your machines and processes.

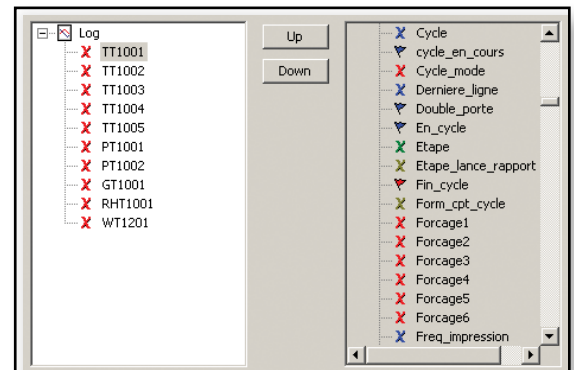
Data points logged from devices, machines and processes provide a performance baseline for analysis, and can be used to trigger PLC functions, alarms or notifications when points stray from nominal parameters. These variables can be used as reliable predictors of impending machine failure, monitoring for preventative maintenance, as well as general performance monitoring of distributed processes or discrete production throughput. Reliable data can be used to identify process vulnerabilities, abnormal conditions or wear trending.

Data Logging can be used for real-time monitoring of process activities, product traceability and quality control issues, TPM, downtime, OEE (overall equipment effectiveness), or be used to generate virtually unlimited data sets for statistical analysis and control decisions.

Know more. Do more.

One Data Station Plus allows a user to quickly set up monitoring of a number of disparate devices in a control application, collect performance data, display it, store it for evaluation, or trigger PLC functions, either live or remotely. The Data Station Plus' built-in math capability also allows probability calculations to pre-analyze hard point data to provide only relevant information. An integrated OPC server allows easy SCADA connectivity using Red Lion's OPCWorx.

The multiple Data, Alarm, Event and Security loggers in Crimson® 3.0 provide data in "IT ready" CSV (comma separated values) files that can be easily opened with applications such as Microsoft® Excel. No software plug-ins are required to access your application data. And a built-in CompactFlash® card slot provides unlimited data



Set up for one data log in Crimson 3.0

storage as well as secure and immediate retrieval of the DSP's configuration. All the requirements for quality traceability, production tracking or maintenance are now embedded into one platform. The ability to monitor your process can be set up in just minutes with the DSP's connectivity and logging tools.



Security Logging

Date	Time	Type	Description
12/18/2006	16:55:09	Alarm	Temperature E Boiler Too High
12/18/2006	16:55:15	Accept	Temperature E Boiler Too High
12/18/2006	16:55:25	Clear	Temperature E Boiler Too High
12/18/2006	16:55:39	Alarm	Level tank X12 below 25%
12/18/2006	17:13:25	Alarm	Level tank X12 below 15%
12/18/2006	18:25:15	Alarm	CRITICAL_ALARM Level tank X12 below 2%
12/18/2006	18:42:29	Alarm	Pump Failure, feeding zone 3
12/18/2006	18:43:32	Accept	Level tank X12 below 25%
12/18/2006	18:43:32	Accept	Level tank X12 below 15%
12/18/2006	18:43:32	Accept	CRITICAL_ALARM Level tank X12 below 2%
12/18/2006	18:43:32	Accept	Pump Failure, feeding zone 3
12/18/2006	18:55:15	Clear	Pump Failure, feeding zone 3
12/18/2006	19:02:35	Clear	CRITICAL_ALARM Level tank X12 below 2%
12/18/2006	19:15:34	Clear	Level tank X12 below 15%
12/18/2006	20:38:01	Clear	Level tank X12 below 25%

Alarms and Events Logging

▶▶▶ Monitor and control your applications. **Anywhere.**

View and Control your system remotely.

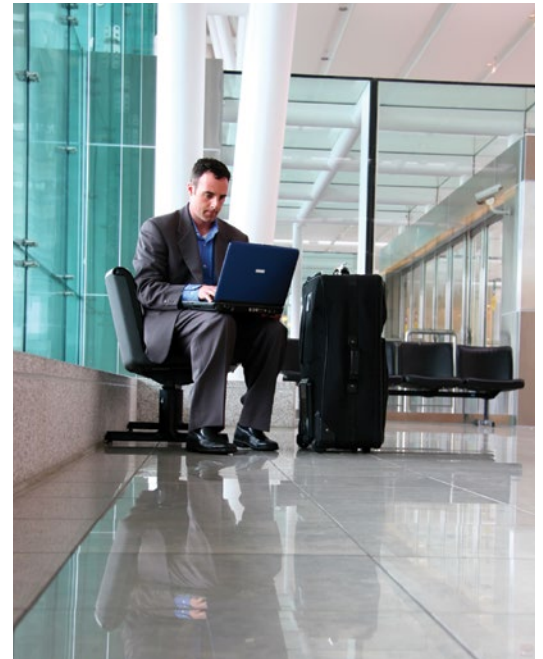
With its built-in **web server**, the Data Station Plus allows you to remotely monitor and control your process with the click of a mouse. Web-enabling your process facilitates remote real-time monitoring, operation, diagnostics and data acquisition from any networked PC, as well as browser equipped PDA's or phones. A complete graphics package, with over 4000 images, can be used to accurately depict your machine or process.



The Data Station Plus can automatically synchronize its log files via FTP to a remote server for long term storage. Log files may also be retrieved manually or emailed on command.

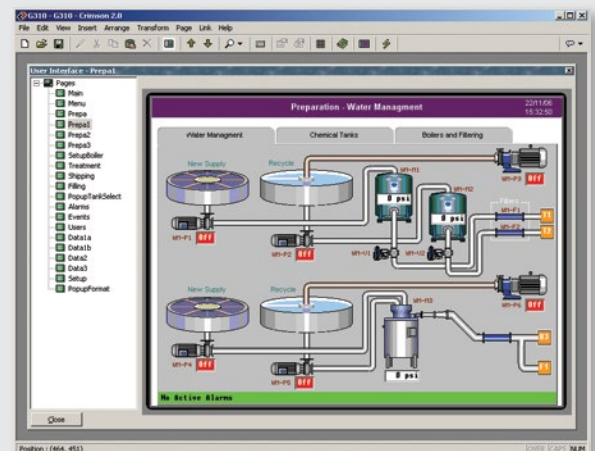
Faster reaction. Save time. Save money.

The Data Station Plus messaging facilities can be used to send alarms or events using email or SMS text messages to PCs, as well as PDA's and mobile phones. Files can be attached to email so report or logging information arrive directly to the appropriate personnel, facilitating faster intervention or maintenance when problems occur.



Protocol conversion. Ethernet gateway. IT-ready data logging. It's all here.

The Data Station Plus is configured with Crimson 3.0 configuration software, which is not only powerful and easy to use—it's free. The combination of protocol conversion, web and FTP servers and data logging, with its large library of communication drivers, creates a seamless method to connect all your devices to a secure and easily accessible network, even those stranded by legacy technology. The Data Station Plus is simply the most economical, easiest to integrate, data logging, monitoring and control system ever developed.



User interface


▶▶▶ The universal solution to connect, monitor and control

CONNECT



Easily monitor and control the process for improved quality

MONITOR



Early notification reduces downtime


CONTROL



Supervise, manage and control processes on site or remotely

- > FTP Server
- > Email and SMS Messaging
- > File Synchronization
- > Alarms and Event Logging
- > Security Manager for Multi-User Applications

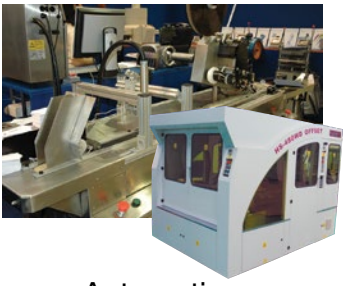
- > Data Logging
- > Embedded Web Server
- > Virtual HMI for Easy Remote Viewing and Control
- > Custom Web Pages
- > Protocol Converter/Gateway

Remote Management



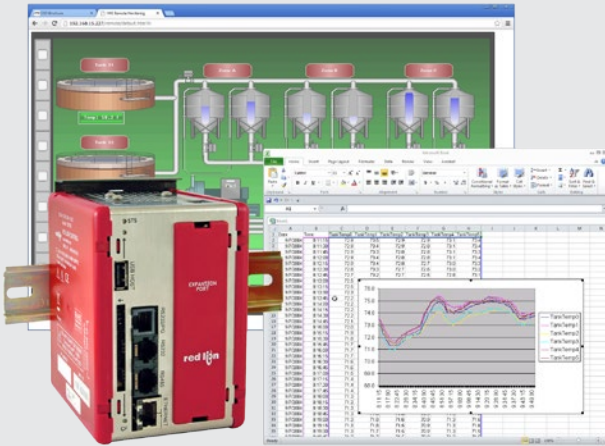
Communication



Automation

SYSTEM

▶▶▶ Data Station Plus specifications



MODEL DSPZR

Data Station Plus ZR

MODEL DSPZR Data Station Plus ZR

- > Multiple protocol Converter
- > Web server provides access to custom web pages, virtual HMI, data and event logger
- > Virtual HMI VGA size maximum (1280x720) provides remote monitoring and control
- > Configured via Crimson 3.0 Windows compatible software
- > Two (2) RS 232 and one (1) RS485/422 serial communication ports on board
- > 10/100 Base-T Ethernet port supports multiple protocols
- > USB Port to download the unit's configuration from a PC
- > CompactFlash Socket to increase memory capacity for data-log files and custom web pages
- > FTP server and synchronization for file transfer
- > OPC Server for easy SCADA connectivity using OPCWorx
- > Optional card adds fieldbus connectivity, extra serial ports, etc.
- > Extended memory for larger applications
- > USB host capability
- > Syncs data logs to FTP and Microsoft SQL server



MODEL DSPGT

Data Station Plus GT

MODEL DSPGT Data Station Plus GT

- > Multiple protocol Converter
- > Web server provides access to custom web pages, virtual HMI, data and event logger
- > Virtual HMI VGA size maximum (640x480) provides remote monitoring and control
- > Configured via Crimson 3.0 Windows compatible software
- > Two (2) RS232 and one (1) RS485/422 serial communication ports on board
- > 10/100 Base-T Ethernet port supports multiple protocols
- > USB Port to download the unit's configuration from a PC
- > CompactFlash Socket to increase memory capacity for data-log files and custom web pages
- > FTP server and synchronization for file transfer
- > OPC Server for easy SCADA connectivity using OPCWorx
- > Optional card adds fieldbus connectivity, extra serial ports, etc.
- > Extended memory for larger applications



MODEL DSPSX

Data Station Plus SX

MODEL DSPSX

Data Station Plus SX

- > Multiple protocol Converter
- > Web server provides access to custom web pages, virtual HMI, data and event logger
- > Virtual HMI QVGA size maximum (320x240) provides remote monitoring and control
- > Configured via Crimson 3.0 Windows compatible software
- > Two (2) RS232 and one (1) RS485/422 serial communication ports on board
- > 10/100 Base-T Ethernet port supports multiple protocols
- > USB Port to download the unit's configuration from a PC
- > CompactFlash Socket to increase memory capacity for data-log files and custom web pages
- > FTP server and synchronization for file transfer
- > OPC Server for easy SCADA connectivity using OPCWorx
- > Optional card adds fieldbus connectivity, extra serial ports, etc.



MODEL DSPLE

Data Station Plus LE

MODEL DSPLE

Data Station Plus LE

- > Multiple protocol Converter
- > Configured via Crimson 3.0 Windows compatible software
- > Two (2) RS232 and one (1) RS485/422 serial communication ports on board
- > 10/100 Base-T Ethernet port supports multiple protocols
- > USB Port to download the unit's configuration from a PC
- > CompactFlash Socket for programming only
- > Optional card adds fieldbus connectivity or extra serial ports

MODEL XC

Optional communication card*

XCRS0000 - Isolated serial communication card with one RS232 and one RS422/485

XCPBDP00 - Profibus DP slave communication card

XCDN0000 - DeviceNet slave communication card

XCCN0000 - CanOpen communication card

XCENET00 - Ethernet communication card

XCGSM000 - GSM cellular modem card

*Each DSP can accept one expansion card

▶▶▶ A comprehensive portfolio of industrial automation and networking solutions to **connect. monitor. control.**



INDUSTRIAL AUTOMATION

Process Control

- ▶ PID Controllers
- ▶ Data Acquisition
- ▶ RTUs & I/O Modules
- ▶ Signal Conditioners
- ▶ Sensors

HMIs & Panel Meters

- ▶ HMI Operator Panels
- ▶ Panel Meters
- ▶ Large LED Displays
- ▶ Visual Management

INDUSTRIAL NETWORKING

Ethernet Switches

- ▶ Unmanaged
- ▶ Monitored
- ▶ Managed
- ▶ PoE
- ▶ Routers
- ▶ Wi-Fi Radios

Cellular M2M

- ▶ Cellular Routers
- ▶ Cellular RTUs

Communication Converters

- ▶ Protocol Converters
- ▶ Media Converters
- ▶ Serial Converters



As the global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our automation, Ethernet and cellular M2M technology enables companies worldwide to gain real-time data visibility that drives productivity. Product brands include Red Lion, N-Tron® and Sixnet®. With headquarters in York, Pennsylvania, the company has offices across the Americas, Asia-Pacific and Europe. Red Lion is part of Spectris plc, the productivity-enhancing instrumentation and controls company

Connect. Monitor. Control.

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