

Sierra Wireless Airlink LS300 Router

Setup using Inductive Automation Template

Description

This document covers the setup of the LS300 using the template provided by Inductive Automation. It will setup your LS300 to act simply as an SMS gateway device on your network. The following changes will be made:

- To be able to send and receive SMS.
- DHCP Server disabled.
- OTA ACEManager disabled.
- Primary Gateway disabled.
- LAN/Ethernet Changes made.
- Outbound Port 80/443 Blocked
- Airlink Management Services Disabled
- SSH enabled over Telnet

There is a companion document which details the manual setup of the LS300. That document can be used in conjunction with this. It is called *SierraWirelessLS300Setup.doc*.

LS300 and Network Security

The security settings provided by the Inductive Automation template are basic steps to secure the device. This in no way covers all security aspects that the LS300 is capable of and your own policies in securing your network. You need to take the time to configure and test the current settings and other security measures of the device appropriate to your network. Inductive Automation is not responsible for the security of your LS300 or your network.

SIM Card

Inductive Automation tested the LS300 using a T-Mobile SIM card that had Pre-Paid SMS Texting. It was also tested using a T-Mobile SIM card with Pre-Paid SMS/Data. SMS was able to be sent and received by the LS300. If you wish to configure the LS300 “Over the Air”, you will need a data plan and enable this option as the Inductive Automation template disables this feature.

Inductive Automation also attempted to test an AT&T SIM card with SMS only. For whatever reason, this was unsuccessful. However, this does not mean an AT&T SIM card with both SMS and Data would not work.

Setup Steps

The sections below should be used to install the Inductive Automation LS 300 template. This setup assumes you have already installed your SIM Card.

The browsers you should use when logging into the ACEManager is either *Internet Explorer* or *Firefox*. The ACEManager Interface behaves poorly when using *Google Chrome* or *Safari*.

Default Ethernet Connection

First connect the LS300 directly to your computer.

Default Ethernet settings for access:

Device IP Address: 192.168.13.31

Port: 9191

Username: user

Password: 12345

It should be as simple as changing your computer's LAN settings to DHCP. Then connect to the Raven XE via a browser with ***<http://192.168.13.31:9191/index.htm>***.

Password

The first thing you need to do is change the password. From the Admin Tab of ACEManager, change it.

Firmware

The first thing to check is if the router's firmware is up-to-date. Go to the Status Tab. If the router's ALEOS Software Version is not 4.3.3a.014 (the latest firmware version as of this writing), it should be updated. This can be found on the Sierra Wireless website at [http://www.sierrawireless.com/en/Support/Downloads/AirLink/Configurable Intelligent Gateways/AirLink_LS300.aspx](http://www.sierrawireless.com/en/Support/Downloads/AirLink/Configurable_Intelligent_Gateways/AirLink_LS300.aspx)

With the firmware downloaded, follow these instructions to install it:

- 1) In the top right hand corner of the AceManager page, hit the Firmware link. This opens up a window.
- 2) Browse to where the file is located, and hit update firmware. The update runs automatically.

The LS300's manual also covers how to upgrade the firmware easily.

Upload Inductive Automation Template

You will now upload the LS300 to use Inductive Automation's Template:

- 1) From the ACEManager, press the Upload link.
- 2) Select the file on your computer called *IA_LS300Template_07092013.xml*.
- 3) Press the Load & Apply button.
- 4) You will then be asked to reboot the Raven; do so. The entire procedure takes about 3-4 minutes. You will then be able to re-access the ACEManager at ***http://192.168.13.31:9191/index.htm***.

Uploading the template does not change your IP LAN settings.

Finalizing the LS300 for your Network

At this point you should change the LS300 IP configuration to be appropriate to your network. Additionally, you should now review the security settings of the LS300 to see if there are additional settings you need to account for. See the Security tab under the ACEManager. Again, it is not Inductive Automation's responsibility to secure the LS300 from unwanted inbound and outbound traffic.

Remember, any change you make on the LS300 will require a reboot. You should now be ready to plug it into your network.

Testing SMS

Now that your LS300 is on the network, let us see if you can send and receive SMS messages. If you haven't already, install your SIM card into the LS300.

If you have loaded the Inductive Automation template you will connect via an SSH client such as **Putty**. The user name and password will be the same that is used to connect to the ACEManager.

The following are basic commands to send an SMS message:

```
at*smsm2m="1XXXXXXXXX This is SMS test message."
```

To send a test message to itself:

```
at*phonehome=1XXXXXXXXX
```

1XXXXXXXXX is the number for the Raven XE.

To see if the LS300 is receiving text messages, send one to it. Then from the ACEManager, go to Services – SMS – SMS Security. There are 2 fields called Last Incoming Phone Number and Last Incoming Message you can see if it came in. Press **Refresh** if you do not see it immediately.