

UNPACKING INSTRUCTIONS

- 1 Unpack the Red Lion unit and verify the following components are enclosed for the IndustrialPro™ Router (Figure A).

Figure A: Package Contents SN/RAM-6XXX:


SN-/RAM 6X00 AC adapter with either barrel connector (AC) or Molex (MX), or 15ft Molex cable (DC) can be ordered in a kit (ie. SN -6600-XX-AC, -DC, or -MX) or ordered separately. (SN -6400 not available).



SN/RAM-6X01-4: pin plug with screw terminals to connect to an external DC power source. Available with AC adapter with barrel connector (AC).



SN/RAM-6X21-4: pin plug with screw terminals to connect to an external DC power source. Available with AC adapter with barrel connector (AC).

Antennas sold separately

- 2 Contact your cellular provider (carrier) and request a data account. For CDMA models (SN/RAM-66XX), give the ESN number of the router to the carrier to activate the data account. For GSM, HSPA and LTE models (SN/RAM-64XX, SN/RAM-68XX & SN/RAM-67xx) the carrier should provide you with a SIM card to insert into the router, along with the APN, username, & password for data connectivity.
- 3 Insert the SIM card (GSM, HSPA and LTE models only):
 - Locate the SIM slot on the right side of the modem
 - Insert the card with its cut side facing forward and on the left.
 - Using the tip of a pen, push it in until it clicks.
- 4 An antenna with an SMA connector should be connected to the router. This antenna should meet the specifications listed below. Also see Hardware Guide for more information on antennas.
 - 3G: Dual-band 800 & 1900 MHz
 - LTE: 700MHz
 - Nominal 50 ohm impedance
 - Voltage Standing Wave Ratio (VSWR) less than 2.5:1
- 5 There are 4 methods to provide power to the router:
 - 4-pin Molex connector – available on SN-6X00
 - 4-pin screw terminal – available on SN-6XX1/EB
 - Side mounted 2.5mm barrel connector – all models
 - Power-over-Ethernet – available on SN-6X01EB

The modem requires a power source between 8 and 30 VDC to operate:

Label	Color	Description
GND	Black	Ground
PWR+	Red	Power 8 to 30 VDC (500mA@12VDC)
IN	White	Future feature – not supported
OUT	Green	Future feature – not supported

- 6 Please allow 2-4 minutes for the unit to recognize the cellular data card and connect to the cellular network. When this has occurred the Signal Strength LEDs should light up (see table on back). If signal strength is not lit or flashes slowly, please refer to the User Manual at www.sixnet.com.

- 7 Connect to the Ethernet RJ45 port for network connectivity.

ACCESSING THE GRAPHICAL USER INTERFACE (GUI)

- 1 **Connect PC to the IndustrialPro™ Router**

Connect a CAT-5 Ethernet cable between the local PC and the unit's Ethernet port. Verify the link LED is lit.

- 2 **Setup PC IP Address**

For assistance with configuring your PC, see the appropriate Microsoft Windows support webpage listed at: <http://support.microsoft.com>.

PC to Ethernet Interfaces

Select "Use the following IP address" and fill in the blank fields with the information below:

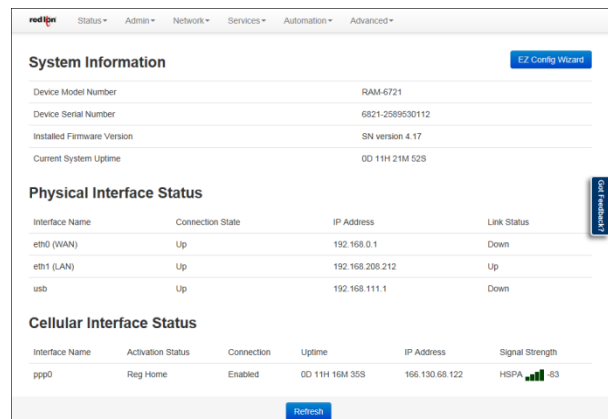
	Ethernet 0
IP address	192.168.0.2
Subnet mask	255.255.255.0
Default gateway	192.168.0.1
Preferred DNS	192.168.0.1

- 3 **Access Graphical User Interface**

Open a web browser & enter the following in the address bar: <http://192.168.0.1:10000/>

LOGIN INSTRUCTIONS

- For User Name enter:
admin (lowercase letters)
 - For Password enter:
last six digits of the unit serial number (lowercase)
- Upon successfully logging in you will see the following screen.

Figure B: GUI


You are now connected to the Management GUI. If you should see anything other than the GUI screen shown, please refer to the Software User Guide located at: www.sixnet.com.

VERIFY CELLULAR CONNECTIVITY

Confirm the following on the GUI (see *Figure B*) after logged into the unit:

Activation: “Succeeded” or “Unavailable”

Connection: “Enabled”

IP Address: Populated with a network IP address

Signal Strength has GREEN bars populated. If you see any RED bars represented under Signal Strength, please consult the User Manual. Ethernet (Eth0) should show “Up” and show the network issued IP address.

NOTE: For SIM based models, if “Unavailable” and connection “Unknown” browse to the **Network Tab → Cellular Connection → Configuration** and input the APN in the field labeled “Enter APN”, input username and password in appropriate fields if supplied by your cellular carrier.

If you are unable to confirm this status on the Main page, please refer to the SN 6000 User Guide for troubleshooting steps at www.sixnet.com.

For more information on setting up Modbus features, please refer to the Software User Guide available at www.sixnet.com.

If you are able to confirm this status, then your unit is successfully connected to the cellular network.

RED LION WIRELESS TECHNICAL SUPPORT

If you have followed all of the instructions up to this point, have verified with your carrier that you are not having an authentication problem, have verified that you have adequate cellular signal reception, and your unit is still not communicating, then it is time to contact Red Lion Wireless Technical Support at support@redlion.net or 1-877-432-9908 and we will be happy to assist you in getting your unit operational.

HARDWARE STATUS LEDS

LED	State	Description
Power	ON	Power is applied to the router
Signal	ON	Excellent signal strength
	FLASH	Flashes faster as signal is stronger
	OFF	Very weak or no signal (less than -100dBm)
WAN	OFF	Cellular connection is not established
	ON	Cellular connection is established – no network data activity
	FLASH	Cellular connection is established – with network data activity
RS232	ON	Link established with serial device but no data activity
	FLASH	Data transmitted/received with attached serial device
Ethernet	ON	Link established with Ethernet device
	FLASH	Data transmitted/received

INSTALLATION AND HAZARDOUS AREA WARNINGS

All power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods are in accordance with the authority having jurisdiction. This equipment is suitable for Use in Class 1, Division 2, Groups A, B, C and D or Non-Hazardous Locations Only.

WARNING – EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

WARNING – EXPLOSION HAZARD – WHEN IN HAZARDOUS LOCATIONS, DISCONNECT POWER BEFORE REPLACING OR WIRING UNITS.

WARNING – EXPLOSION HAZARD – DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.

AVERTISSEMENTS POUR INSTALLATION ET ENDROITS DANGEREUX

Tout pouvoir, le câblage d'entrée et de sortie (I/O) doivent être conformes aux méthodes de câblage de Classe I, Division 2 et conformément à l'autorité compétente. Cet équipement est adapté pour une utilisation en Classe1, Division 2, Groupes A, B, C et D ou endroits non-dangereux seulement

AVERTISSEMENT – RISQUE D'EXPLOSION – LA SUBSTITUTION DE TOUT COMPOSANT PEUT NUIRE À LA CONFORMITÉ DE CLASSE I, DIVISION 2.

AVERTISSEMENT – RISQUE D'EXPLOSION – LORSQUE DANS DES ENDROITS DANGEREUX, DÉBRANCHEZ LE CORDON D'ALIMENTATION AVANT DE REMPLACER OU DE BRANCHER LES MODULES.

AVERTISSEMENT – RISQUE D'AVERTISSEMENT – NE DÉBRANCHEZ PAS L'ÉQUIPEMENT PENDANT QUE LE CIRCUIT EST DIRECT OU À MOINS QUE L'ENVIRONNEMENT SOIT CONNU POUR ÊTRE LIBRE DE CONCENTRATIONS INFLAMMABLES.

FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy; and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference to radio communications, in which case the user will be required to correct the interference at their own expense. Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Information to the user:

If this equipment causes interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: In order to meet FCC emissions limits, this equipment must be used only with cables that comply with IEEE 802.3. If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems".