

Connect to a serial to WIFI adapter from a remote network

This method uses the 'port forwarding' feature of your wifi's router. Most IP addresses supplied by your ISP are dynamic (as opposed to static) and can change without notice which will prevent connection to your device and therefore will require obtaining the new IP address for reconnection with the device. You will need the ability to access your router's settings as well. The general procedure to do this:

1. Add the serial to WIFI device (such as US converter's S2W232 or WF5000B adapters) to your existing network. See the [Serial to WIFI Setup Guides](#) section on Sun's website for instructions on how to do this.
2. Log into your wifi router (common addresses are 192.168.1.1 or 192.168.0.1 with the default user as admin and the default password as admin).
3. In your router's settings, determine the IP address that was given to the serial to WIFI device as well as the **public IP** of this router. You can also determine the public IP of your router using the [whats my IP](#) website.
4. Use your web browser to log into the IP address of the serial to device with following credentials: user: admin, password: admin.
5. Verify the serial port settings of the device and make sure the baud rate of the device is the same as what is set in the chamber's SDEF menu.
6. Record the port number (default for the S2W232 is 5000 and 8899 for the WF5000B) for the device as this information is needed in the router's port forwarding setting.
7. Navigate to the port forwarding feature of your router's setting and add the IP address of your serial to WIFI device as well as the port number and apply this new setting. The device should now be accessible from a remote network.
8. From a remote network, open a serial communication program or use the free from Google play store app 'Serial To WIFI' on your android phone to access the serial to WIFI device attached to the chamber.
9. If using the serial to wifi app for android, select Devices from the hamburger menu on top left, then select the '+' or add icon to add a new device. Add the **public IP** address of the router obtained in step 3 and the port number assigned to your device, then click connect. If the connection is successful you can then send valid chamber commands such as CHAM?, for example, to obtain the chamber probe reading.
10. If using a PC, you must install and run the free to download [VCOM](#) software to add a virtual com port. Enter the public IP address in the 'Remote IP' field and the port number of the device (default is 5000 for the S2W232 and 8899 for the WF5000B).
11. Once the virtual com port is created, you can then run a terminal program such as [TeraTerm](#), [CoolTerm](#) or the [Sun Serial App](#) demo program using the COM port created by the VCOM software to begin communicating with the chamber.