Data Station Plus & Modular Controller

Red Lion Automation Series

Enhanced Data Station Plus & Modular Controller

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

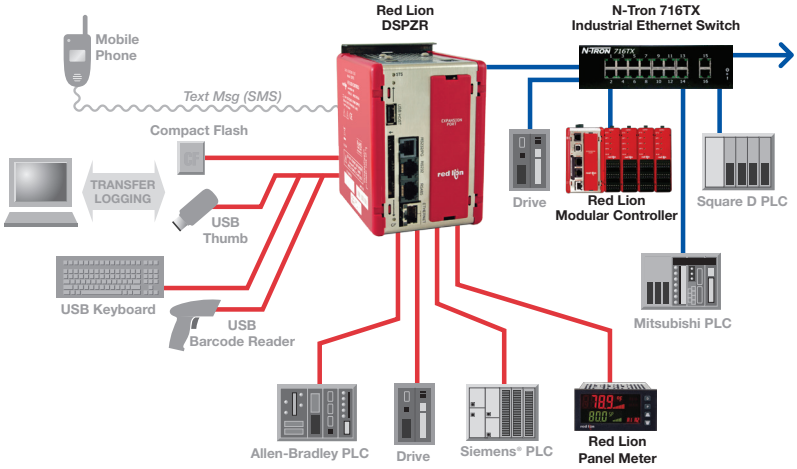
The units offer protocol conversion, data logging, and remote machine access. With three built-in serial ports and a 10 Base-T/100 Base-TX Ethernet port, the units perform protocol conversion, allowing disparate devices to communicate seamlessly with one another. The Ethernet port supports up to ten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

CSMSTRZR



APPLICATION DIAGRAM



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

industrial automation

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/PG, RS232 port, RS485 port, Ethernet port and option cards
RS232/PG Port: RS232 port via RJ12
COMMS Ports: RS422/485 port via RJ45, and RS232 port via RJ12
DH485 TXEN: Transmit enable; open collector, V_{OH} = 15 VDC, V_{OL} = 0.5 V @ 25 mA max
Ethernet Port: 10 BASE-T/100 BASE-TX
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

REAL-TIME CLOCK

Typical Accuracy: less than one minute per month drift (Crimson's SNTP facility allows synchronization with external servers)
Battery: Lithium Coin Cell with typical lifetime of 10 years at 25 °
A "Battery Low" system variable is available so that the programmer can choose specific action(s) to occur when the battery voltage drops below its nominal voltage
This unit is NOT field serviceable and all work must be done by a qualified technician

POWER

24 VDC ± 10%
CSMSTRZR: 450 mA min. (1 module); 3.4 Amps max. (16 modules + Expansion Card)
DSPZR: 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

POWER CONNECTION

Removable wire clamp screw terminal block
Wire Gage Capacity: 24 AWG to 12 AWG
Torque: 4.45 to 5.34 in/lb (0.5 to 0.6 N-m)

CERTIFICATION & COMPLIANCE

CSMSTRZR - Check each module's specifications to determine system compliance
IEC/EN 61010-1 CE Approved

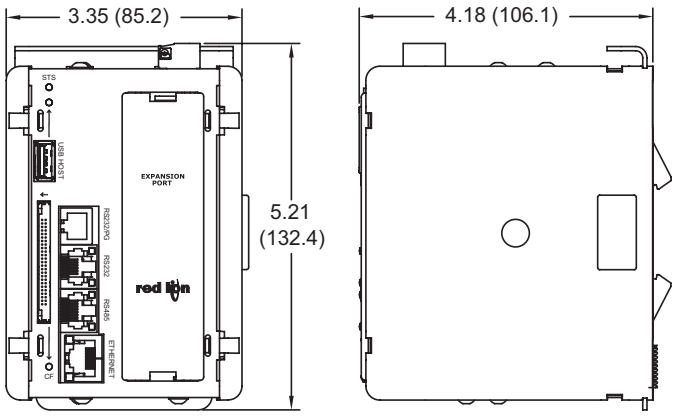
ENVIRONMENTAL

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 according to EN50022 -35 x 7.5 and -35 x 15.
Weight: 1.30 lb (590 g)

DIMENSIONS *In inches (mm)*



ORDERING INFORMATION

PART NUMBER	MODEL	DESCRIPTION
CSMSTRZR	CSMSTRZR[1]	Enhanced Modular Controller Master
DSPZR000	DSPZR	Enhanced Data Station Plus
CBLPROG0	CBL	RS232 Programming cable
CBLUSB00		USB cable
CBLxxxxx		Communications cables[2]
PSDRxxxx	PSDR	DIN-Rail mounted power supply
XCCN0000	XCCN	CANopen option card
XCDN0000	XCDN	DeviceNet option card
XCENET00	XCENET	Ethernet option card
XCGSM000	XCGSM	GSM Cellular option card[3]
XCPBDP00	XCPB	PROFIBUS option card
XCRS0000	XCRS	RS232/485 option card
G3CFxxxx	G3CF	CompactFlash card[4]
CSBASE00		Replacement base (CSMSTRZR only)
CSTERM00		Replacement termination plug (CSMSTRZR only)
CSBUNG00		Replacement rubber end cap (CSMSTRZR only)

Notes:
[1] For a complete list of PID modules & data acquisition modules, go to www.redlion.net/link/wp.asp?ID=6162. [2] For a complete list of communications drivers and cables, go to www.redlion.net/link/wp.asp?ID=6163. [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).

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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.

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