Data Station Plus

The Complete
Data Management Solution
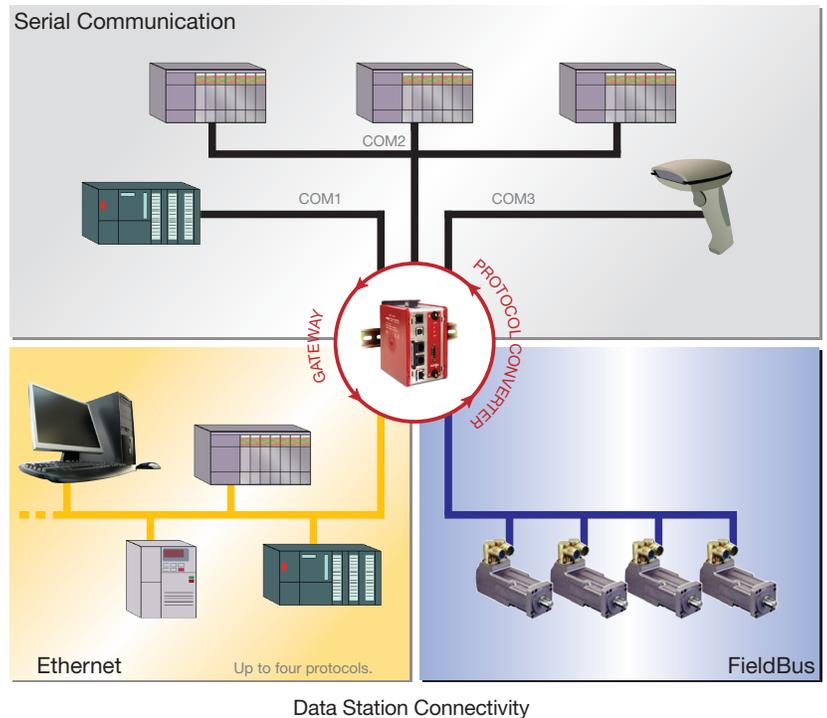
> Multiple protocol converter allows complete system integration

> 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

industrial
automation

▶▶▶ 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 250 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.

Serial Communication

COM2

COM1 COM3

GATEWAY PROTOCOL CONVERTER

Ethernet Up to four protocols. FieldBus
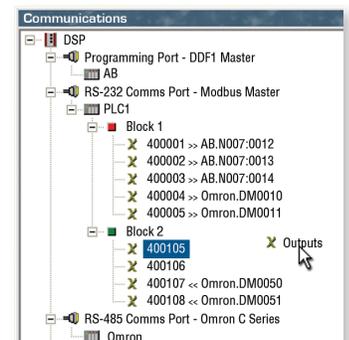
Data Station Connectivity

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 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.
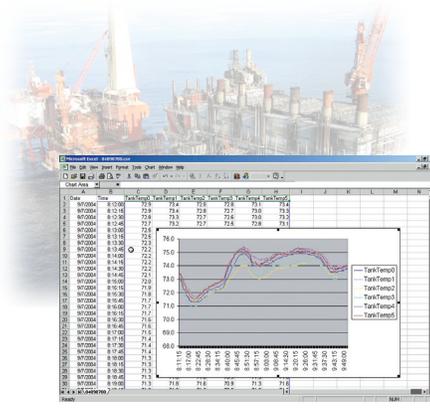
Add a Data Station Plus to your equipment, and you can offer your customers out-of-box connectivity to their SCADA systems, while providing yourself the means to remotely support the machine. The DSP's ability to support four Ethernet protocols simultaneously, while offering OPC compatibility, means 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.

Communications
DSP
  Programming Port - DDF1 Master
    AB
  RS-232 Comms Port - Modbus Master
    PLC1
      Block 1
        400001 >> AB.N007:0012
        400002 >> AB.N007:0013
        400003 >> AB.N007:0014
        400004 >> Omron.DM0010
        400005 >> Omron.DM0011
      Block 2
        400105   Outputs
        400106
        400107 << Omron.DM0050
        400108 << Omron.DM0051
  RS-485 Comms Port - Omron C Series
    Omron

Drag and Drop Gateway Blocks in Crimson 2

CANopen   DeviceNet™   PROFI PROCESS FIELD BUS   OPC®   EtherNet/IP™

2

▶▶▶ Reduce costs using data management.

Data Logging

Security Logging

Alarms and Events 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.
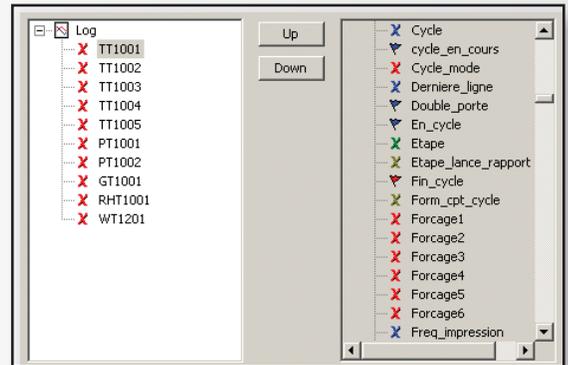
Know more. Do more.

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 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
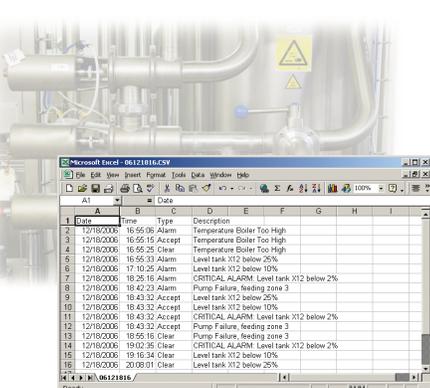

Set up for one data log in Crimson 3.0

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.

Learn more at www.redlion.net.
Call +1 (717) 767-6511 to speak to a representative.
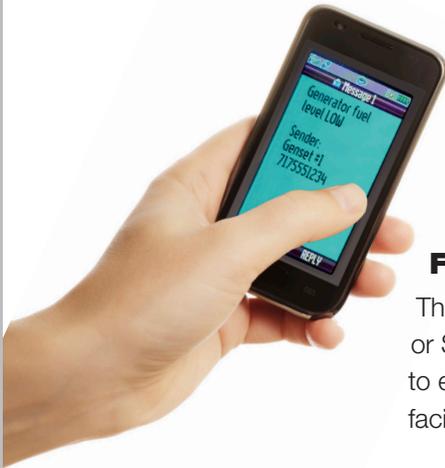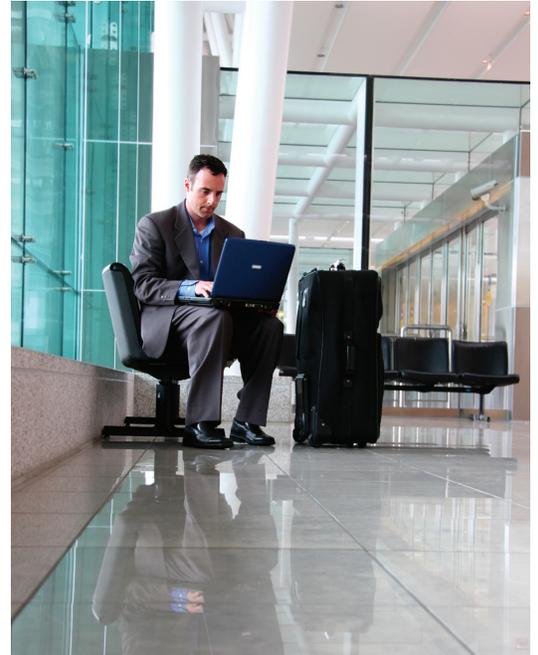
▶▶▶ Monitor and control your applications. Anywhere.

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 email or SMS text messages to PCs, as well as PDAs 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.
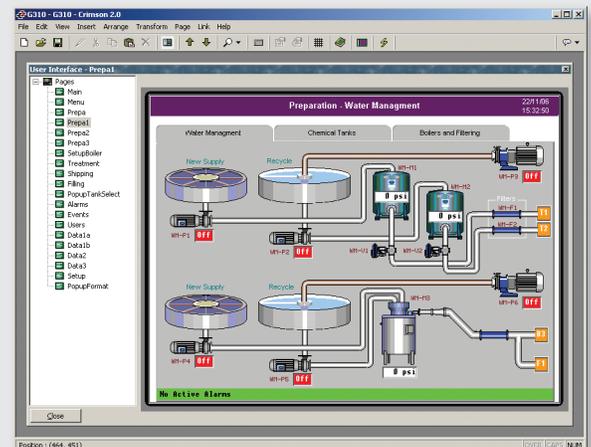
Learn more at www.redlion.net.
Call +1 (717) 767-6511 to speak to a representative.

Protocol conversion. Ethernet gateway. IT-ready data logging. It's all here.
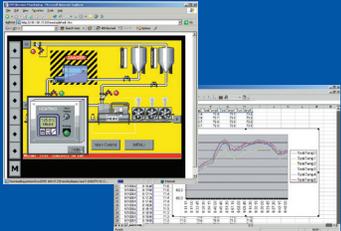
The Data Station Plus is configured with Crimson 3 configuration software, which is not only powerful and easy to use—it's free. The combination of protocol conversion, web and FTP servers and data logging, with its large library of communication drivers, creates a seamless method to connect all your 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
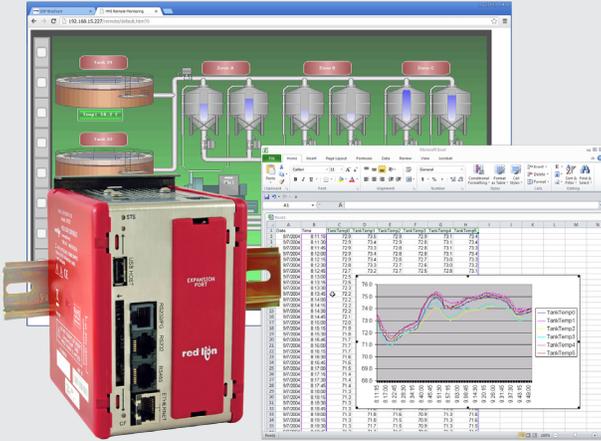> Custom Web Pages
> Protocol Converter/Gateway

DATA

PROTOCOL CONVERTER

EXCHANGE   EXCHANGE

DATA

DATA

Remote Management

Communication

Automation

SYSTEM

MODEL DSPZR
Data Station Plus ZR

MODEL DSPGT
Data Station Plus GT

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

> 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 DSPLE
Data Station Plus LE

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

> 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

*Each DSP can accept one expansion card

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

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

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▶ HMI Operator Panels
▶ Panel Meters
▶ Large LED Displays
▶ Industrial TV Displays

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

Cellular M2M
▶ Cellular Routers
▶ Cellular RTUs

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▶ Protocol Converters
▶ Media Converters
▶ Serial Converters

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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 award-winning 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. For more information, please visit www.redlion.net. Red Lion is a Spectris company.