



Installation & Configuration Guide

NMEA Data Feed Service for Windows GPS Applications

Mobile Application Platform (MAP)

July 2009



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1.0 Overview

The National Marine Electronic Association (NMEA) Data Feed Service streams NMEA data from the *iLM* to a Windows OS computer (laptop). The data is then made available to a third-party GPS application running on the laptop.

The Trimble NMEA Data Feed Service is available in a single setup.exe file. When installed, it consists of a running Windows Service and a client application. The client application is the configuration user interface for the service.

This document outlines the installation and configuration procedure for the Trimble NMEA Data Feed Service on a laptop. It also describes setting up and powering up the *iLM* as well as connecting the laptop wirelessly to the *iLM* for the data stream and connecting a third-party GPS application to the data stream.

The following diagram illustrates the operation of the NMEA data feed. It also includes worksheet boxes for you to enter the particular parameters for your connection.

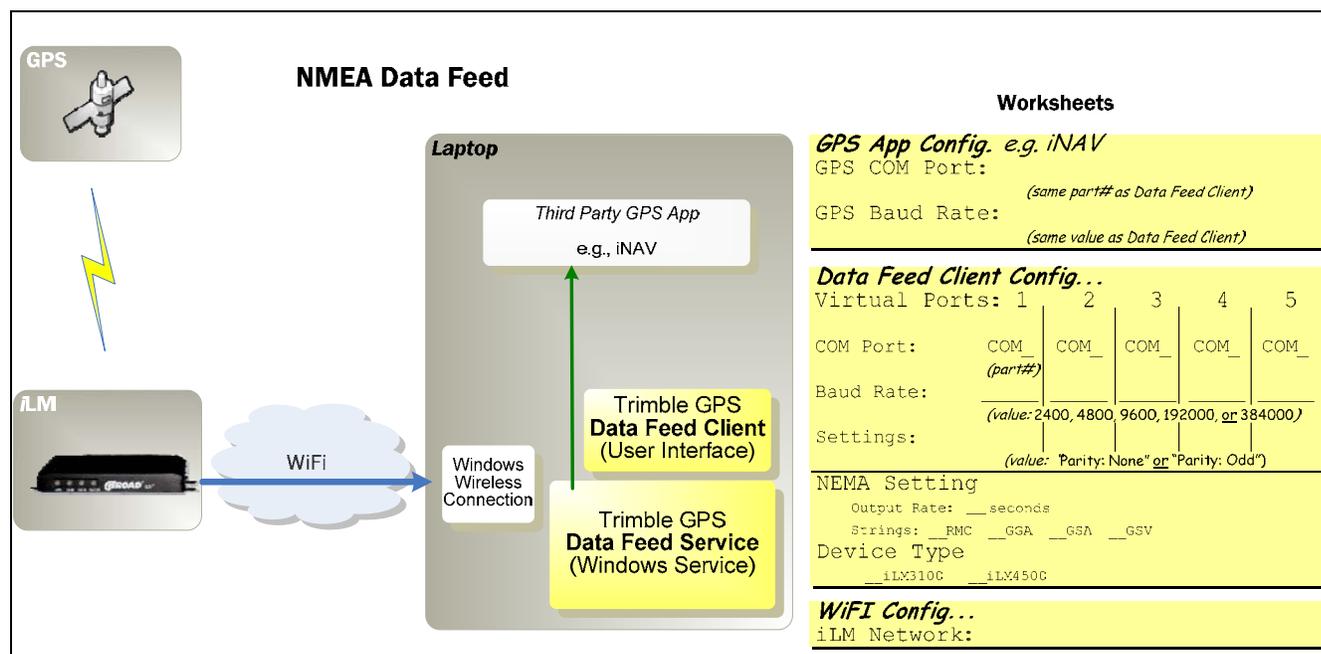


Figure 1: NMEA Data Feed



Note: In order to use this product you must subscribe to this service.

2.0 NMEA Data Feed Quick Reference

The following steps provide a quick reference for the installation and configuration procedure for the Trimble NMEA Data Feed.

1. Install the NMEA Data Feed Service on the laptop by running the **setup.exe** for the Data Feed Service:
TrimMain_NMB.SVC.NMEADDataFeed_Services_MAIN_<version#>_setup.exe
2. Start the **Trimble GpsDataFeed Service**:
 - a. Go to: **Start > Administrative Tools > Services**. This opens the Services window.
 - b. Right-click the Data Feed Service Name: **Trimble GpsDataFeed Service**.
 - c. Select **Start**.
3. Set up the **iLM** and connect to it from the laptop by **WiFi** to the **iLM network**:
 - a. Set up **iLM** device by ensuring the antenna is correctly connected.
 - b. Power **iLM** by inserting charger in a vehicle outlet or by use of an inverter.
 - c. Ensure **WLAN, GPS** and **Status light** is on.
 - d. Use the laptop's **Windows Wireless Connection wizard**.
 - e. Connect to **iLM's Wireless network**.
4. Configure the service using the **GpsDataFeed Service** client (user interface):
 - a. Go to: **Start > All Programs > GpsDataFeedService > GpsDataFeedService**.
Alternatively, right-click the **Data Feed Service** client icon in the system tray and select **Config**.
 - b. Configure:
 - **Port Settings** – including **COM port** and **baud rate** for up to five virtual ports).
 - **NMEA Setting** – output rate in seconds and any or all of the following NMEA strings: **RMC, GGA, GSA, and GSV**.
 - **Device Type** – **iLM 3100** or **iLM 4500**.
5. Configure third party GPS app (for example, **iNAV**) to a **COM Port** configured in the Data Feed Service client and the corresponding **Baud Rate**. For example, with **iNAV**:



- a. Open the **iGuidance** application.
- b. Select **Menu** icon on **iNav map** > **Settings** > **GPS COM Port** select the COM Port number, and click **OK**.
- c. Select **Menu** icon on **iNav map** > **Settings** > **GPS Baud Rate** select the Baud Rate, and click **OK**.



Note: Configuring the third party GPS app will vary depending upon the particular GPS application you are using.

3.0 Procedure Details

Installation of the Data Feed Service on the Laptop

To install the NMEA Data Feed Service on the laptop:

1. Run the **setup.exe** for the Data Feed Service.

TrimMain_NMB.SVC.NMEADDataFeed_Services__MAIN_<version#>_setup.exe. The **Setup - GPS Data Feed Service Wizard** screen, shown in Figure 2, displays.

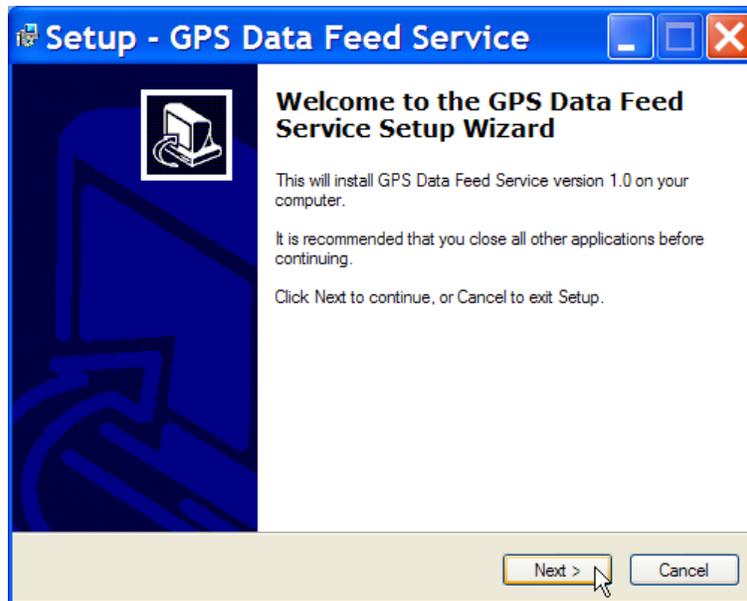


Figure 2: Set-up - GPS Data Feed Wizard Welcome Screen



Warning! During installation, use the default Start menu folder name.

2. Click **Next**. The **Select Destination Location** screen, shown in Figure 3, displays.

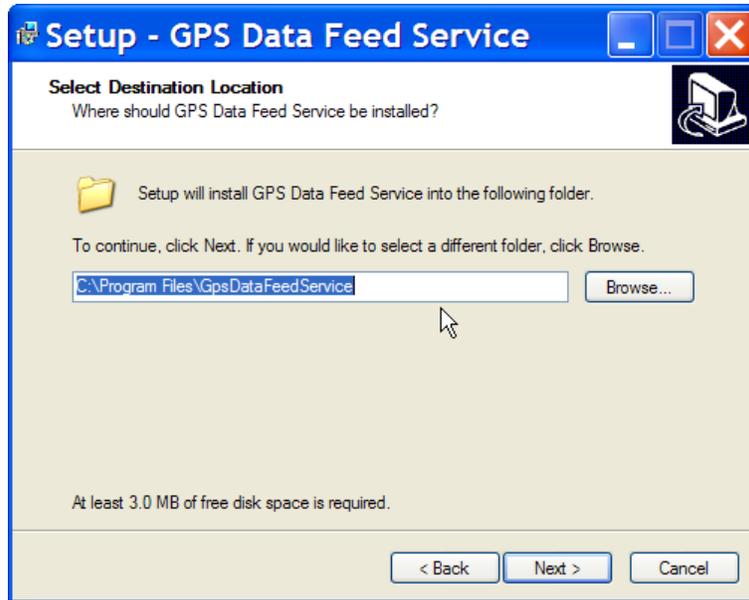


Figure 3: Select Destination Location Screen

3. Click **Browse** to specify the desired location.
4. Click **Next**. The **Select Start Menu Folder** screen, shown in Figure 4, displays.

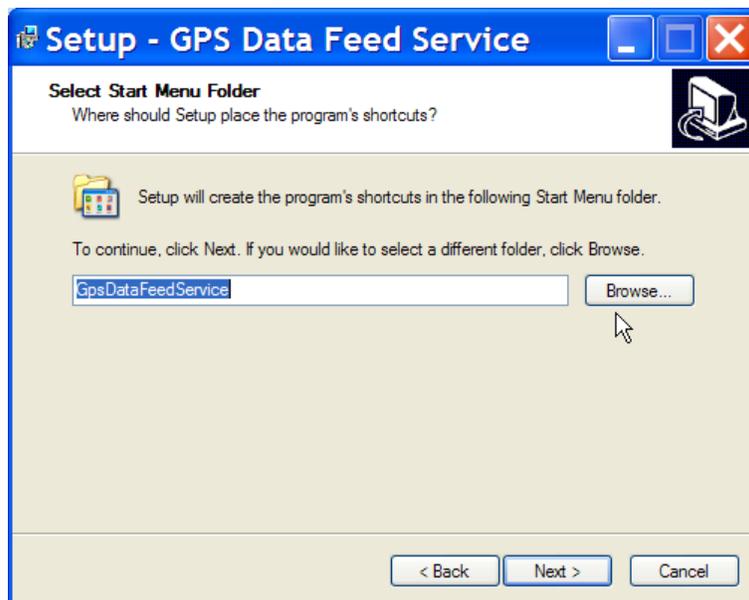


Figure 4: Select Start Menu Folder Screen

5. Click **Browse** to specify the desired **Start Menu** folder location.



Warning! Do not change the folder name.

6. Click **Next**. The **Ready to Install** screen, shown in Figure 5, displays.

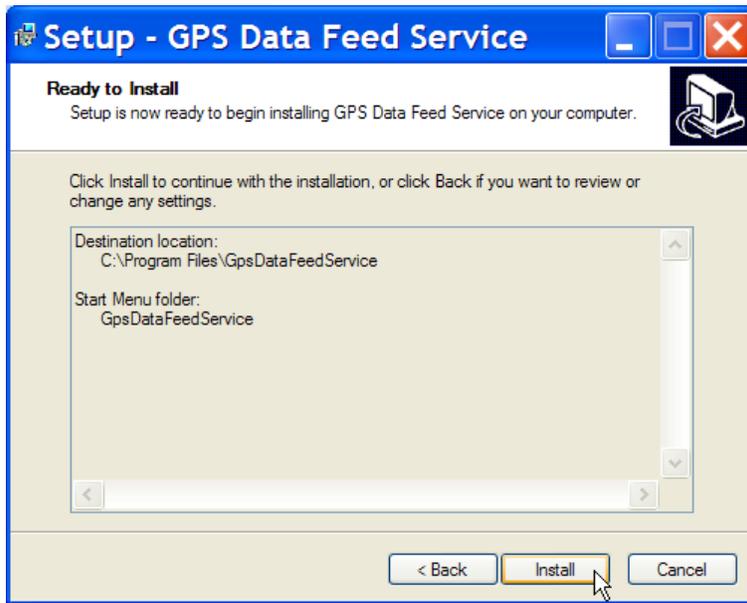


Figure 5: Ready to Install Screen

7. Review settings and click **Install**. The **Completing the GPS Data Feed Service Setup Wizard** screen, shown in Figure 6, displays once installation is done.



Figure 6: Completing the GPS Data Feed Service Setup Wizard Screen

8. Click **Finish** to end setup. This closes the setup wizard.

Starting the Windows Service

To start the Data Feed Service (a Windows service):

1. Go to: **Start>Administrative Tools>Services**. The **Services** screen, shown in Figure 7, displays.
2. Right-click the Data Feed Service **Trimble GpsDataFeed Service**.
3. Select **Start**.

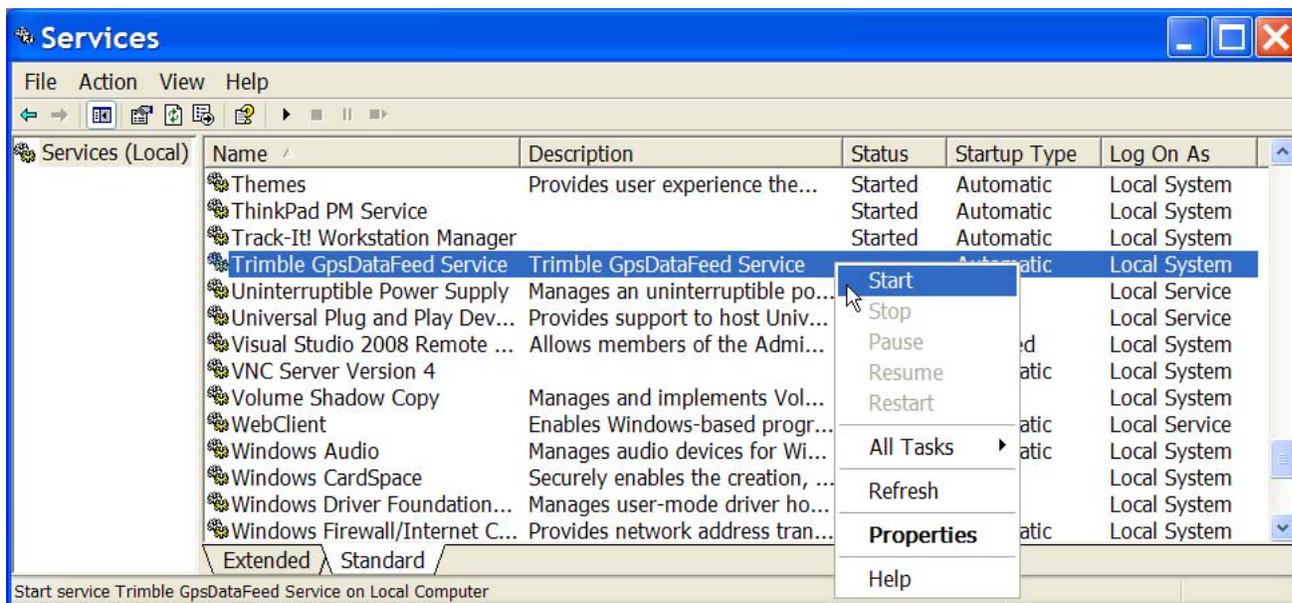


Figure 7: Services Screen

4. Close the **Services** window.

Configuration of the Service with the Client

To run the user interface client for the Data Feed Service:

1. Go to **Start>All Programs>GpsDataFeedService>GpsDataFeedService**. The **Create New Configurations** screen, shown in Figure 8, displays.

Alternatively, right-click the **Data Feed Service** client icon in the system tray and select **Config**.

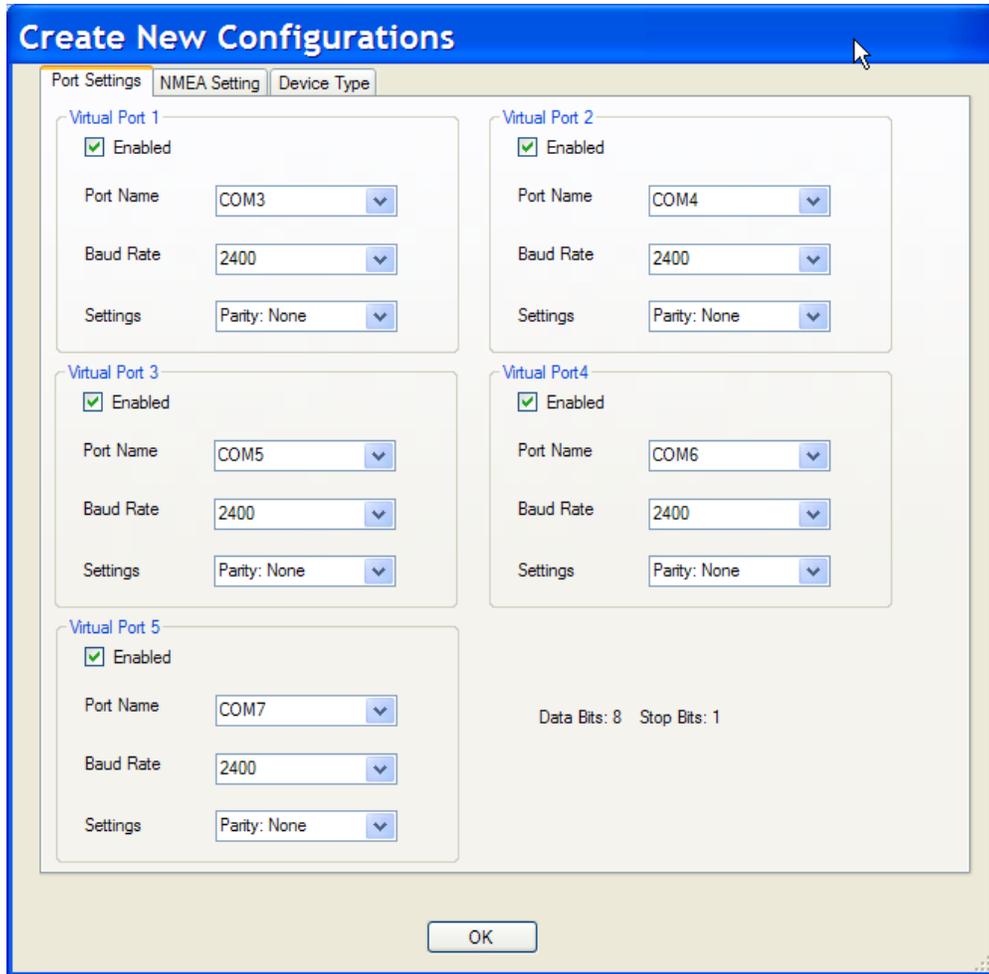


Figure 8: Create New Configurations: Port Settings Tab

2. Configure port settings for the **Data Feed Service**. You can enable and configure up to five ports for five different GPS applications.
3. Click the **NMEA Setting** tab. The **Create New Configurations: NMEA Setting** screen, shown in Figure 9, displays.

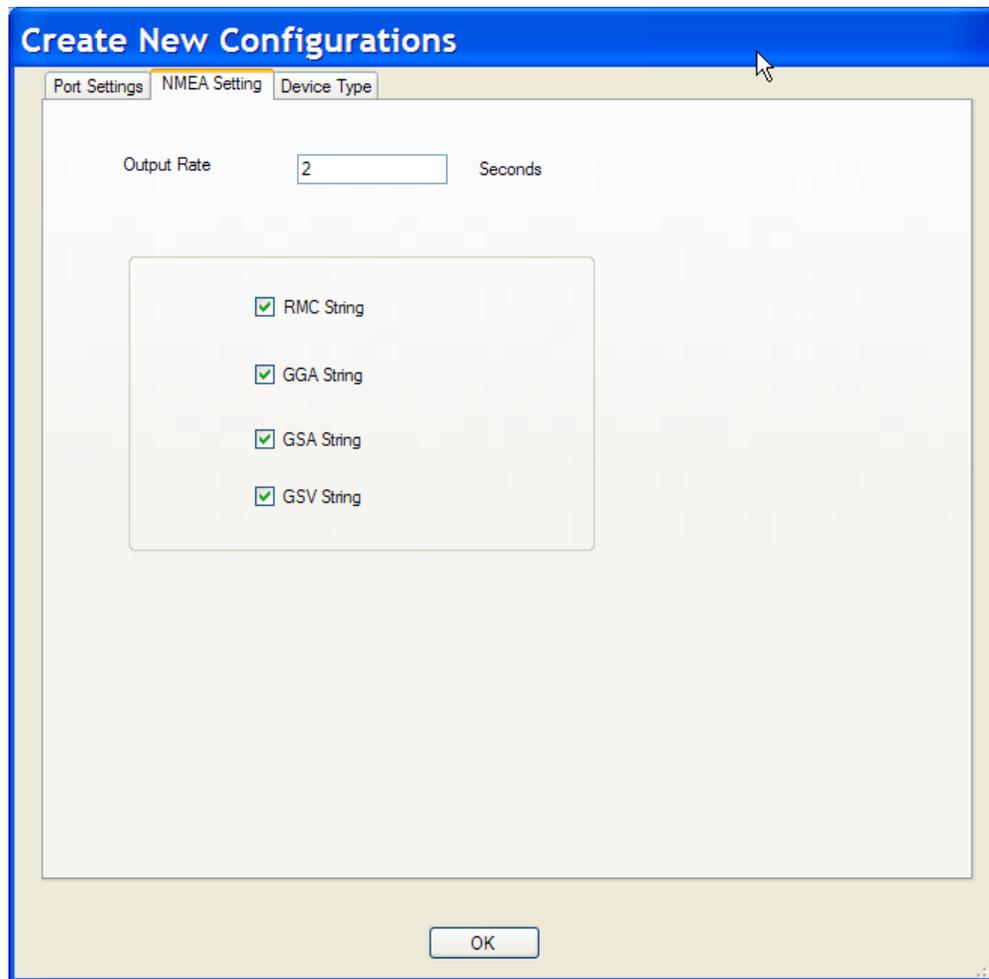


Figure 9: Create New Configurations: NMEA Setting Tab

4. Configure NMEA strings.
5. Click the **Device Type** tab. The **Create New Configurations: Device Type** screen, shown in Figure 10, displays.

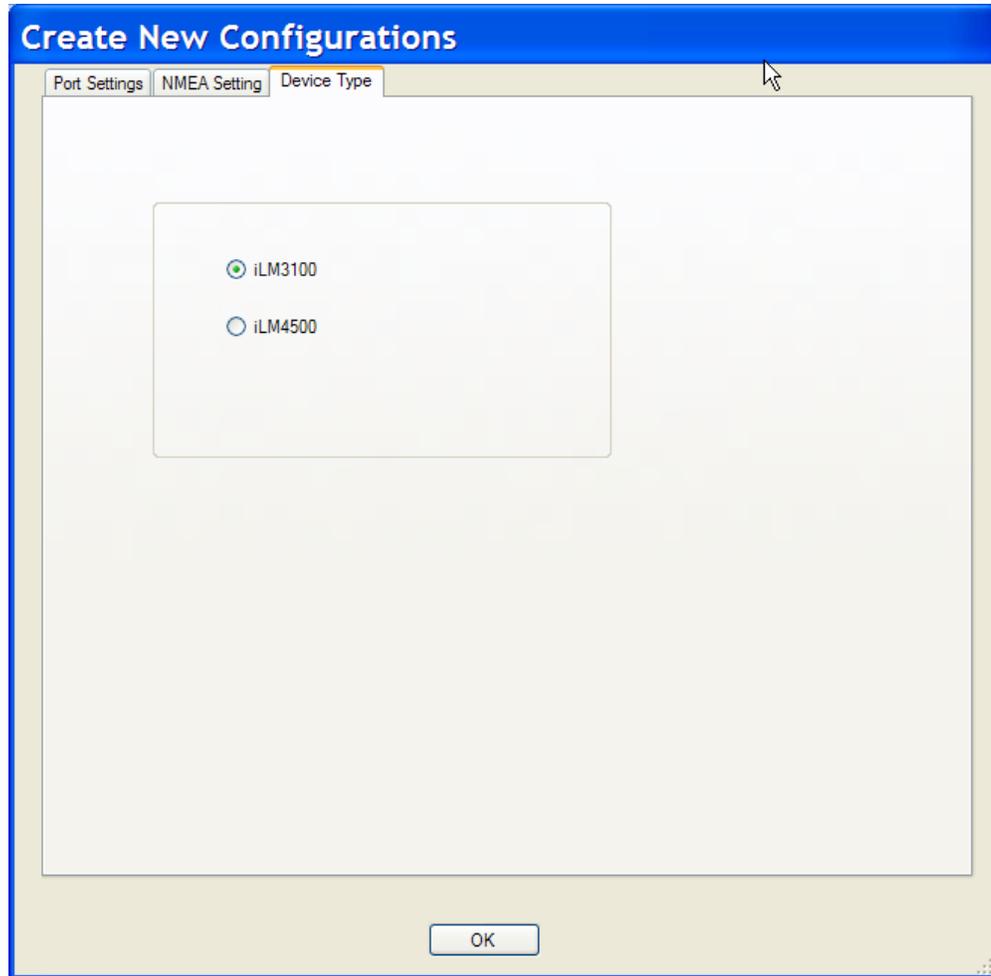


Figure 10: Create New Configurations: Device Type

6. Select the type of *iLM* device.
7. Click **OK**.



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