The Red Lion DSP and CSMSTR Series are designed to act as the nexus for industrial data collection and management.

The units offer protocol conversion, data logging, and remote machine access. With three built-in serial ports and a 10 Base-T/100 Base-TX Ethernet port, the units perform protocol conversion, allowing disparate devices to communicate seamlessly with one another. The Ethernet port supports up to ten protocols simultaneously so even Ethernet to Ethernet protocols can be converted.

These units leverage over 250 communication drivers via three independent serial ports and an Ethernet port, to connect and collect data from virtually any PLC, drive, bar code scanner, etc.

### APPLICATIONS
- Transportation
- Oil & Gas
- Mining
- Maritime
- Factory Floor

### PRODUCT HIGHLIGHTS
- Protocol conversion feature converts numerous protocols simultaneously
- 250+ communications drivers for communicating directly with PLCs, drives, etc.
- Data logging; syncs data logs to FTP servers and Microsoft SQL Server®
- Built-in webserver allows remote view or control from any internet connected PC
- USB host capabilities

### FEATURES & BENEFITS
- Provides email and SMS text message alerts
- USB host port to download the unit’s configuration from a PC or for data transfers to a PC
- 10 BASE-T/100 BASE-TX Ethernet connection can connect to an unlimited number of devices via ten protocols simultaneously
- CSMSTRZR performs hierarchical control of other modules in the modular controller series
- CSMSTRZR supports up to 16 CS-Series modules to accept digital and analog signals
Enhanced Data Station Plus & Modular Controller Specifications

**COMMUNICATION PROPERTIES**

USB/PG Port: Adheres to USB 2.0 specification full speed only via Type B connection
USB Host Port: Complies with Universal Serial Bus Specification Rev 2.0. and supports data transfers at full-speed (hardware over current protected at 0.5 A max)
Serial Ports: Format and baud rates for each port are individually software programmable
Serial Ports: Individually isolated
Communication Port to Port: 1500 VAC
Communication Ports to Power: 1000 VDC
Communication Ports to Earth: 1000 VDC
Units Dielectric: Withstand test per 1 minute
Communication Ports: RS232/RS485 port, RS485 port, Ethernet port and option cards

**ENVIRONMENTAL**

Operating Temperature Range: 0°C to 45°C
Storage Temperature Range: -30°C to +70°C
Operating and Storage Humidity: 80% max relative humidity, non-condensing, from 0°C to 50°C
Altitude: Up to 2000 meters

**MECHANICAL**

Construction: Case body is burgundy high impact plastic and stainless steel for indoor use only (Installation category II, pollution degree 2)
Mounting: Snaps onto standard DIN style top hat (T) profile mounting rails
RJ45 Jack: Wired as a NIC (Network Interface Card); jack shield is electrically connected to earth ground, but the port is isolated

**LEDs**

STS: Status LED indicates condition of master or DSP
USB HOST: HOST LED indicates port status/activity
TX/RX: Transmit/receive LEDs show serial activity
Ethernet: Link and activity LEDs
CF: CompactFlash LED indicates card status and read/write activity

**MEMORY**

On-board User Memory: 128 Mbytes of non-volatile Flash memory
On-board RAM: 64 Mbytes
Memory Card: CompactFlash Type II slot for Type I and Type II cards

**POWER**

24 VDC ± 10%
CSMSTRZR: 450 mA min. (1 module); 3.4 Amps max. (16 modules + Expansion Card)
DSP2R: 250 mA min., without expansion card; 1 Amp maximum with expansion card fitted
For All Units: Must use NEC Class 2 or Limited Power Source (LPS) rated power supply

**ORDERING INFORMATION**

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<tr>
<th>PART NUMBER</th>
<th>MODEL</th>
<th>DESCRIPTION</th>
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<tr>
<td>CSMSTRZR</td>
<td>CSMSTRZR1</td>
<td>Enhanced Modular Controller Master</td>
</tr>
<tr>
<td>DSPZR000</td>
<td>DSPZR</td>
<td>Enhanced Data Station Plus</td>
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<tr>
<td>CBLPGRO00</td>
<td>CBLUSB00</td>
<td>RS232 Programming cable</td>
</tr>
<tr>
<td>CBLxxxx</td>
<td>CBLxxxx</td>
<td>Communications cables 1</td>
</tr>
<tr>
<td>PDRxxxx</td>
<td>PDRxxxx</td>
<td>DIN-Rail mounted power supply</td>
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<tr>
<td>XCCN0000</td>
<td>XCCN</td>
<td>CANopen option card</td>
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<tr>
<td>XCDN0000</td>
<td>XCDN</td>
<td>DeviceNet option card</td>
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<td>XCNENET00</td>
<td>XCNENET</td>
<td>Ethernet option card</td>
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<td>XCGSM0000</td>
<td>XCGSM</td>
<td>GSM Cellular option card</td>
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<tr>
<td>XCBP0000</td>
<td>XCBP0000</td>
<td>PROFIBUS option card</td>
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<td>XCRS20000</td>
<td>XCRS20000</td>
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<tr>
<td>G3CFxxxx</td>
<td>G3CFxxxx</td>
<td>CompactFlash card 1</td>
</tr>
<tr>
<td>CSBASE0000</td>
<td>CSBASE0000</td>
<td>Replacement base (CSMSTRZR only)</td>
</tr>
<tr>
<td>CSTERM0000</td>
<td>CSTERM0000</td>
<td>Replacement termination plug (CSMSTRZR only)</td>
</tr>
<tr>
<td>CSBUNG0000</td>
<td>CSBUNG0000</td>
<td>Replacement rubber end cap (CSMSTRZR only)</td>
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**NOTES:**

1 For a complete list of PID modules & data acquisition modules, go to www.redlion.net/link/wp.asp?ID=6163. 2 For a complete list of communications drivers and cables, go to www.redlion.net/link/wp.asp?ID=6162. 3 Antenna (G3QANT00) is NOT included with the card. Must be purchased separately if needed. 4 Industrial grade two million write cycles. SMART Modular Technologies model SG9CF (UL Listed Directory Category NWGQ).

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.