

Connecting iPort to Remote Instruments

First you must configure all the instruments to be on the modem's LAN network. The Sierra modem's default LAN IP address is usually 192.168.13.31, so if you have 3 analyzers to connect, you would assign them IP addresses such as 192.168.13.100, 192.168.13.101 and 192.168.13.102. All 3 instrument Gateways should be the same as the modem's IP address: 192.168.13.31. A switch box can be used if the modem does not have enough Ethernet ports for all analyzers.

Next, connect to the modem either using the cellular static IP address assigned by the carrier, or connect directly through the ethernet port using 192.168.13.31. Browse to the LAN tab, and using the drop down box on the Host Public Mode, select "All Hosts Use Private IP's" and then Apply the change.

Next, browse to the Security tab and select Port Forwarding. Select the Ethernet interface and add a line for each instrument. In this case the Public Start Port and End Port can be the same, and should be unique for each instrument. One of our customers used port 5042 for the Model 42i NOx, port 5043 for the Model 43i SO2, port 5049 for the Model 49i Ozone, etc. For the Host IP, enter the 3 IP addresses that you assigned to each instrument: 192.169.13.100, 192.168.13.101 and 192.168.13.102. The Private Port for all 3 entries must be 9880, as this is the port used by the iPort software. Apply the changes.

Finally, configure iPort so that it can connect to each instrument. In the Preferences dialog box, enable Direct TCP/IP. Then, under Instrument>TCP Connect>IP Addresses, enter the 3 instrument specific IP addresses. In each case the IP will be the static IP of the modem, followed by the instrument specific port number that was programmed into the modem. In this case xxx.xxx.xxx.xxx:5042 xxx.xxx.xxx.xxx:5043 and xxx.xxx.xxx.xxx:5049. Each entry should be separated by a space.

Select Instrument>TCP Connect>Connect and a dialog box should come up for each instrument.

A very useful instruction document for the Sierra modem can be found here:

<http://blog.industrialnetworking.com/2015/06/configure-port-forwarding-in-sierra.html>