

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

VRPP

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:
 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-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

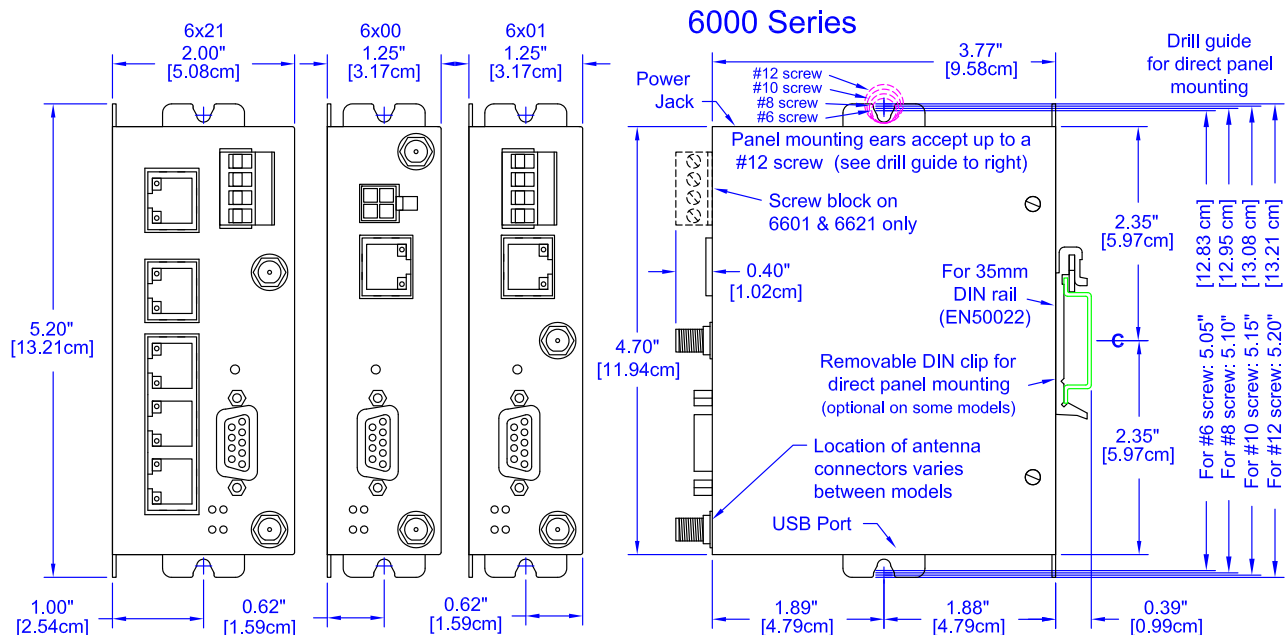
EMI/EMC:
 Emissions: FCC, Part 15 and Industry Canada, ICES-003; Class A;
 EN55022, IEC61000-6-4
 Immunity: IEC61000-6-2 (EN61000-4-2,3,4,5,6,8)
 Hazardous Locations: Class I, Div. 2, Groups A, B, C, D, ISA 12.12.01
 Electrical safety: UL508/CSA22.2/14 (CUL); IEC61010-1
 Carrier Specific Approvals
 RoHS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

WARRANTY

3 years on design and manufacturing defects

* See Hardware Manual for thermal considerations.

DIMENSIONS in inches (mm)



▶▶▶ 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 | |
| SN-6800-(Carrier Code)-MX | SN | 1 | 1 | 3G/GSM | AC adapter/Molex end connector | (AT) AT&T; (BM) Bell Mobility; (GE) Generic*; (MTS) Manitoba; (RO) Rogers; (TE) TELUS |
| 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 | |

* See Band/Frequency table for compatibility

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 GSM: 850/900/1800/1900 MHz |



www.redlion.net

Connect. Monitor. Control.

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.