

# Data Station Plus

The Complete Data Management Solution



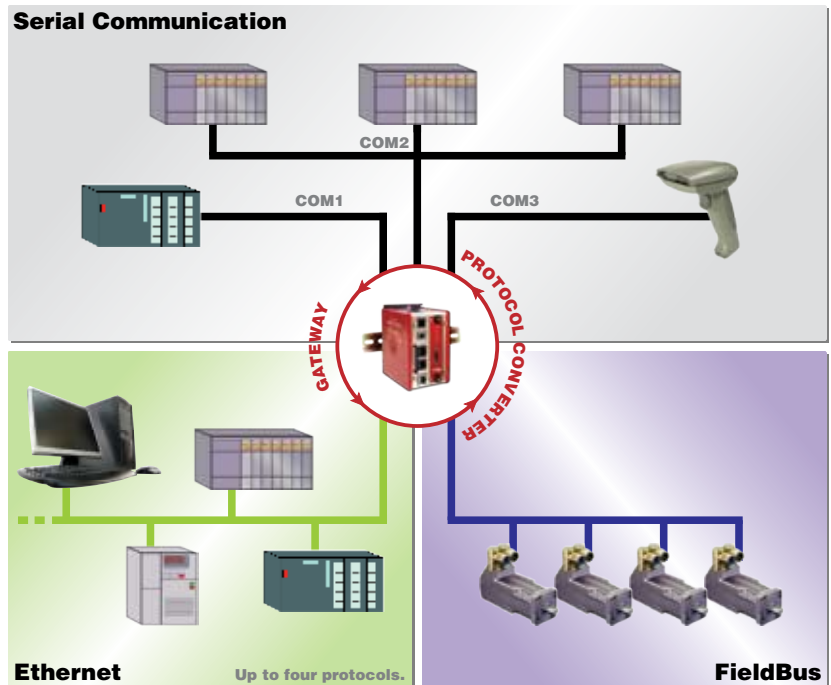
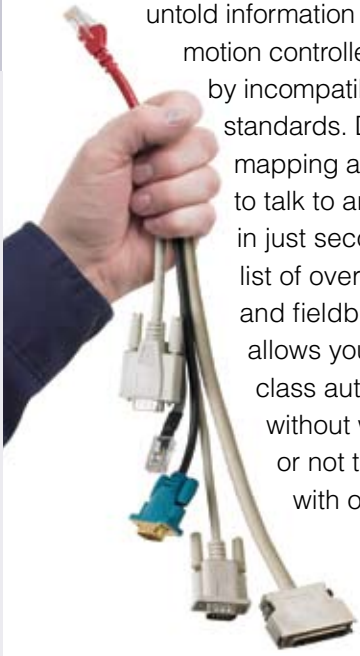
- Multiple protocol converter allows complete system integration
- IT-ready data logging for process tracking and improvement
- Remote asset management and control via built in web server
- Reduce downtime with e-mail and SMS alarm capability

**red lion**  
trust+innovation®

# 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 130 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.



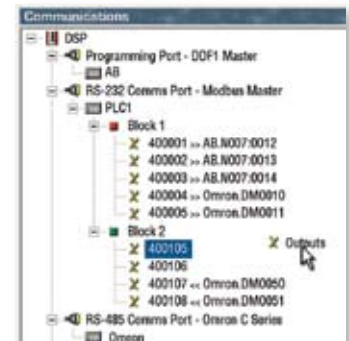
Data Station Connectivity

## 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 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 four 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 2



# Reduce costs using data management.



Data Logging

## Monitor the vital signs of your machines and processes.

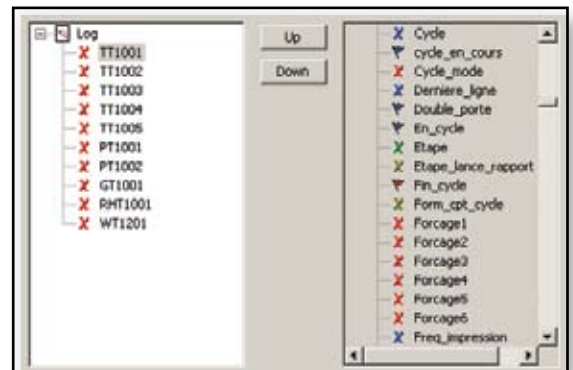
Data points logged from devices, machines and processes provide a performance baseline for analysis, and can be used to trigger PLC functions, alarms or notifications when points stray from nominal parameters. These variables can be used as reliable predictors of impending machine failure, monitoring 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. 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 2 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 storage as well as secure and immediate retrieval of the DSP's configuration.

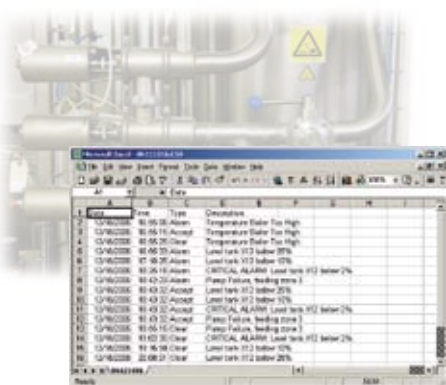


Set up for one data log in Crimson 2.0



Security Logging

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.



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 PDAs 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.

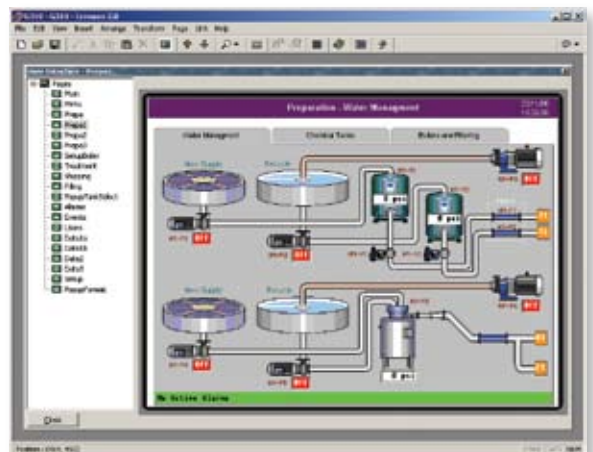


## Faster reaction. Save time. Save money.

The Data Station Plus' messaging facilities can be used to send alarms or events using e-mail or SMS text messages to PCs, as well as PDAs and mobile phones. Files can be attached to e-mail 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 2 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 monitoring, management and control.

## MANAGEMENT



Supervise, manage and control processes on site or remotely

## PREVENTION

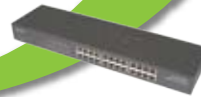


Early notification reduces downtime

## CONTROL



Easily monitor and control the process for improved quality



- 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

**DATA**



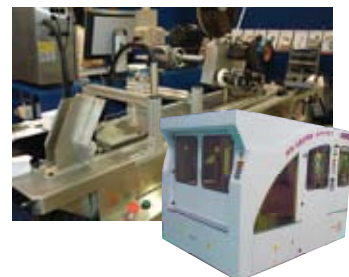
**DATA**



**Remote Management**



**Communication**



**Automation**

**SYSTEM**

# Data Station Plus Specifications



## MODEL DSPLE

### Data Station Plus LE

- Configured via Crimson 2.0 Windows compatible software
- Multiple protocol Converter
- 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\*

- XCERS0000** - 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.

\*Each DSP can accept one expansion card.

## MODEL DSPSX

### Data Station Plus SX

- Configured via Crimson 2.0 Windows compatible software
- Multiple protocol Converter
- 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
- Web server provides access to custom web pages, virtual HMI, data and event logger
- CompactFlash Socket to increase memory capacity for data-log files and custom web pages.
- Virtual HMI QVGA size maximum (320x240) provides remote monitoring and control
- 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 DSPGT

### Data Station Plus GT

- Configured via Crimson 2.0 Windows compatible software
- Multiple protocol Converter
- 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
- Web server provides access to custom web pages, virtual HMI, data and event logger
- CompactFlash Socket to increase memory capacity for data-log files and custom web pages.
- Virtual HMI VGA size maximum (640x480) provides remote monitoring and control
- 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

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