

Transportation

Solutions for rail, tunnel and traffic management



industrial
networking

►► Solutions for rail, tunnel and traffic management.

Roads and rails need to move more

than vehicles, passengers and freight – they need to move data. Safe and efficient operations demand that transportation networks serve as information infrastructures that provide a real-time view of safety, performance and traffic conditions to the people that are responsible for system management.

Today's most efficient road and rail systems rely on information, which is why highway authorities, railways, municipalities and other organizations around the world rely on Red Lion Controls to provide intelligence and communications wherever their operations reach.

Red Lion industrial networking and automation products are at the heart of many successful rail, subways, tunnel monitoring, traffic management and other transportation systems. Understanding market demands, we design and deliver industrial Ethernet switches, Wi-Fi devices and HMIs to meet the most stringent physical and information network requirements.

Red Lion helps to improve safety, efficiency and information flow in the transportation industry through applications for rail, tunnel and traffic management.

Rail Management

Create advanced telematics systems using Red Lion's industrial Ethernet switches and wireless devices to collect and manage data from passenger management systems, cameras, engine monitoring systems and more. Our switches support onboard control networks and provide real-time data to remote systems via IEEE 802.11a/b/g/n Wi-Fi connectivity. With multiple communication and network configuration options, our switches and Wi-Fi devices make it easy to access data produced in route or in station from anywhere. Our IP67-rated fault-tolerant switches offer up to 16 rugged M12 ports to connect multiple I/O devices. They can be remotely monitored and controlled for outstanding reliability.



The following Red Lion products, which are made in America per ARRA/2 CFR Part 176.160 requirements, are EN50155 standard compliant for rail rolling stock applications, ensuring consistent performance in areas such as emissions, shock, vibration and operating temperature:

- N-Tron 708M12 and 716M12 managed Ethernet switches
- N-Tron 105M12 and 108M12 unmanaged Ethernet switches
- N-Tron 702-W and 702M12-W Wi-Fi devices



► N-Tron 105 PoE Ethernet switch series



► N-Tron 702-W and 702M12-W Wi-Fi devices

Tunnel Management

Putting Ethernet infrastructure inside tunnels enables operators to use responsive monitoring and management capabilities to get more control. By collecting, managing and communicating data from video cameras, sensors and other devices, Red Lion industrial products deliver real-time data to the systems that rely on it for safety, traffic management, toll collection and motorist information displays. Our PoE switches are designed to transmit power along with data over an Ethernet network to PoE capable cameras.



The following products offer many connectivity options for supporting systems inside tunnels to sharing data in real time with monitoring and control systems miles away:

- ▶ Sixnet SLX-5EG PoE Ethernet switch series
- ▶ N-Tron 105 PoE Ethernet switch series
- ▶ N-Tron 702-W and 702M12-W Wi-Fi devices

Traffic Management

Add range and reliability to traffic controls with Red Lion. Our Ethernet switches with fiber transceivers have been installed inside traffic cabinets to support fiber optic data links spanning up to 80 km. The range is only surpassed by reliability, because the switches are rated to operate in temperatures ranging from -40°F to 185°F (-40°C to 85°C), offer IP40-rated protection, comply with NEMA TS-2 standards and have other features and options to ensure continual operation and accurate data communication.



With an MTBF of more than 1 million hours, the following Red Lion products help keep traffic and data flowing smoothly regardless of location:

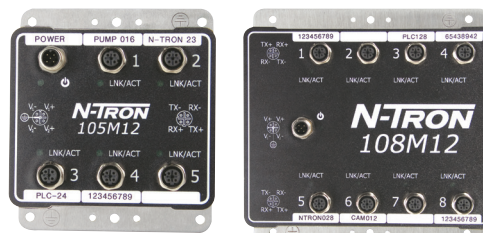
- ▶ N-Tron and Sixnet industrial Ethernet switches
- ▶ N-Tron 702-W and 702M12-W Wi-Fi devices

From supporting remote video cameras for security and traffic monitoring to diagnostic systems that instantly collect data as trains and cars roll past unattended checkpoints, transportation authorities rely on Red Lion to ensure information and operations keep moving. Regardless of application, our HMI operator interfaces seamlessly combine protocol conversion, data logging and web server capabilities with visualization functionality for PLCs, motor drives and other communications-capable devices. Our N-Tron NT24k managed industrial Gigabit Ethernet switches offer modular flexibility in rackmount and DIN rail configurations to deliver maximum fiber or copper connectivity.

Learn more at better.redlion.net
Call +31 (0) 33 4723-225 to speak to a representative.



- ▶ N-Tron 708M12 and 716M12 managed Ethernet switches



- ▶ N-Tron 105M12 and 108M12 unmanaged Ethernet switches



- ▶ Sixnet SLX-5EG PoE Ethernet switch

▶▶▶ 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
- ▶ Industrial TV Displays

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



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Connect. Monitor. Control.

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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.