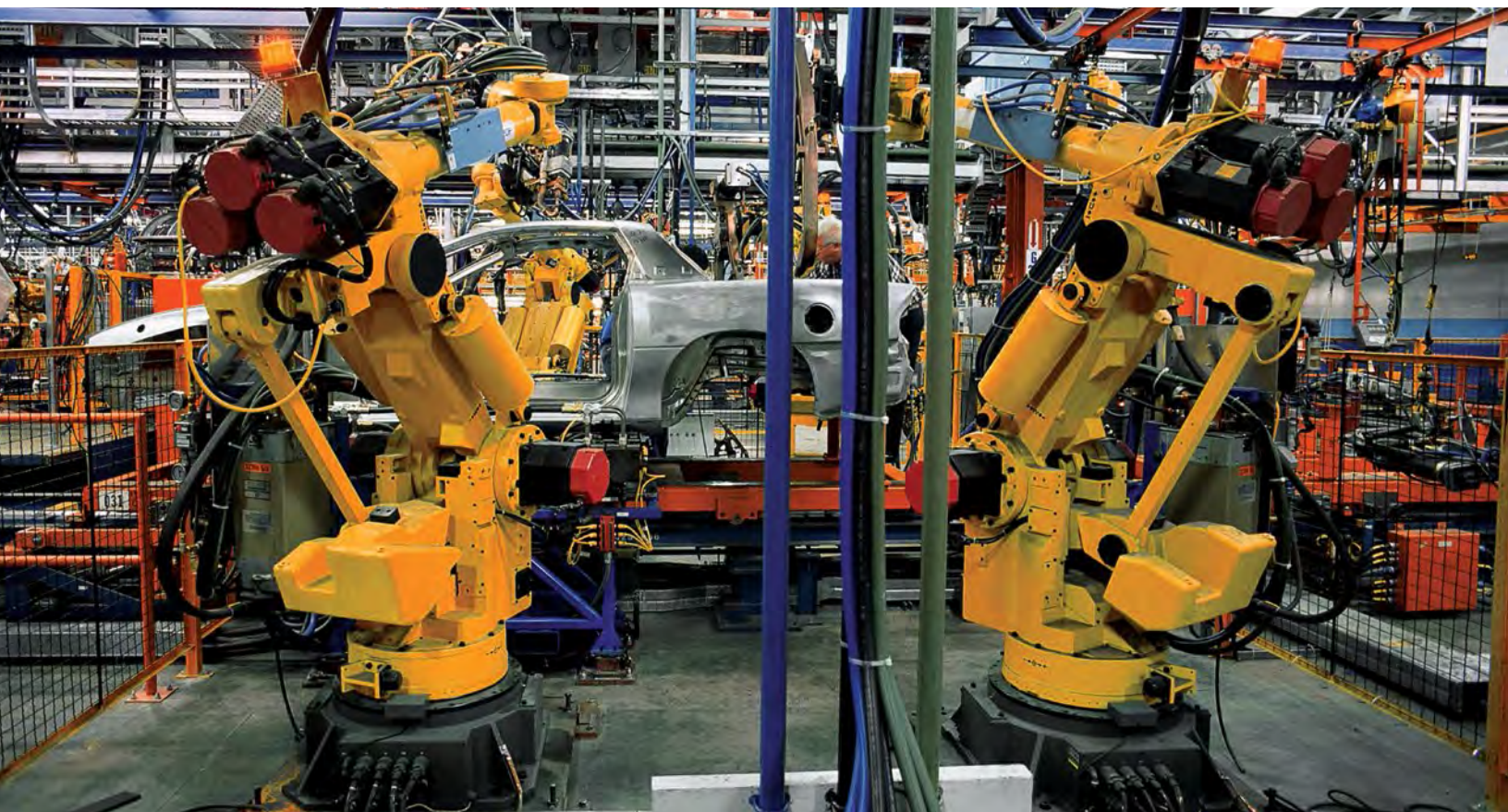


Industrial Networking Ethernet & Cellular M2M

Products, Topologies & Glossary of Terms



A Message from the President

"As we brought Red Lion, N-Tron and Sixnet together, we have become a better company, not just a bigger one."

Mike Granby
President, Red Lion Controls



Please allow me to start by saying thank you to the thousands of customers all over the world who place their trust in the products and reputation of Red Lion®, N-Tron® and Sixnet®. We appreciate your business and look forward to serving you at even higher levels in the future.

We have recently gone through some exciting changes, merging N-Tron and Sixnet together into a bigger, better Red Lion. Each company had its own legacy and its own strengths, and together we now offer an industry-leading portfolio of industrial automation and networking products. The long and trusted history of Red Lion and Sixnet in the automation market is a perfect complement to N-Tron's mastery of industrial networking, and to Sixnet's recent developments in the fields of cellular and machine-to-machine communications.

As we brought Red Lion, N-Tron and Sixnet together, we have become a better company, not just a bigger one. We recognize that you, the customer, is what matters, and that any merger only makes sense if it is able to put better solutions and products in your hands. We are dedicated to being your global experts in communication, monitoring and control for industrial automation and networking—and to doing so with the exceptional levels of service for which Red Lion is well known.

Over the last year, we have launched a bigger and better product portfolio. In addition to the panel meters, HMIs and other industrial automation products that Red Lion customers have always trusted, we now offer a broad selection of communication technologies, ranging from industrial Ethernet, through Wi-Fi to complete cellular M2M solutions.

The end result? A comprehensive set of products that enables you to connect, monitor and control anything. From one device to a thousand devices. Connecting serially, via Ethernet, or over high-speed wireless networks. Speaking one protocol, or hundreds of protocols. On a single machine, across your factory, or spanning multiple sites all over the globe.

Thank you again, and we look forward to further supporting you as we continue our journey as one unified Red Lion.

A handwritten signature in black ink, appearing to read "Mike Granby". The signature is stylized with a large, sweeping "M" and a long, thin tail stroke.

Table of Contents

Ethernet Switches

4	Unmanaged Ethernet Switches
6	Monitored Ethernet Switches
8	Managed Ethernet Switches
10	Advanced Managed Ethernet Switches
11	Power over Ethernet (PoE) Solutions
12	Ultra-Rugged IP67 Switches

Wireless & Wired Routers

13	Wi-Fi Radios
14	Wired and Cellular M2M Routers

Wireless Accessories

16

Communication Converters

19

Topologies

21

Glossary

30

Ethernet Switches

Red Lion's new N-Tron and Sixnet series industrial Ethernet switches are designed to meet diverse networking environments. Built-in redundancy coupled with robust reliability ensures infrastructures like yours stay up and running around the clock. Red Lion provides uptime anywhere so you can get the most out of your network investment.

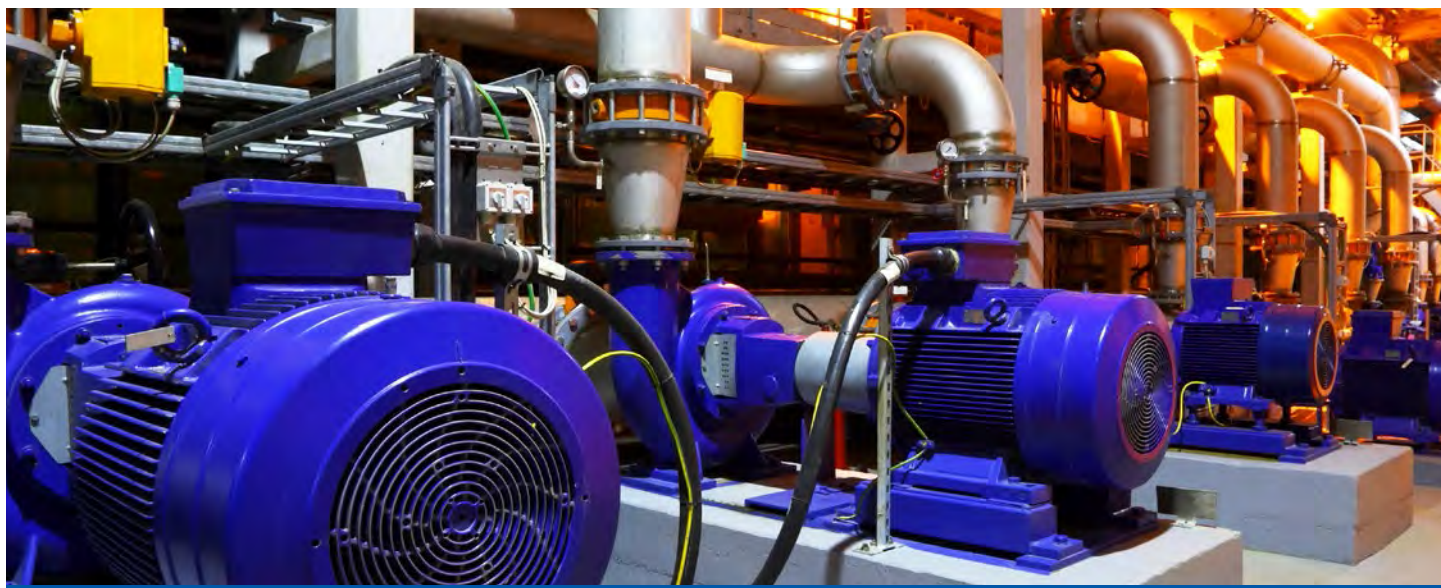
- > Unmanaged Ethernet Switches
- > Monitored Ethernet Switches
- > Managed Ethernet Switches
- > Advanced Managed Ethernet Switches
- > PoE Solutions
- > Ultra-Rugged IP67 Switches



►►► Unmanaged Ethernet Switches

Red Lion's unmanaged industrial Ethernet switches offer powerful network performance with plug-and-play functionality. With an endless range of port options, these unmanaged switches are set to tackle the demands of industrial data acquisition, control and Ethernet I/O applications.

- > Compact IEEE 802.3 Layer 2 industrial switches
- > Automatic speed, duplex and cable sensing
- > For use in mission-critical applications
- > Plug-and-play functionality



Sixnet Series SL & SLX Fast Ethernet (10/100)

- > Robust edge devices
- > Flexible deployment options
- > Industrial rated



MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER		
SL-2ES-2/3	Unmanaged	2	1	1	DIN rail – Lexan	-10° to 60° C
SL-5ES-1	Unmanaged	5	5	-	DIN rail – Lexan	-40° to 60° C
SL-5ES-2/3	Unmanaged	5	4	1	DIN rail – Lexan	-40° to 60° C
SL-6ES-4/5	Unmanaged	6	4	2	DIN rail – Lexan	-40° to 60° C
SL-8ES-1	Unmanaged	8	8	-	DIN rail – Lexan	-40° to 60° C
SL-9ES-2/3	Unmanaged	9	8	1	DIN rail – Lexan	-40° to 60° C
SLX-3ES-2/3	Unmanaged	3	2	1	DIN rail – Metal	-40° to 85° C
SLX-5ES-1	Unmanaged	5	5	-	DIN rail – Metal	-40° to 85° C
SLX-5ES-2/3	Unmanaged	5	4	1	DIN rail – Metal	-40° to 85° C
SLX-6ES-4/5	Unmanaged	6	4	2	DIN rail – Metal	-40° to 85° C
SLX-8ES-1	Unmanaged	8	8	-	DIN rail – Metal	-40° to 85° C
SLX-8ES-6/7	Unmanaged	8	5	3	DIN rail – Metal	-40° to 85° C
SLX-9ES-2/3	Unmanaged	9	8	1	DIN rail – Metal	-40° to 85° C

N-Tron Series 100, 300 & 500 Entry-Level Fast Ethernet (10/100)

- > Compact, rugged design
- > Easy installation
- > Industrial rated



MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER		
102MC	Unmanaged	2	1	1	DIN rail – Metal	-40° to 80° C
104TX	Unmanaged	4	4	-	DIN rail – Metal	-40° to 80° C
105TX	Unmanaged	5	5	-	DIN rail – Metal	-40° to 80° C
105TX-SL	Unmanaged	5	5	-	DIN rail – Metal	-40° to 85° C
105FX	Unmanaged	5	4	1	DIN rail – Metal	-40° to 70° C
106FX2	Unmanaged	6	4	2	DIN rail – Metal	-40° to 70° C
108TX	Unmanaged	8	8	-	DIN rail – Metal	-40° to 70° C
110FX2	Unmanaged	10	8	2	DIN rail – Metal	-40° to 80° C
111FX3	Unmanaged	11	8	3	DIN rail – Metal	-40° to 80° C
112FX4	Unmanaged	12	8	4	DIN rail – Metal	-40° to 80° C
114FX6	Unmanaged	14	8	6	DIN rail – Metal	-40° to 80° C
116TX	Unmanaged	16	16	-	DIN rail – Metal	-40° to 85° C
302MC	Unmanaged	2	1	1	DIN rail – Metal	-40° to 70° C
304TX	Unmanaged	4	4	-	DIN rail – Metal	-40° to 70° C
305FX	Unmanaged	5	4	1	DIN rail – Metal	-40° to 70° C
306TX	Unmanaged	6	6	-	DIN rail – Metal	-40° to 70° C
308TX	Unmanaged	8	8	-	DIN rail – Metal	-40° to 70° C
316TX	Unmanaged	16	16	-	DIN rail – Metal	-40° to 85° C
306FX2	Unmanaged	6	4	2	DIN rail – Metal	-40° to 70° C
308FX2	Unmanaged	8	6	2	DIN rail – Metal	-40° to 85° C
309FX	Unmanaged	9	8	1	DIN rail – Metal	-40° to 85° C
317FX	Unmanaged	17	16	1	DIN rail – Metal	-40° to 85° C
508TX	Unmanaged	8	8	-	DIN rail – Metal	-40° to 85° C
508FX2	Unmanaged	8	6	2	DIN rail – Metal	-40° to 85° C
509FX	Unmanaged	9	8	1	DIN rail – Metal	-40° to 85° C
516TX	Unmanaged	16	16	-	DIN rail – Metal	-40° to 85° C
517FX	Unmanaged	17	16	1	DIN rail – Metal	-40° to 85° C
524TX	Unmanaged	24	24	-	DIN rail – Metal	-40° to 85° C
526FX2	Unmanaged	26	24	2	DIN rail – Metal	-40° to 85° C

N-Tron Series 1000 & Sixnet SLX Unmanaged Gigabit (10/100/1000)

- > Plug-and-play unmanaged operation
- > Gigabit speed port options
- > Industrial rated



MODEL NUMBER	TYPE	TOTAL PORTS	GIGABIT ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100/1000	GIG FIBER		
1002MC	Unmanaged	2	1	1 SFP	DIN rail – Metal	-40° to 85° C
1003GX2	Unmanaged	3	1	2 SFP	DIN rail – Metal	-40° to 85° C
1005TX	Unmanaged	5	5	-	DIN rail – Metal	-40° to 85° C
SLX-3EG-1SFP	Unmanaged	3	2	1 SFP	DIN rail – Metal	-40° to 85° C
SLX-5EG-1	Unmanaged	5	5 (4 PoE)	-	DIN rail – Metal	-40° to 85° C
SLX-5EG-2SFP	Unmanaged	5	3 PoE	2 SFP	DIN rail – Metal	-40° to 85° C

▶▶▶ Monitored Ethernet Switches

Red Lion's monitored industrial Ethernet switches provide network performance monitoring with Modbus or N-View™ monitoring technology. These rugged, compact switches are built for mission critical standards and provide a very low cost network monitoring solution that can be integrated directly into any industrial control system.

- > Layer 2 unmanaged industrial switches
- > Network performance monitoring via Modbus or N-View software
- > Versatile networking solutions
- > Flexible deployment options
- > Hardened for the toughest applications



Sixnet Series SL & SLX Ring Fast Ethernet (10/100)

- > Fast, fault-tolerant network redundancy
- > Pre-configured for plug-and-play ring functionality
- > Industrial design
- > Real-time Modbus over Ethernet monitoring



MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER		
SL-6RS-1	Ring	6	6	-	DIN rail – Lexan	-40° to 60° C
SL-6RS-4/5	Ring	6	4	2	DIN rail – Lexan	-40° to 60° C
SLX-6RS-1	Ring	6	6	-	DIN rail – Metal	-40° to 85° C
SLX-6RS-4/5	Ring	6	4	2	DIN rail – Metal	-40° to 85° C

N-Tron Series 300 & 500 Monitored Fast Ethernet (10/100)

- > Offers high reliability
- > Plug-and-play operation
- > N-View monitoring provides real-time switch diagnostics



MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER		
302MC-N	Monitored	2	1	1	DIN rail – Metal	-40° to 70° C
304TX-N	Monitored	4	4	-	DIN rail – Metal	-40° to 70° C
306TX-N	Monitored	6	6	-	DIN rail – Metal	-40° to 70° C
308TX-N	Monitored	8	8	-	DIN rail – Metal	-40° to 70° C
305FX-N	Monitored	5	4	1	DIN rail – Metal	-40° to 70° C
306FX2-N	Monitored	6	4	2	DIN rail – Metal	-40° to 70° C
308FX2-N	Monitored	8	6	2	DIN rail – Metal	-40° to 85° C
309FX-N	Monitored	9	8	1	DIN rail – Metal	-40° to 85° C
316TX-N	Monitored	16	16	-	DIN rail – Metal	-40° to 85° C
317FX-N	Monitored	17	16	1	DIN rail – Metal	-40° to 85° C
508TX-N	Monitored	8	8	-	DIN rail – Metal	-40° to 85° C
516TX-N	Monitored	16	16	-	DIN rail – Metal	-40° to 85° C
508FX2-N	Monitored	8	6	2	DIN rail – Metal	-40° to 85° C
509FX-N	Monitored	9	8	1	DIN rail – Metal	-40° to 85° C
517FX-N	Monitored	17	16	1	DIN rail – Metal	-40° to 85° C
524TX-N	Monitored	24	24	-	Rackmount – Metal	-40° to 85° C
526FX2-N	Monitored	26	24	2	Rackmount – Metal	-40° to 85° C

N-Tron Series 500 Process Control Fast Ethernet (10/100)

- > Expanded Ethernet communications
- > N-View monitoring provides real-time switch diagnostics
- > Rugged industrial DIN rail and rackmount options



MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER		
508TX-A	Process Control	8	8	-	DIN rail – Metal	-40° to 85° C
516TX-A	Process Control	16	16	-	DIN rail – Metal	-40° to 85° C
508FX2-A	Process Control	8	6	2	DIN rail – Metal	-40° to 85° C
509FX-A	Process Control	9	8	1	DIN rail – Metal	-40° to 85° C
517FX-A	Process Control	17	16	1	DIN rail – Metal	-40° to 85° C
524TX-A	Process Control	24	24	-	Rackmount – Metal	-40° to 85° C
526FX2-A	Process Control	26	24	2	Rackmount – Metal	-40° to 85° C

►►► Managed Ethernet Switches

Red Lion's rugged, reliable managed industrial Ethernet switches support industry-standard applications. Our hardened switches are ideally suited for harsh industrial environments where real-time performance under extreme operating conditions is required. Built-in redundancy and network management ensure communications stay up and running while providing tools for monitoring and tracking.

- > Layer 2 managed industrial Ethernet switches
- > Rugged enclosure supports deployment in extreme environments
- > Powerful network management
- > Gigabit options



Sixnet Series SLX Managed Ethernet

- > Versatile networking solutions
- > Supports Modbus monitoring
- > Fast Ethernet and Gigabit port options
- > DIN rail or panel mounting options



MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		GIGABIT ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER	10/100/1000	GIG SFP		
SLX-5MS-1	Managed	5	5	-	-	-	DIN rail – Metal	-40° to 75° C
SLX-5MS-4/5	Managed	5	3	2	-	-	DIN rail – Metal	-40° to 75° C
SLX-5MS-MDM-1	Managed	5	5	-	-	-	DIN rail – Metal	-40° to 75° C
SLX-8MS-1	Managed	8	8	-	-	-	DIN rail – Metal	-40° to 75° C
SLX-8MS-4/5/8/9	Managed	8	4 or 6	2 or 4	-	-	DIN rail – Metal	-40° to 75° C
SLX-8MG-1 (All Gigabit)	Managed	8	-	Up to 4	8	Up to 4 Combo Ports	DIN rail – Metal	-40° to 75° C
SLX-10MG-1	Managed	10	7	Up to 2	3	Up to 2 Combo Ports	DIN rail – Metal	-40° to 75° C
SLX-16MS-1	Managed	16	16	-	-	-	DIN rail – Metal	-40° to 75° C
SLX-18MG-1	Managed	18	16	Up to 2	2	Up to 2 Combo Ports	DIN rail – Metal	-40° to 75° C

N-Tron Series 700 & 7000 Managed Ethernet

- > Outstanding management and monitoring features
- > Fast Ethernet and Gigabit port options
- > Ideally suited to use as a ring manager



MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		GIGABIT ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER	10/100/1000	GIG SFP		
708TX	Managed	8	8	-	-	-	DIN rail – Metal	-40° to 85° C
708FX2	Managed	8	6	2	-	-	DIN rail – Metal	-40° to 85° C
709FX *	Managed	9	8	1	-	-	DIN rail – Metal	-40° to 70° C
710FX2 *	Managed	10	8	2	-	-	DIN rail – Metal	-40° to 70° C
711FX3 *	Managed	11	8	3	-	-	DIN rail – Metal	-40° to 70° C
712FX4 *	Managed	12	8	4	-	-	DIN rail – Metal	-40° to 70° C
714FX6	Managed	14	8	6	-	-	DIN rail – Metal	-40° to 70° C
716TX	Managed	16	16	-	-	-	DIN rail – Metal	-40° to 70° C
716FX2	Managed	16	14	2	-	-	DIN rail – Metal	-40° to 70° C
7010TX	Managed	10	8	-	-	Up to 2	DIN rail – Metal	-40° to 70° C
7012FX2 *	Managed	12	8	2	-	Up to 2	DIN rail – Metal	-40° to 70° C
7018TX	Managed	18	16	-	-	Up to 2	DIN rail – Metal	-40° to 70° C
7018FX2	Managed	18	14	2	-	Up to 2	DIN rail – Metal	-40° to 70° C
7026TX	Managed	26	24	-	-	Up to 2	DIN rail – Metal	-40° to 80° C
7026TX-AC	Managed	26	24	-	-	Up to 2	DIN rail – Metal	-40° to 80° C
7506GX2 (All Gigabit)	Managed	6	-	-	4	Up to 2	Rackmount – Metal	-40° to 80° C
7900 (Modular)	Managed	26	Up to 24	Up to 16	-	Up to 2	Rackmount – Metal	-20° to 70° C

* KEMA approved IEC 61850-3 and IEEE 1613 HV models available

N-Tron Series NT24k Managed Ethernet

- > All-Gigabit Port modular design
- > Robust remote monitoring
- > Smart plug-and-play operation
- > DIN rail and rackmount options
- > Extreme environment specifications



MODEL NUMBER	TYPE	POWER OPTIONS	TOTAL PORTS	FAST ETHERNET		GIGABIT ETHERNET			OPERATING TEMP
				10/100	100 FIBER	10/100/1000	GIG SFP	GIG FIBER	
NT24k-DC1	Managed	Single 18-49VDC	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	-40° to 85° C
NT24k-DC2	Managed	Dual 18-49VDC	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	-40° to 85° C
NT24k-AC1	Managed	Single 90-264VAC/ 90-300VDC	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	-40° to 85° C
NT24k-AC2	Managed	Dual 90-264VAC/ 90-300VDC	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	-40° to 85° C
NT24k-AC1-DC1	Managed	Single 90-264VAC/ 90-300VDC & 18-49VDC	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	-40° to 85° C
NT24k-DR16-DC	Managed	Redundant 18-49VDC	Up to 16	Up to 16	Up to 16	Up to 16	Up to 16	Up to 16	-40° to 75° C
NT24k-DR16-AC	Managed	90-264VAC/ 90-300VDC	Up to 16	Up to 16	Up to 16	Up to 16	Up to 16	Up to 16	-40° to 75° C
NT24k-DR24-DC	Managed	Redundant 18-49VDC	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	-40° to 75° C
NT24k-DR24-AC	Managed	90-264VAC/ 90-300VDC	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	Up to 24	-40° to 75° C

▶▶▶ Advanced Managed Ethernet Switches

Red Lion's advanced managed industrial Ethernet switches offer powerful enterprise-class networking with security options that prevent unauthorized access and enable security policy enforcement. These powerful switches provide QoS traffic classification and sophisticated multicast controls, reducing traffic and ensuring real-time message delivery. The flexible industrial design is built to support the harshest environments.

- > Layer 2 and Layer 3 Ethernet switches
- > Rugged, enterprise-class networking features
- > Advanced security control



Sixnet Series EL Advanced Managed Ethernet

MODEL NUMBER	TYPE	POWER OPTIONS	TOTAL PORTS	FAST ETHERNET		GIGABIT ETHERNET		10 GIG	OPERATING TEMP
				10/100	100 FIBER	10/100/1000	GIG SFP		
EL212F-AC-V1 **	Managed	Single 90-300 VDC or 85-264 VAC	12	Up to 8 SFP	Up to 8 SFP	-	Up to 4 SFP (2 Combo)	-	-40° to 85° C
EL212F-DC-V1 **	Managed	Dual Redundant 24/48 VDC	12	Up to 8 SFP	Up to 8 SFP	-	Up to 4 SFP (2 Combo)	-	-40° to 85° C
EL228-AO-1 *	Managed	Single 85-264 VAC or 90-300 VDC	28	Up to 24 SFP	Up to 24 SFP	4	Up to 2 SFP (2 Combo)	-	-40° to 85° C
EL228-AA-1 *	Managed	Dual 85-264 VAC or 90-300 VDC	28	Up to 24 SFP	Up to 24 SFP	4	Up to 2 SFP (2 Combo)	-	-40° to 85° C
EL228-DO-1 *	Managed	Single 18-75 VDC	28	Up to 24 SFP	Up to 24 SFP	4	Up to 2 SFP (2 Combo)	-	-40° to 85° C
EL228-DD-1 *	Managed	Dual 18-75 VDC	28	Up to 24 SFP	Up to 24 SFP	4	Up to 2 SFP (2 Combo)	-	-40° to 85° C
EL326-DO-1 *	Managed – Layer 3	Single 18-59 VDC	26	-	-	24	Up to 4 SFP (4 Combo)	Up to 2	-35° to 75° C
EL326-DD-1 *	Managed – Layer 3	Dual 18-59 VDC	26	-	-	24	Up to 4 SFP (4 Combo)	Up to 2	-35° to 75° C
EL326-AO-1 *	Managed – Layer 3	Single 85-264 VAC or 90-300 VDC	26	-	-	24	Up to 4 SFP (4 Combo)	Up to 2	-35° to 80° C
EL326-AA-1 *	Managed – Layer 3	Dual 85-264 VAC or 90-300 VDC	26	-	-	24	Up to 4 SFP (4 Combo)	Up to 2	-35° to 80° C

* Rackmount - Metal; ** DIN rail - Metal

▶▶▶ Power over Ethernet (PoE)

Red Lion's industrial PoE solutions are designed to transmit power and data over an Ethernet network. PoE networks eliminate the need for running separate wires for power and are ideal in installations with devices such as IP surveillance cameras, wireless access points, IP phones and other PoE-enabled devices. Our industrial PoE devices offer a compact, rugged design for harsh, remote locations.

- > Compact, rugged design
- > Switches, injectors and splitters
- > Transmit power and data over Ethernet networks



Sixnet Series PoE Switches, Injectors and Splitters

MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		GIGABIT ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER	10/100/1000	GIG SFP		
EB-5ES-PSE-1	Unmanaged	5	1 (4 PoE)	-	-	-	DIN rail – Lexan	-40° to 75° C
SLX-5EG-1	Unmanaged	5	-	-	5 (4 PoE)	-	DIN rail – Metal	-40° to 85° C
SLX-5EG-2SFP	Unmanaged	5	-	-	3 PoE	2 SFP	DIN rail – Metal	-40° to 85° C
EB-PSE-24V-1 (PoE Midspan Injector)	Unmanaged	2	1 (1 PoE)	-	-	-	DIN rail – Lexan	-40° to 75° C
EB-PSE-48V-2 (PoE Midspan Injector)	Unmanaged	4	2 (2 PoE)	-	-	-	DIN rail – Lexan	-40° to 75° C
EB-PD-24V-1 (PoE Splitter)	Unmanaged	2	2 (1 PoE)	-	-	-	DIN rail – Lexan	-40° to 75° C

N-Tron Series 100 & 1000 PoE Switches, Injectors and Splitters

MODEL NUMBER	TYPE	TOTAL PORTS	FAST ETHERNET		GIGABIT ETHERNET		MOUNTING & CASE	OPERATING TEMP
			10/100	100 FIBER	10/100/1000	GIG SFP		
105TX-POE	Unmanaged	5	5 (4 PoE)	-	-	-	DIN rail – Metal	-40° to 85° C
100-POE4 (PoE Midspan Injector)	Unmanaged	8	4 (4 PoE)	-	-	-	DIN rail – Metal	-40° to 85° C
105FX-POE	Unmanaged	5	4 PoE	1	-	-	DIN rail – Metal	-40° to 85° C
100-POE-SPL (PoE Splitter)	Unmanaged	2	2 (1 PoE)	-	-	-	DIN rail – Metal	-40° to 85° C
1000-POE+* (PoE Midspan Injector)	Unmanaged	2	-	-	1 (1 PoE+)	-	DIN rail – Metal	-40° to 85° C

* IEEE802.3at Compliant

▶▶▶ Ultra-Rugged IP67 Switches

Red Lion's Sixnet series ultra-rugged IP67 switches are built to military standards, bringing advanced networking capabilities to the field. Thousands of tanks, armored personnel carriers, unattended vehicles (UAVs), weapons control systems, naval vessels, helicopters, airplanes, drones and other assets that are deployed today depend on our MIL switches.

- > Ultra-rugged construction
- > Superior performance in critical applications
- > MIL standard compliant



Ultra-Rugged IP67 Switches

MODEL NUMBER	TYPE	POWER OPTIONS	TOTAL PORTS	FAST ETHERNET		GIGABIT ETHERNET		INGRESS PROTECT	OPERATING TEMP
				10/100	100 FIBER	GIGABIT**	10 GIG FIBER*		
MIL312	L3 Managed	18-36 VDC	12	-	-	12	-	IP67	-40° to 75° C
MIL314	L3 Managed	18-36 VDC	14	-	-	12	2	IP67	-40° to 75° C
MIL316	L3 Managed	18-36 VDC	16	-	-	16	-	IP67	-40° to 75° C
MIL318	L3 Managed	18-36 VDC	18	-	-	16	2	IP67	-40° to 75° C
ET-8MS-MIL	L2 Managed	10-30 VDC	8	8	-	-	-	IP67	-40° to 75° C
ET-8MG-MIL	L2 Managed	18-30 VDC	8	8	-	-	-	IP67	-40° to 75° C
ET-8ES-MIL	Unmanaged	10-30 VDC	8	8	-	-	-	IP67	-40° to 75° C
ET-8EG-MIL	Unmanaged	18-30 VDC	8	-	-	8	-	IP67	-40° to 75° C

IP67 Industrial Switches

Red Lion's IP67 industrial Ethernet switches provide reliable network performance. These rugged and compact Ethernet switches provide reliable and cost-effective networking solutions for the toughest industrial mission critical applications.

- > Rugged Ethernet switches
- > Versatile unmanaged and managed solutions
- > Hardened for the toughest applications

MODEL NUMBER	TYPE	POWER OPTIONS	TOTAL PORTS	FAST ETHERNET		GIGABIT ETHERNET		INGRESS PROTECT	OPERATING TEMP
				10/100	100 FIBER	GIGABIT**	10 GIG FIBER*		
716M12	L2 Managed	10-30 VDC	16	16	-	-	-	IP67	-40° to 80° C
716M12-HV	L2 Managed	40-160 VDC	16	16	-	-	-	IP67	-40° to 80° C
708M12	L2 Managed	10-30 VDC	8	8	-	-	-	IP67	-40° to 80° C
708M12-HV	L2 Managed	40-160 VDC	8	8	-	-	-	IP67	-40° to 80° C
105M12	Unmanaged	10-30 VDC	5	5	-	-	-	IP67	-40° to 80° C
108M12	Unmanaged	10-30 VDC	8	8	-	-	-	IP67	-40° to 70° C
108M12-HV	Unmanaged	10-60 VDC	8	8	-	-	-	IP67	-40° to 70° C
ET-5ES-IP67	Unmanaged	10-30 VDC	5	5	-	-	-	IP67	-40° to 75° C
EB-GT-8ES-1EP	Unmanaged	16-40 VDC	8	8	-	-	-	IP67	-40° to 60° C
ET-5RS-IP67	Ring	10-30 VDC	5	5	-	-	-	IP67	-40° to 75° C

* Copper and Fiber options available; ** Multimode and Singlemode fiber options available