# IndustrialPro® SN 6000 Cellular Routers

Sixnet® Networking Series



# **Rugged Ethernet & Serial Cellular Routers**

Red Lion's Sixnet series IndustrialPro SN 6000 cellular routers with 3G network 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 reliable 3G connectivity with network fallback. Featuring a web-based event engine that can trigger alarms or 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**

- > Reliable 3G Cellular 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**

- > 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











## ▶▶▶ IndustrialPro SN 6000 3G Specifications

## **WIRELESS INTERFACE**

AT&T HSPA+ with fallback to GSM
Bell Mobility HSPA+ with fallback to GSM
Generic HSPA+ with fallback to GSM
Manitoba HSPA+ with fallback to GSM
Rogers HSPA+ with fallback to GSM
Sprint EVDO with fallback to CDMA
TELUS HSPA+ with fallback to GSM
Verizon EVDO with fallback to GSM

## **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** 

## ΙP

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: 660x: 2.0W - 2.9W 6621: 3.6W - 4.5W 680x: 2.6W - 5.0W

6821: 4.2W - 6.6W 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-6x2

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

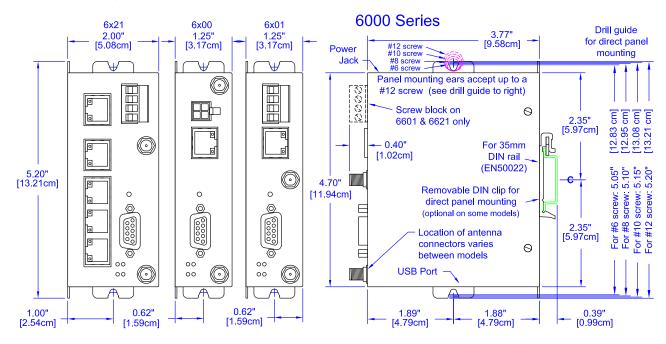
RoHS compliant

## WARRANTY

3 years on design and manufacturing defects

\* See Hardware Manual for thermal considerations.

## **DIMENSIONS** in inches (mm)



# ▶▶▶ IndustrialPro SN 6000 3G Specifications

## **ORDER GUIDE**

PART NUMBER	PRODUCT LINE	SERIAL RS-232	ETHERNET 10/100	CELLULAR	POWER CONNECTOR	DEFAULT CARRIERS
SN-6600-(Carrier Code)	SN	1	1	3G/CDMA	Molex end connector cable	(SP) Sprint; (VZ) Verizon
SN-6600-(Carrier Code)-AC	SN	1	1	3G/CDMA	AC adapter	
SN-6600-(Carrier Code)-MX	SN	1	1	3G/CDMA	AC adapter/Molex end connector	
SN-6601-(Carrier Code)	SN	1	1	3G/CDMA	DC powered	
SN-6601-(Carrier Code)-AC	SN	1	1	3G/CDMA	AC adapter	
SN-6601EB-(Carrier Code)	SN	1	1	3G/CDMA	PoE (Power Over Ethernet)	
SN-6621-(Carrier Code)	SN	1	5	3G/CDMA	DC powered	
SN-6621-(Carrier Code)-AC	SN	1	5	3G/CDMA	AC adapter	
SN-6800-(Carrier Code)	SN	1	1	3G/GSM	Molex end connector cable	
SN-6800-(Carrier Code)-AC	SN	1	1	3G/GSM	AC adapter	(AT) AT&T (BM) Bell Mobility; (GE) Generic*; (MTS) Manitoba; (RO) Rogers; (TE) TELUS
SN-6800-(Carrier Code)-MX	SN	1	1	3G/GSM	AC adapter/Molex end connector	
SN-6801-(Carrier Code)	SN	1	1	3G/GSM	DC powered	
SN-6801-(Carrier Code)-AC	SN	1	1	3G/GSM	AC adapter	
SN-6801EB-(Carrier Code)	SN	1	1	3G/GSM	PoE (Power Over Ethernet)	
SN-6821-(Carrier Code)	SN	1	5	3G/GSM	DC powered	
SN-6821-(Carrier Code)-AC	SN	1	5	3G/GSM	AC adapter	

<sup>\*</sup> See Band/Frequency table for compatability

## **FREQUENCY SPECIFICATIONS**

PART NUMBER	BANDS/FREQUENCIES		
SN-66XX-SP/VZ	EVDO: 800/1900 MHz CDMA: 800/1900 MHz		
SN-68XX-AT/BM/GE/MTS/RO/TE	HSPA: Bands 1, 2, 5, 6, 8; Frequencies 800/850/900/1900/2100 MHz		



www.redlion.net

**Americas** sales@redlion.net

Asia-Pacific asia@redlion.net

Europe Middle East Africa europe@redlion.net

+1 (717) 767-6511

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.

ADLD0428 062915 ©2015 Red Lion Controls, Inc. All rights reserved. Red Lion, the Red Lion logo, N-Tron and Sixnet are registered trademarks of Red Lion Controls, Inc. All other company and product names are trademarks of their respective owners.