

**OVERVIEW**

The MobilityPro™ BT-5600 series modems are rugged 3G wireless modems built to provide simple and reliable communication over the EVDO Rev. A cellular data network.

This guide covers initial configuration for the BT-5600 & BT-5630.


**FEATURES**

- CDMA EVDO Rev. A with fallback to Rev. 0 a, 1XRTT and IS95
- Diversity antenna
- Ethernet, Serial, USB and WiFi (5630 model only)
- Reliable Always-on cellular link
- Rugged industrial design
- Remote diagnostics, configuration and updates
- 3 Analog inputs, 4 Digital inputs, 3 Digital outputs
- IPsec VPN multiple tunnel and 3DES|AES up to 256-bit encryption

**LED INDICATORS**

LED	State	Description
<b>Power</b>	ON	Power is applied to the router
	ON	Excellent signal strength
<b>Signal</b>	FLASH	Flashes faster as signal is stronger
	OFF	Very weak or no signal (less than -100dBm)
<b>WAN</b>	ON	Wireless link established, but no data activity
	FLASH	Data transmitted/received on wireless network
<b>RS232</b>	ON	Link established with serial device but no data activity
	FLASH	Data transmitted/received with attached serial device
<b>GPS</b>	ON	Position fix available
	OFF	No position fix available
<b>Ethernet Link</b>	ON	Link established with Ethernet device
<b>Ethernet Activity</b>	FLASH	Data transmitted/received with attached Ethernet device

**ADDITIONAL INFORMATION**

Visit our support page at [www.redlion.net](http://www.redlion.net) to access the modem's documentation, as well as configuration help, troubleshooting and firmware & software updates. Or contact Technical Support at 1-877-432-9908 or [support@redlion.net](mailto:support@redlion.net).

**POWER**

The modem has a 4-pin Molex connector for power input and requires a power source between 8 and 30 VDC.

LABEL	DESCRIPTION
GND	Ground
POS	Power 8 to 30 VDC (12 or 24 VDC nominal)
IGN	Ignition sense
O3	Digital output

\* An AC-DC power adaptor can be purchased as an accessory.

**ANTENNA**

An antenna with an SMA connector should be connected to the modem. This antenna should meet the following specifications:

- Dual-band 800 & 1900 MHz
- Nominal 50 ohm impedance
- Voltage Standing Wave Ratio (VSWR) less than 2.5:1

\*Antennas are sold separately.

**DATA INTERFACES**

**Ethernet:** 10/100 Mbps Auto-sensing Female RJ45 port

**USB:** USB 2.0 Type B Female

**Serial:** RS-232 9 pin DCE Female, with these default settings:

- Speed: 115200 bps
- Data bits: 8
- Parity: None
- Stop Bits: 1
- Flow Control: Hardware

**SETUP**
**1. Setup a data account for the modem**

Contact your Alltel dealer and request a data account to be assigned to the modem's ESN (electronic serial number). The ESN is printed on modem's label.

**2. Wiring and power-up**

1. Connect the modem to your computer using a standard Ethernet cable. Alternatively, the RS-232 or USB ports can be used for setup.
2. Connect the cellular antenna to the antenna connector.
3. Plug in the power connector to power-up the modem.

**3. Start BlueVue Device Manager Software**

1. Download and install the latest version of BlueVue Device Manager from [www.redlion.net](http://www.redlion.net).

- When launched, it will attempt to connect to 192.168.0.1 by default, once connected to the modem, the Modem Diagnostic window will open. (Note that 192.168.0.1 connects to the Ethernet cable. To connect to the USB port use 192.168.111.1):



**Troubleshooting:** If BlueVue displays “Detecting Modem at 192.168.0.1” indefinitely, then:

- Make sure the modem is powered on.
- Check the Ethernet Link LED on the modem. If it’s off, it usually means you have a problem with the Ethernet cable or with your computer’s network card.
- Close all other network connections (such as WiFi)
- Set your computer to obtain an IP address automatically

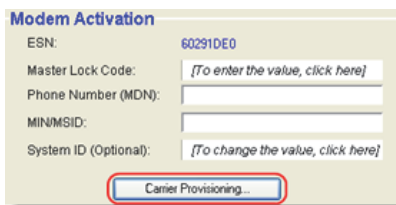
#### 4. Confirm that the modem is acquiring a cellular signal

The Signal LED should be on or flashing, indicating that the modem has a signal. BlueVue Device Manager displays signal information in the top right of its window; a minimum of 1 bar is required to connect to the carrier with the modem.

**Troubleshooting:** If the Signal LED is off, then there may be an issue with the antenna or cellular coverage might be too low in your current location.

#### 5. Activate the modem

- Click on the ACT button located at the top. Click on the Carrier Provisioning button to open the Carrier Provisioning dialog:



- In the Carrier Provisioning window, click on the **OTASP...** button and then click at the warning prompt.



- Wait for the activation process to complete.
- Confirm the success of the number’s programming.
- Click on the **DIAG** button located at the top left to navigate to the **Modem Diagnostic** screen. Click on the **Refresh** button at the bottom and check the phone number reported by the modem under **Modem Identification**: it should match the MDN provided by Alltel.

**Troubleshooting:** If the above does not occur, then the modem most likely has no account. Contact the wireless service provider who provided you with the account and ask them to confirm that the phone number and MIN/MSID assigned correspond to the modem’s ESN (electronic serial number), and that the account is ready to be used.

- Confirm the modem has successfully connected to the cellular network:
  - The WAN LED will be on or flashing.
  - In BlueVue, click the DIAG button, the WAN IP should indicate the IP address assigned to the modem by the cellular network.

#### SETUP IS COMPLETE

The modem should be ready for use as a basic internet access point. For more advanced modem configuration, consult the support section on our website: [www.redlion.net](http://www.redlion.net)

#### INSTALLATION AND HAZARDOUS AREA WARNINGS

Suitable for use in Class I, Division 2, Groups A, B, C and D hazardous locations, or non-hazardous locations only. All power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods and in accordance with the authority having jurisdiction.

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

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

#### AVERTISSEMENTS POUR INSTALLATION ET ENDROITS DANGEREUX

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

**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 NON-DANGEREUX.**

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