

IndustrialPro® SN 6000 Cellular Routers

Sixnet® Networking Series



▶▶▶ Rugged High-Speed Ethernet & Serial Routers

Red Lion's Sixnet series IndustrialPro® SN 6000 cellular routers with multi-carrier 4G LTE support, provide rugged, reliable communication for monitoring and controlling remote assets and processes in extreme conditions.

IndustrialPro SN 6000 industrial cellular routers offer secure and reliable wireless communication to remote assets via software selectable multi-carrier 4G LTE connectivity with fallback to 3G networks. Featuring a web-based event engine that can trigger alarms and send SMS text messages based on real-time operational data, IndustrialPro SN routers can perform reliable local control and alert personnel of critical events. With built-in Ethernet and serial, IndustrialPro SN routers easily integrate with existing equipment enabling remote monitoring and control for M2M applications in industries including oil and gas, water/wastewater, utility, transportation and mining.



APPLICATIONS

- > Mining
- > Oil & Gas
- > Transportation
- > Utility
- > Water/Wastewater

PRODUCT HIGHLIGHTS

- > Multi-Carrier 4G LTE Connectivity
- > Multiple Communication Ports
- > Routing Capabilities Provide Secure, Reliable Communication
- > Event Engine can Trigger Alarms and Send SMS Messages
- > Optional PoE (Powered Device) Support

FEATURES & BENEFITS

- > Multi-Carrier 4G LTE Connectivity
 - Select the best carrier during or post deployment via software configuration
 - Reduces inventory requirements with single hardware solution
- > Multiple Communication Ports
 - One RS-232 serial port, and up to five Ethernet ports provide seamless connectivity to remote devices
- > Rugged, Industrial Design
 - Reliable operation in extreme environments
 - -40° to 75°C operating temperature*
 - DIN-rail and panel mounting options
- > Out-Of Band Management (OOBM)
 - Secure remote CLI access via serial port
 - Pre-loaded with many console port configurations
- > Secure Ethernet Connectivity
 - Routing capabilities for reliable communication
 - Stateful firewall, SSL, GRE and VPN services reduce the risk of unwanted access
- > Advanced Event Engine Functionality
 - Easily configure control engine via drop-down menus
 - Trigger alarms and send SMS messages based on operational data

industrial
networking



▶▶▶ IndustrialPro SN 6000 Multi-Carrier Specifications

WIRELESS INTERFACE

AT&T LTE with fallback to HSPA+
Bell Mobility LTE with fallback to HSPA+
Generic LTE with fallback to HSPA+
Rogers LTE with fallback to HSPA+
TELUS LTE with fallback to HSPA+
Verizon LTE with fallback to EVDO

PROGRAMMABLE PLATFORM

Configurable Events: up to 99 events can be triggered by over 200 system variable which in turn can send text messages
Software Development Kit (SDK)
C/C++/Perl

SYSTEM PERFORMANCE

32-bit ARM9 400 MHz CPU
512 MB NAND
128 MB RAM

TUNNELING

IPsec, GRE, OpenVPN

Routing Protocols

OSPF, BGP, RIP

Clustering

VRRP

IP

NAT, Port Forwarding, Dynamic DNS, DHCP
Stateful Inspection Firewall, IP Transparency

Connectors

Ethernet: One (1) or five (5) 10/100Base-T RJ-45 ports
Serial: One (1) RS-232 (DB9) 115,200bps
USB: One (1) USB 2.0 (mini)
Antennas: Two (2) SMA connectors (antenna, diversity)

POWER INPUT

Input Voltage: 8-30 VDC (12 or 24 VDC nominal)
Standby Power: 1.4W - 3.3W (typical)
Transmitting:
690x: 2.6W – 6.9W
6921: 4.3W – 8.7W
PoE Operation (EB models only)
IEEE 802.3af compliant
Powered Device (PD)
PoE Input: 37-57 VDC (48 VDC nominal)
Heat dissipation: 30 BTU/hour max

MECHANICAL

SN-6x0x
Dimensions: 120 x 96 x 32 mm (4.7" x 3.77" x 1.25")
Weight: 453g (1 lb)
SN-6x21
Dimensions: 120 x 96 x 51 mm (4.7" x 3.77" x 2.0")
Weight: 500g (1.1 lbs)

ENVIRONMENTAL

Operating Temperature: -40° to +75°C*
Shock: IEC60068-2-27
Vibration: IEC60068-2-6
Humidity: 5 to 95% non-condensing
Ingress: IP30 protection

CERTIFICATION

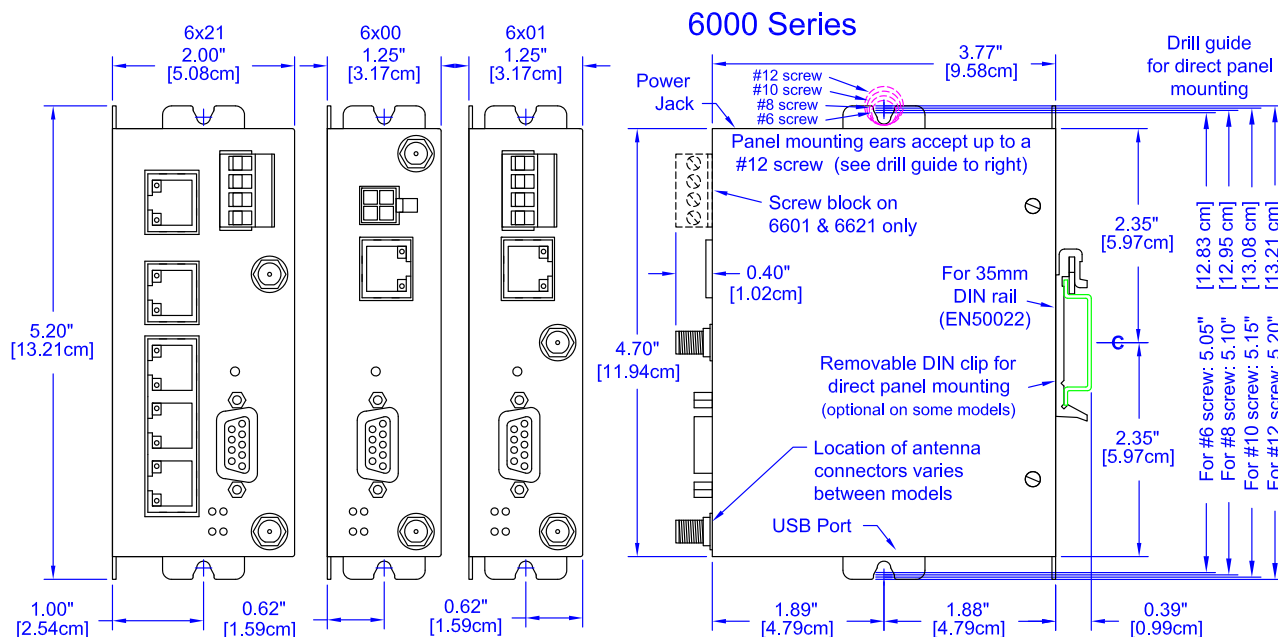
EMI/EMC:
Emissions: FCC, Part 15 and Industry Canada, ICES-003; Class A;
EN55022, IEC61000-6-4
Immunity: IEC61000-6-2 (EN61000-4-2,3,4,5,6,8)
Hazardous Locations: Class I, Div. 2, Groups A, B, C, D, ISA 12.12.01
Electrical safety: UL508/CSA22.2/14 (CUL); IEC61010-1
Carrier Specific Approvals
RoHS compliant

WARRANTY

3 years on design and manufacturing defects

* See Hardware Manual for thermal considerations.

DIMENSIONS in inches (mm)



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ORDER GUIDE

PART NUMBER	PRODUCT LINE	SERIAL RS-232	ETHERNET 10/100	CELLULAR	POWER CONNECTOR	DEFAULT CARRIERS**
SN-6900-(Carrier Code)	SN	1	1	4G LTE	Molex end connector cable	(AT) AT&T; (VZ) Verizon; (AM) Generic; (EU) Europe/Asia; (JP) Japan
SN-6901-(Carrier Code)	SN	1	1	4G LTE	DC powered	
SN-6901EB-(Carrier Code)	SN	1	1	4G LTE	PoE (Power Over Ethernet)	
SN-6921-(Carrier Code)	SN	1	5	4G LTE	DC powered	

* AM (Generic) model includes Bell Mobility, TELUS and Rogers carriers. EU (Europe and Asia) model is not supported in North America. JP (Japan) model only supported in Japan.

** Carrier that is pre-configured on device. Carrier can be selected via software.

FREQUENCY SPECIFICATIONS

North America Models (AT/VZ/AM)

TECHNOLOGY	BANDS	FREQUENCIES	ANTENNA CONFIGURATION
LTE	2, 4, 5, 13, 17, 25	700/850/1900 & 1700(AWS)/2100(AWS) MHz	MIMO Required
Fallback CDMA/EVDO	BC0, BC1, BC10	800/1900 MHz	Diversity Support
Fallback HSPA+	1, 2, 4, 5, 8	850/900/1900/2100 & 1700(AWS)/2100(AWS) MHz	Diversity Support
Fallback GSM/GPRS/EDGE	-	850/900/1800/1900 MHz	-

Rest of World Model (EU)

TECHNOLOGY	BANDS	FREQUENCIES	ANTENNA CONFIGURATION
LTE	1, 3, 7, 8, 20	800/900/1800/2100/2600 MHz	MIMO Required
Fallback HSPA+	1, 2, 5, 8	850/900/1900/2100 MHz	Diversity Support
Fallback GSM/GPRS/EDGE	-	850/900/1800/1900 MHz	-

Japanese Model (JP)

TECHNOLOGY	BANDS	FREQUENCIES	ANTENNA CONFIGURATION
LTE	1, 19, 21	850/1500/1900/2100 MHz	MIMO Required
Fallback HSPA+	1, 5, 6, 19	800/850/2100 MHz	Diversity Support
Fallback GSM/GPRS/EDGE	-	850/900/1800/1900 MHz	-

All specifications are subject to change. Consult the company website for more information.



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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 automation, Ethernet and cellular M2M 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. Red Lion is part of Spectris plc, the productivity-enhancing instrumentation and controls company. For more information, please visit www.redlion.net.

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