

RF300 – Help with Troubleshooting Common Issues

Issue 2 – 03/01/2017 – Update for Wireless G Loggers

This document is a step-by-step problem solver, addressing some of the most commonly encountered problems and issues when setting up and using the RF300 Diligence WiFi Devices.

Contents

RF300 – Help with Troubleshooting Common Issues.....	1
Section 1 – WiFi Device will not connect to the PC via USB	2
Section 2 – Connecting to wireless networks.....	4
Section 3 – Failure to complete the setup process	6
Section 4 – Cloud Sign-In problems using the PC Software.....	7
Section 5 – Loss of Connection	7
Section 6 - Miscellaneous Items	8

Section 1 – WiFi Device will not connect to the PC via USB

You have the RF300 Diligence Sensor Software downloaded and installed on your PC. You've run the software and connected the WiFi Device to the PC using the USB cable provided but the software does not recognise connection of the Device.

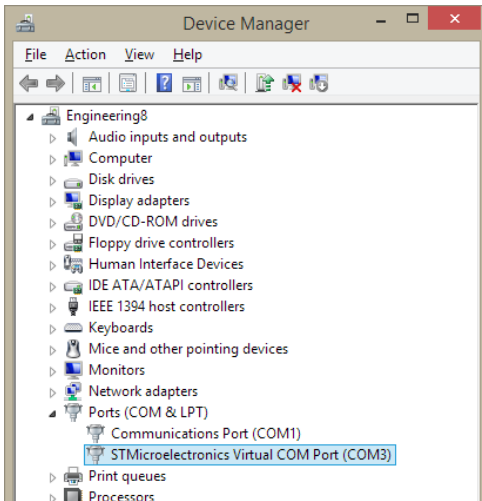
- 1) Unplug the USB cable and reconnect
- 2) Sometimes USB cables can fail, if possible try another USB cable
- 3) There may be a difference between the USB ports on your PC, try another USB port
- 4) Restart the PC and reopen the WiFi Sensor Software

If the above has not resolved the problem, please try the options below.

- 1) Restart the WiFi Device by holding the button for 10 seconds (Unit flashes 'LOW' battery symbol or shows **rSt**)
- 2) Factory reset the WiFi Device by holding the button in for 20 seconds (Unit shows **FArS**)
- 3) Unplug any unnecessary USB devices

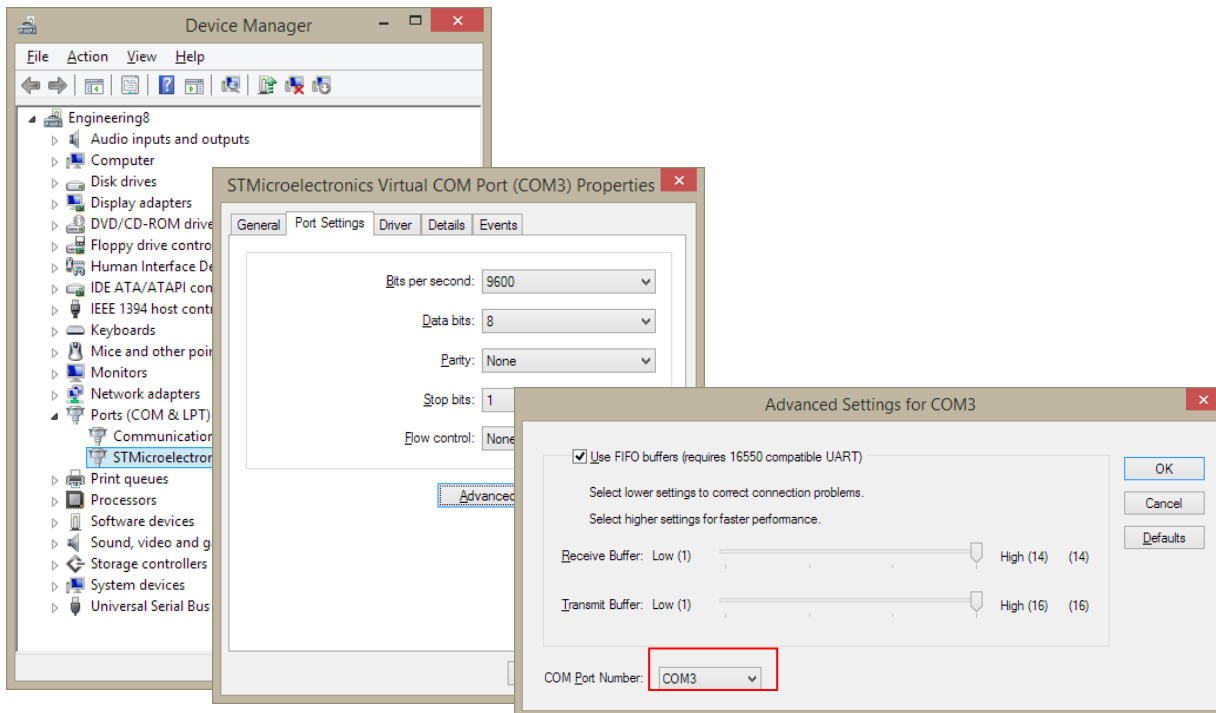
If the above has not resolved the problem, please try the options below....

- 1) Check that the Device appears in Device Manager when connected via USB



You should see a COM Port labelled STMicroelectronics. Check that it is not disabled and showing as working normally.

- 2) If the Device is listed but not working please reinstall the software.
- 3) Change the COM port number. To change the COM port, go to Control Panel, Hardware and Sound, Device Manager, Ports, STMicroelectronics Virtual COM port, Port Settings, Advanced and then select a COM port from the drop down menu that is not in use. Windows Vista and XP may differ.

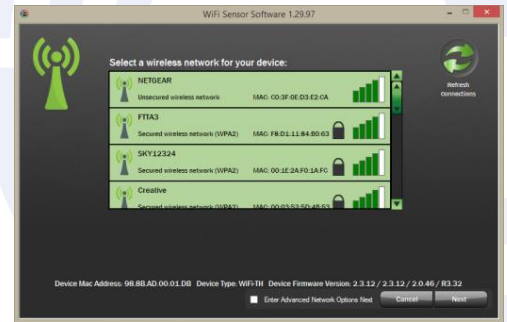


If you have tried all of the above but the Device is still not recognised by your PC, please contact your supplier.

Section 2 – Connecting to wireless networks

My wireless network does not appear in the list during setup

- 1) Refresh the network list
- 2) The WiFi Device may be out of range of the access point or router - move the Device closer
- 3) The wireless network name (SSID) for your network may be hidden - select Other Network and enter the parameters manually
- 4) Restart your access point or router
- 5) For Loggers sold before July 2016 - Your wireless network may not support the required 802.11b data rates - check configuration of your access point or router. Refer to 'Comark RF300 PIB Help with Network Requirements and Setting'.
- 6) On rare occasions the SSID may contain invalid characters which can stop it from being displayed. Refer to 'Comark RF300 PIB Help with Network Requirements and Settings'.



If you have tried all of the above but the wireless network still does not appear in the list, please contact your IT Administrator or supplier

My wireless network appears in the list but the WiFi Device fails to connect

- 1) Have you selected the correct wireless network? There may be multiple networks with the same name (SSID). If necessary, check the MAC Address of your access point or router against that shown in the list of networks.
- 2) Check that password being entered is correct - don't forget it is case sensitive
- 3) The WiFi Device may be out of range of the access point or router - move the Device closer
- 4) If the wireless network is using WEP Encryption, ensure that the HEX key is being entered rather than the password. Online converters are available. The passkey consists of a string of characters A-F and numbers 0-9.
- 5) Does your password contain any punctuation or special characters? Most punctuation is fine but some characters, particularly spaces and commas cannot be handled by the WiFi Sensors. Try changing the password to remove any special characters.



If the above has not resolved the problem, please try the advanced options below

- 1) If the PC has two network connections, you may need to manually select the network which will be used to communicate with the WiFi Devices. Refer to 'Comark RF300 PIB Help with Network Requirements and Settings' for further information.
- 2) If there are multiple access points with the same SSID you may need to manually select the individual access point. Refer to 'Comark RF300 PIB Help with Network Requirements and Settings' for further information.
- 3) Ensure MAC address filtering on the access point or router is either disabled or the WiFi Device is in the allowed list.
- 4) If you are using a DHCP service to allocate IP Addresses on your network (this is normally the case) check that you have not reached the limit on the number of IP Addresses. If necessary, refer to your IT Administrator.
- 5) If you are running the software on a Virtual Machine, it must be allocated an IP address in the same range as the physical PC.
- 6) If the network requires you to log in on a web page after association, the WiFi Device will not be able to communicate using it.

Section 3 – Failure to complete the setup process

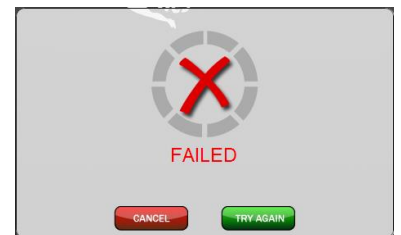
My WiFi Device fails to save settings when setting up on the PC

- 1) Make sure that the Firewall on the PC allows full access to WiFi Sensor Software - Refer to 'Comark RF300 PIB Help with Windows Firewall'
- 2) If your PC has multiple network connections this may prevent communication with the WiFi Device. If possible, disconnect any networks other than the one which the WiFi Device is connected to. Refer to 'Comark RF300 PIB Help with Network Requirements and Settings' for further information.
- 3) Some wireless networks are configured in 'Isolation' mode which must be disabled to allow communication between the WiFi Device and the PC. This will normally be found in the advanced settings of the access point or router. Guest networks will also prevent communication with other devices on the same network.
- 4) The Comark RF300 Diligence WiFi Devices use UDP packets on ports 1024 and 8010, it may be necessary to open these up to allow communication.



My WiFi Device fails to save settings when setting up on the Cloud

- 1) The wireless network which the WiFi Devices are connected to requires an active internet connection. You can check connectivity to the Cloud by connecting the PC or another device to the wireless network and opening the comark.wifisensorcloud.com site in your browser.
- 2) Some routers/corporate firewalls may block outbound connections to the Cloud. Refer to 'Comark RF300 PIB Help with Network Requirements and Settings' for more information.



Section 4 – Cloud Sign-In problems using the PC Software.

I cannot Sign-In to my Cloud Account from the PC software.

If you are unable to sign in to your Cloud Account through the PC software please check that:

- 1) Your PC has an active internet connection and you are able to view the Comark Cloud website using your browser.
- 2) You have activated your Cloud Account by following the link in the Sign-Up email
- 3) You are using the correct email address and password



Section 5 – Loss of Connection

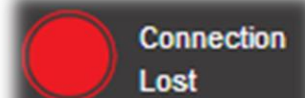
My WiFi Device loses connection to the PC or the Cloud.

Generic (applies to both Cloud and PC connected WiFi Devices)

- 1) Check the signal strength of the wireless network (press button on WiFi Device 3 times to view signal strength) and consider moving the WiFi Device or access point/router
- 2) Try restarting your wireless access point or router
- 3) If your wireless network consists of multiple access points with the same SSID the WiFi Device may not be connecting to the access point with the strongest signal. Refer to Help 'Comark RF300 PIB Help with Network Requirements and Settings'.
- 4) If you are not using the latest firmware version, consider updating your WiFi Device.

Cloud

- 1) Check your internet connection. Can other wireless devices connect to the internet?
- 2) Consult your IT Administrator, there may be network authentication or corporate firewall rules which are preventing the WiFi Device from communicating. Detailed information on how the WiFi Device communicates can be found in 'Comark RF300 PIB Help with Network Requirements and Settings'.



PC Software

- 1) In the event that the WiFi Device loses connection with the PC software it uses UDP broadcast packets to attempt to discover this. Some wireless networks are configured to block UDP broadcast. Check your access point configuration. Alternatively configure your PC and WiFi Devices with static IP Addresses (see Help 'Comark RF300 PIB Help with Network Requirements and Settings')
- 2) Resource limitations on the PC running the WiFi Sensor Software may cause the processing of messages from the WiFi Devices to take an excessive amount of time. This may cause the WiFi Devices to lose connection. Try closing some programs or restarting your PC. Some Firewall and Anti-Virus/Security software may also cause issues here.



Section 6 - Miscellaneous Items

- 1) If you are using the PC software and the Next button is missing on the Alarms page, ensure your font scaling is set to 100%

If the software doesn't run on XP, Vista, or Windows 8 you may need to install .NET 3.5 SP1 framework.

<http://download.microsoft.com/download/2/0/e/20e90413-712f-438c-988e-fdaa79a8ac3d/dotnetfx35.exe>

End.