# ViatorCheck Software

# User Manual

**Manual**

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With regard to the supply of products, the current issue of the following document is applicable:
The General Terms of Delivery for Products and Services of the Electrical Industry, published
by the Central Association of the Electrical Industry (Zentralverband Elektrotechnik und Elek-
troindustrie (ZVEI) e.V.) in its most recent version as well as the supplementary clause:
"Expanded reservation of proprietorship"

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# 1 Overview

**ViatorCheck** is a diagnostic software utility that can be used with the entire family of Viator interfaces. **ViatorCheck** provides a simple way to test HART connections between a PC with a Viator interface and a field device. **ViatorCheck** also gives you the ability to configure the Viator Bluetooth® interface.

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## 2 Installing ViatorCheck

### 2.1 System Requirements for Use with Windows®

Following operating systems are supported:

- Microsoft® Windows® 7 / 8 / 10 / 11

Microsoft® .NET Framework 3.5 is needed to install the program.

### 2.2 Installing ViatorCheck

**i**

**Note**

Install utilities and drivers before plugging in the Viator.

**i**

**Note**

Use an administrator login to install **ViatorCheck**.

### Installation

1. To download the ViatorCheck installation file, visit www.pepperl-fuchs.com.

2. Enter your Viator's type code (HM-PF-USB-010031, HM-PF-USB-PWRX-010031P or HM-PF-RS232-010001) into the keyword search box at the upper-right corner of the Pepperl+Fuchs homepage. Press **Enter**.

3. Select the appropriate product page from the search results.

4. Download the installer from your Viator's product page under the **"software"** tab.

5. Open the **ViatorCheck** folder and double click the **setup.exe** file to start the installation process.

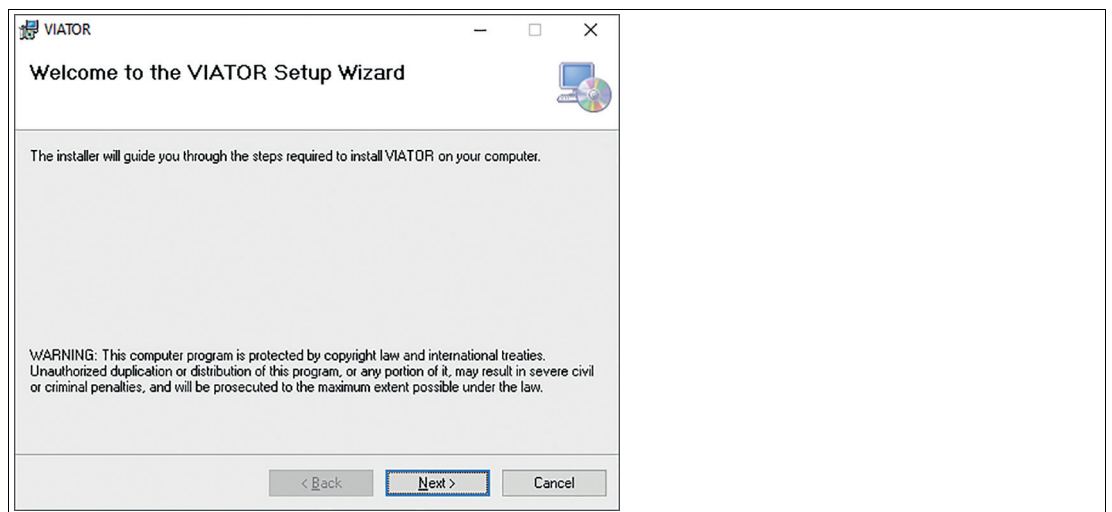6. The preliminary screen will appear. Click **Next >**



Figure 2.1

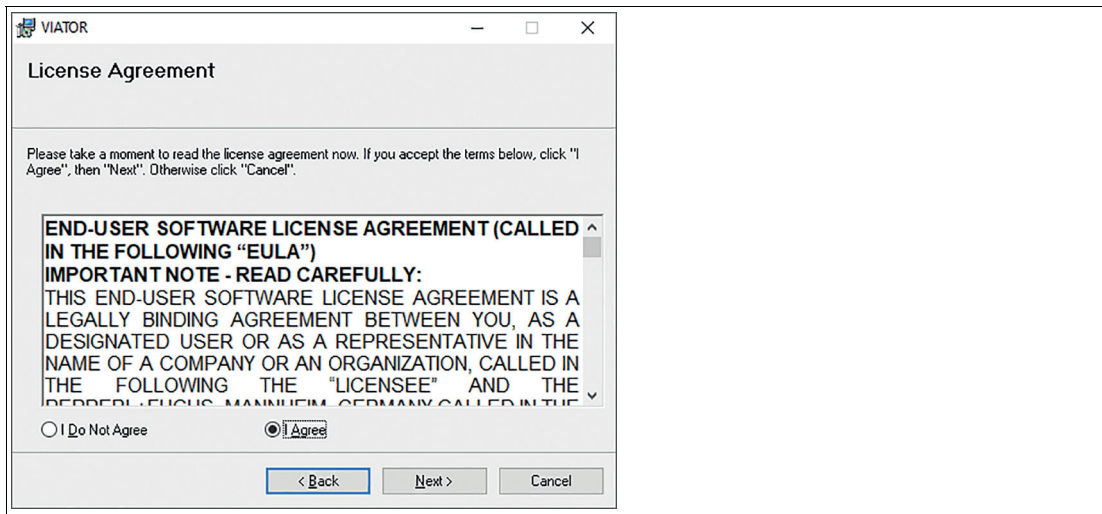**7.**   The next screen will display the end-user license agreement.



Figure 2.2

**8.**   The next window will allow you to select the folder where you would like to install the utility file.
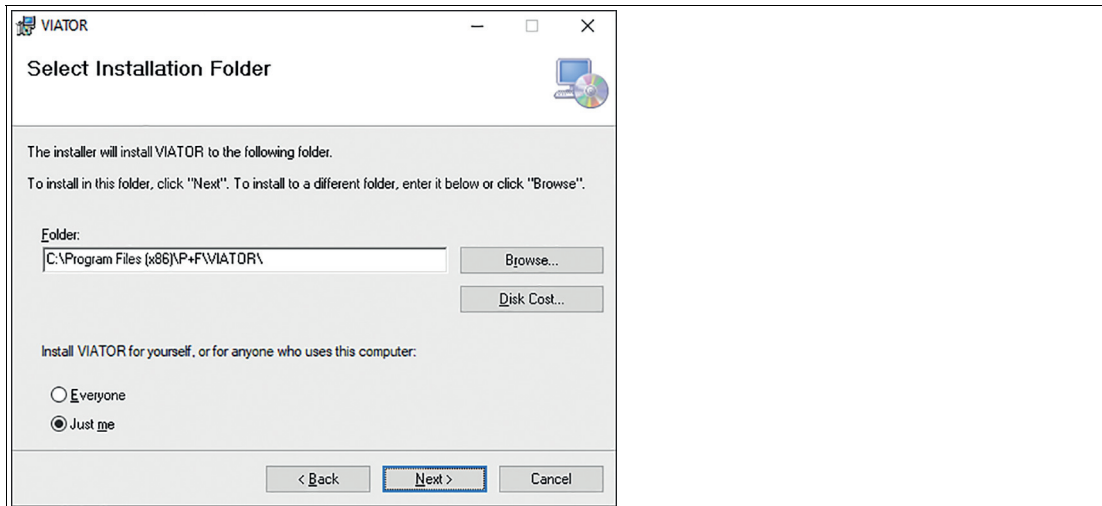


Figure 2.3

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9. After selecting the installation folder, you will be prompted to start the installation. To confirm installation, click **Next >**
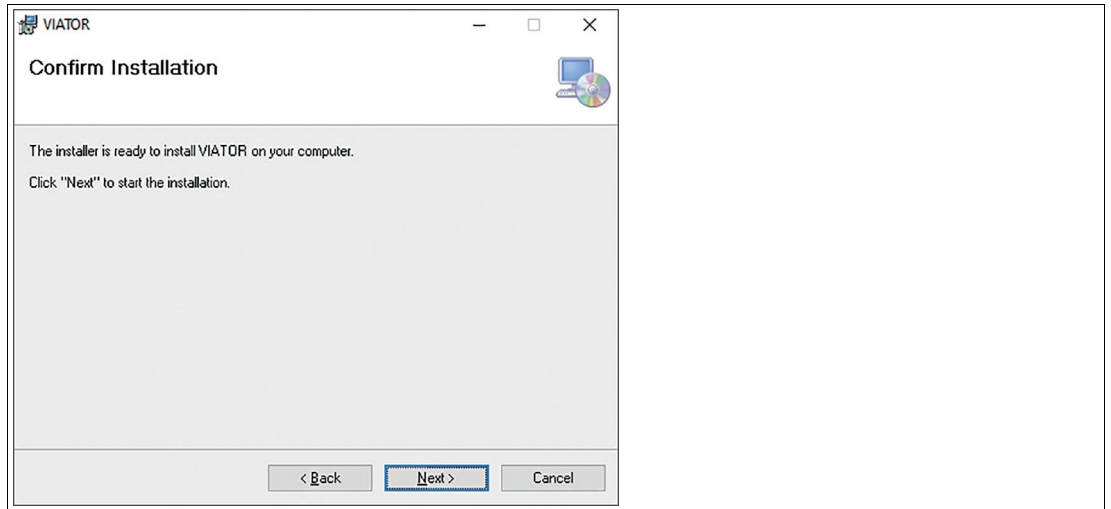


Figure 2.4

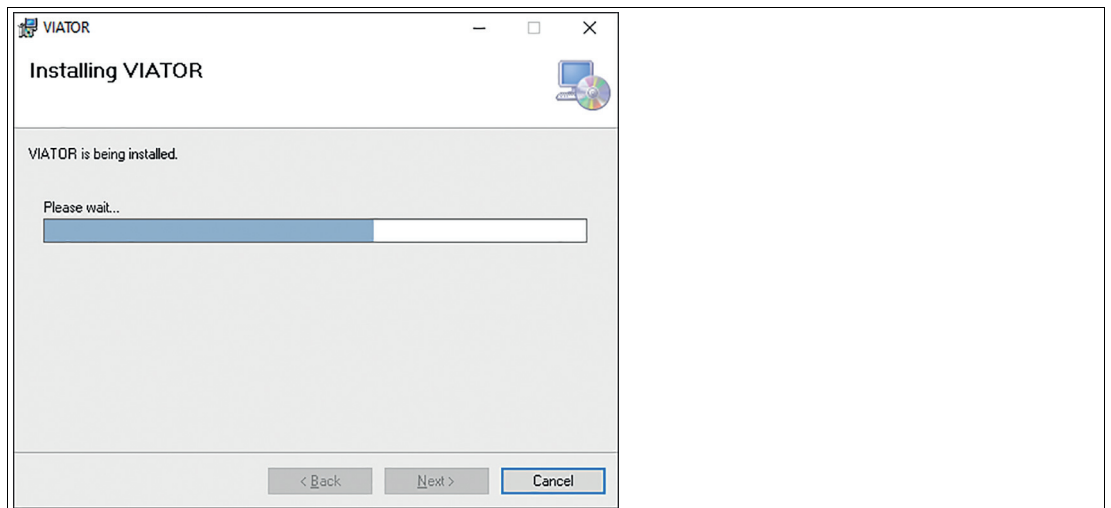10. The utility will now begin to install.



Figure 2.5

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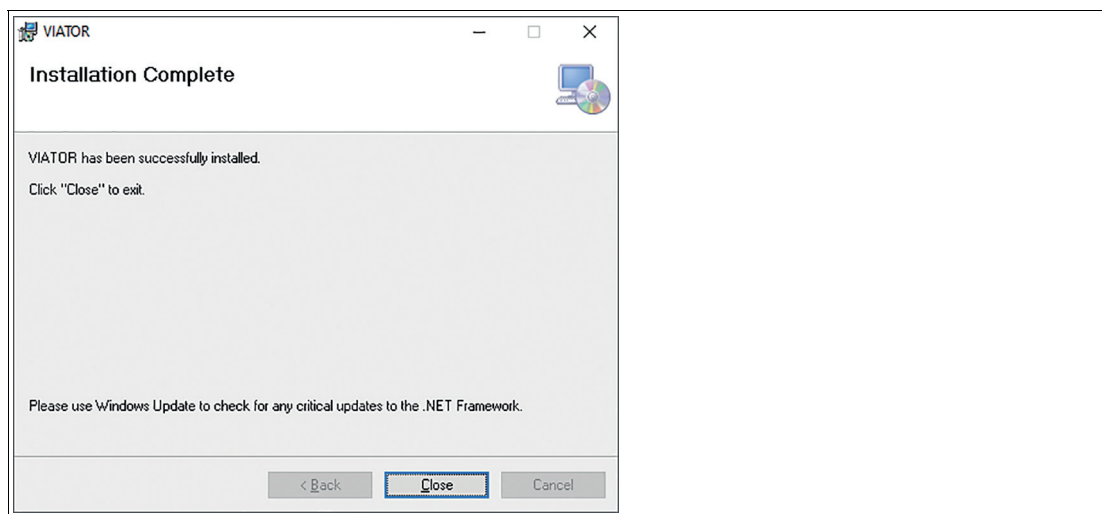**11.** The installation is now complete. To exit, click **Close**



Figure 2.6

## 2.3 Removing ViatorCheck

As part of uninstalling ViatorCheck, com0com will be removed by its uninstaller. Click **Next** to continue through the prompts and remove all components of com0com.

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# 3 Using ViatorCheck

To begin running **ViatorCheck**, select **Start** > **Programs** > **P+F - ViatorCheck**.

> **i**
>
> **Note**
>
> If your Viator Bluetooth® interface is not connecting, try powering off the Viator interface and powering it back on.

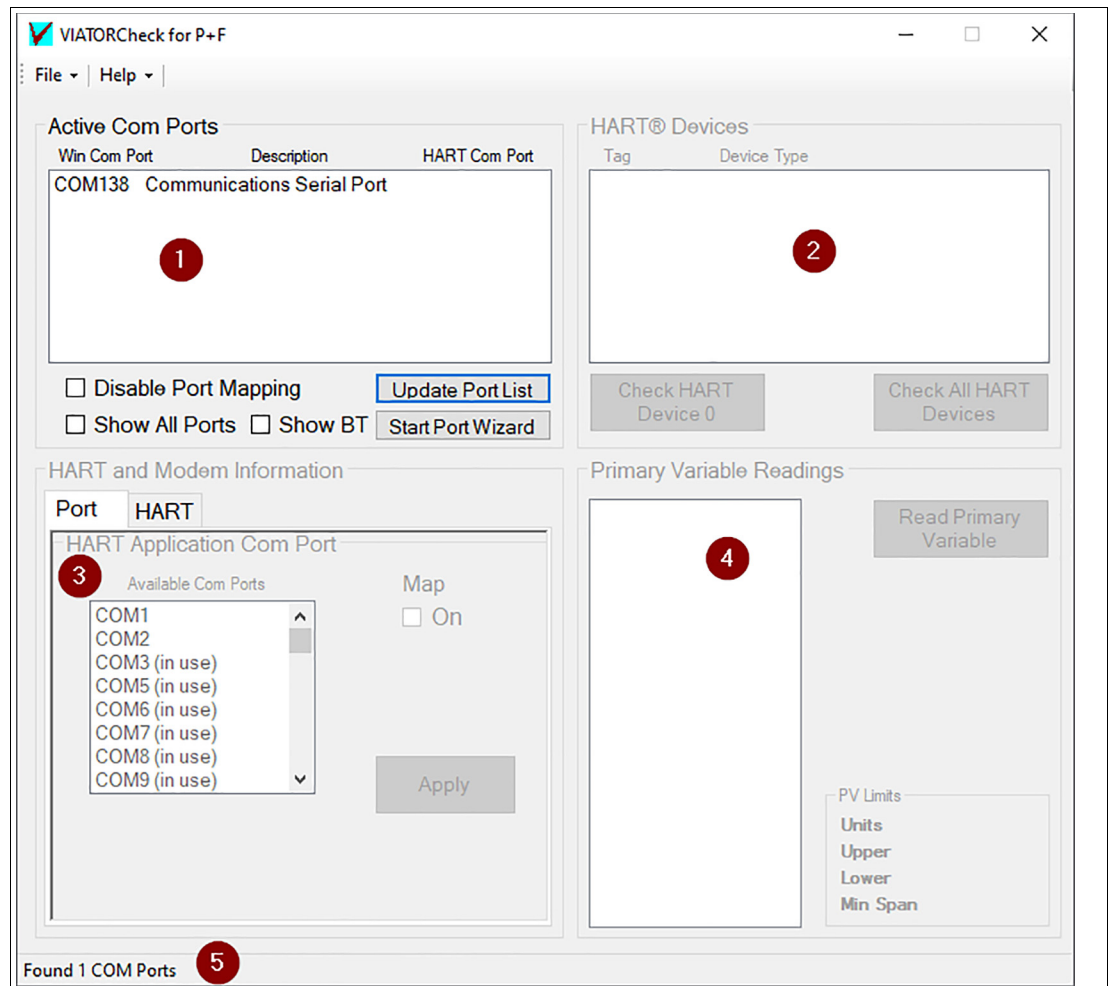**The ViatorCheck application is divided into 5 sections:**



Figure 3.1

1. Active COM Ports List
2. HART Devices List
3. HART, Port Mapping, and BT Modem Information
4. Primary Variable Readings
5. Viator Status Message Line

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## 3.1 Active COM Ports List

The Active COM ports list displays all of the active COM ports on the system, along with some descriptive information about what type of COM port it is (such as USB or Bluetooth) and the HART COM port it is set to. For Bluetooth® COM ports, the Bluetooth® device name will also be displayed if it can be determined. The default list shows only COM1-4, Viator USB modems, and all Viator Bluetooth® modems.
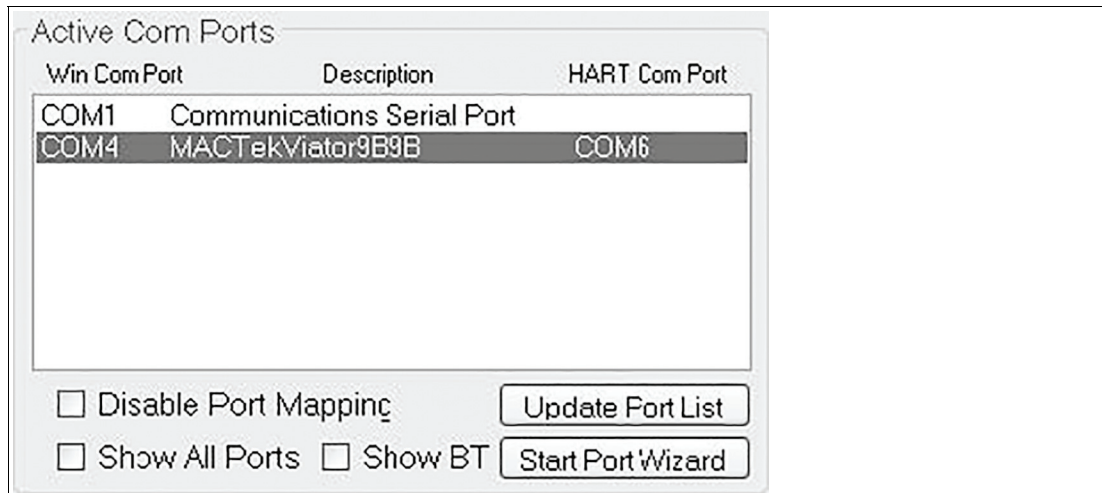


Figure 3.2

### 3.1.1 Update Port List

The options **Show All Ports** and **Show BT** allow display of all ports with or without BT ports. Setting **Show All Ports** will automatically select **Show BT ports** and un-checking **Show BT with Show All Ports** checked will only show the serial and USB ports. Pressing **Update Port List** will scan for any new modems and will update the list based on the port selection checked.

### 3.1.2 Selecting a Port

Clicking on a COM port will select it, and it will attempt to open. If a previous COM port was already opened by ViatorCheck, that one will now be closed. If the COM port cannot be opened, an error message is displayed:
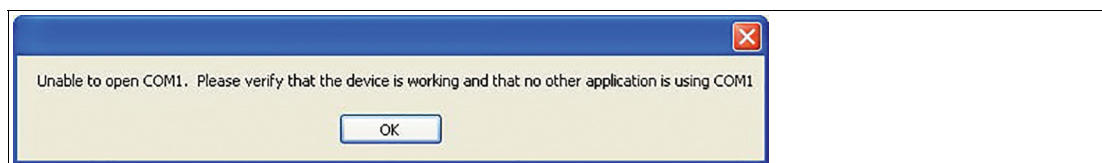


Figure 3.3

Once a COM port is selected and opened, the "HART Device List" and the "HART and Modem Information" areas become available.

### 3.1.3 HART COM Port

Upon starting, ViatorCheck scans for Viator Bluetooth® modems. If any are detected, it maps the actual modem port to an available HART COM port. Use the HART COM port when specifying the port to a HART application. If the port mapping is not required, then select Disable Port Mapping before exiting the program to inhibit the Viator Serial Port Communication Filter (VSPCF) program from starting and mapping the ports. The Viator Bluetooth® modem ports should be mapped to allow better performance. This is critical for some HART applications to work with the Bluetooth® modem.

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### 3.1.4 Port Wizard

> **Procedure**

1. The Port Wizard is a step-by-step procedure for creating a mapped port. Click on **Start Port Wizard** below **Update Port List** to go through a series of windows that explain the steps and set up the mapping. The first screen shown below allows the mapping to be disabled completely. To continue with the wizard, click **Proceed**.
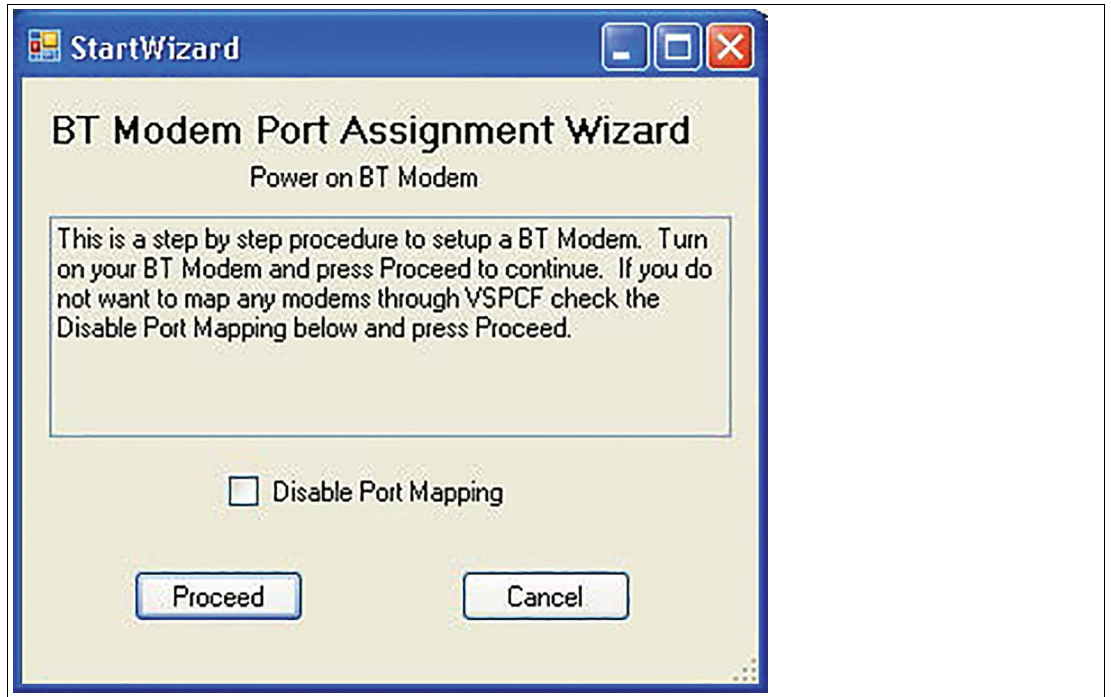


Figure 3.4

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2.  The next screen allows the selection of the Bluetooth® modem to set up. If the Bluetooth® modem does not appear in the list, check **Show all BT Devices** to rescan. The modem may also need to have the power cycled in order to appear. After selecting the modem port, the **Identify Modem** button can be used if the modem is not easily detected among other modems. A long steady blink every second will help identify the modem selected.
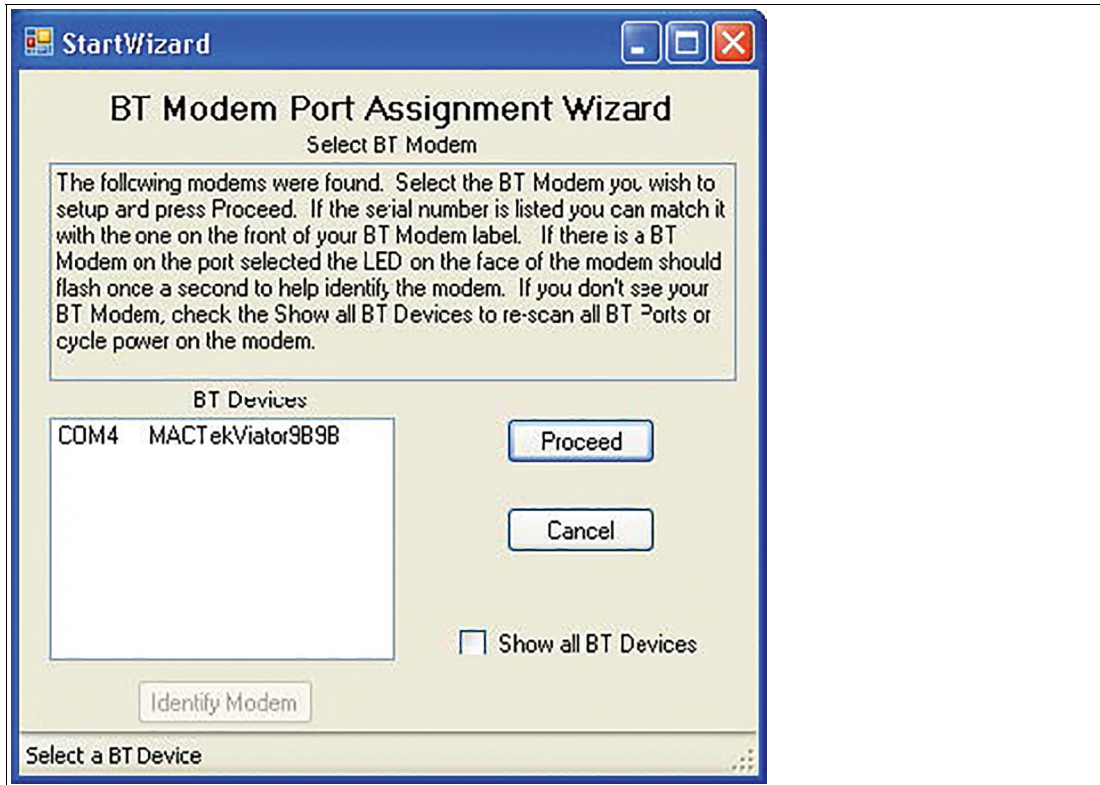


Figure 3.5

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3. After the HART Bluetooth® modem has been selected, the next step is to select a port to map the modem to. This is the actual port that a HART application uses to communicate through the modem. Select a port that your application can recognize. If the port is shown as "(in use)," do not choose it unless you are absolutely sure that you do not have any device on that port. If another BT modem or piece of equipment has reserved that port, it will not be possible to enable mapping for it.
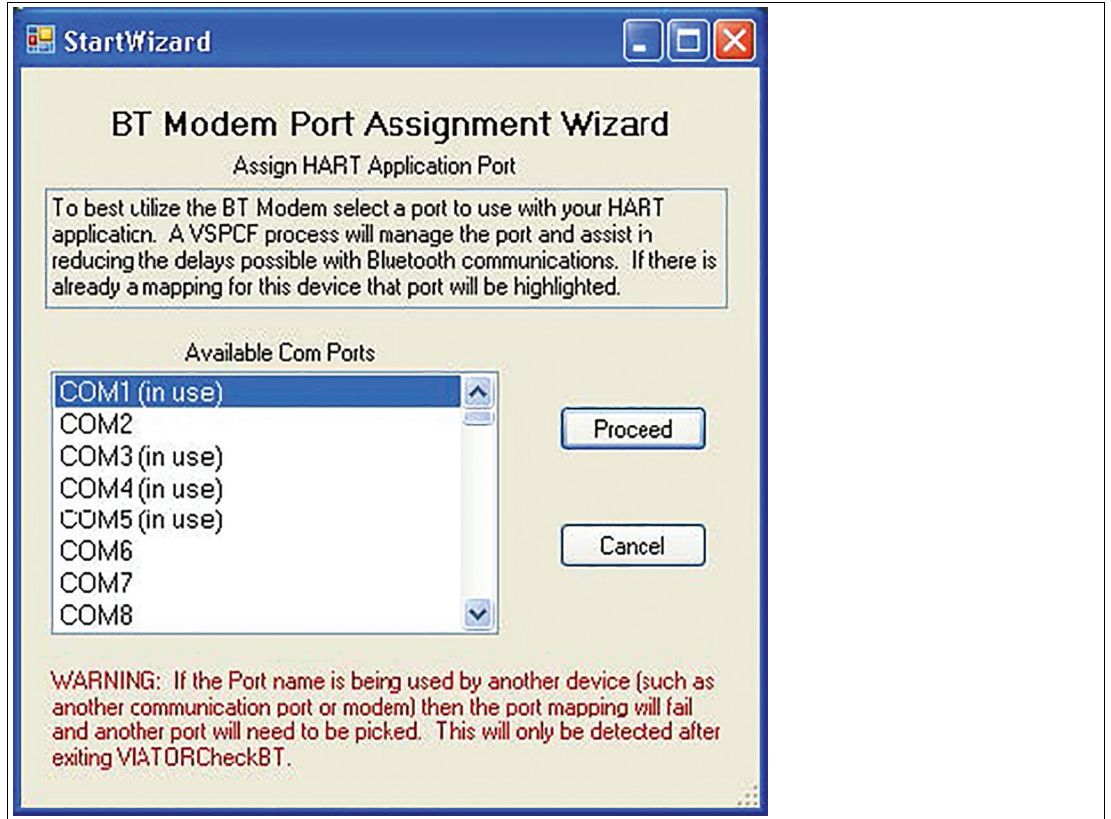


Figure 3.6

4. The final screen allows the mapping selections to be confirmed. The actual mapping will not occur until ViatorCheck is closed and VSPCF is run on that port.
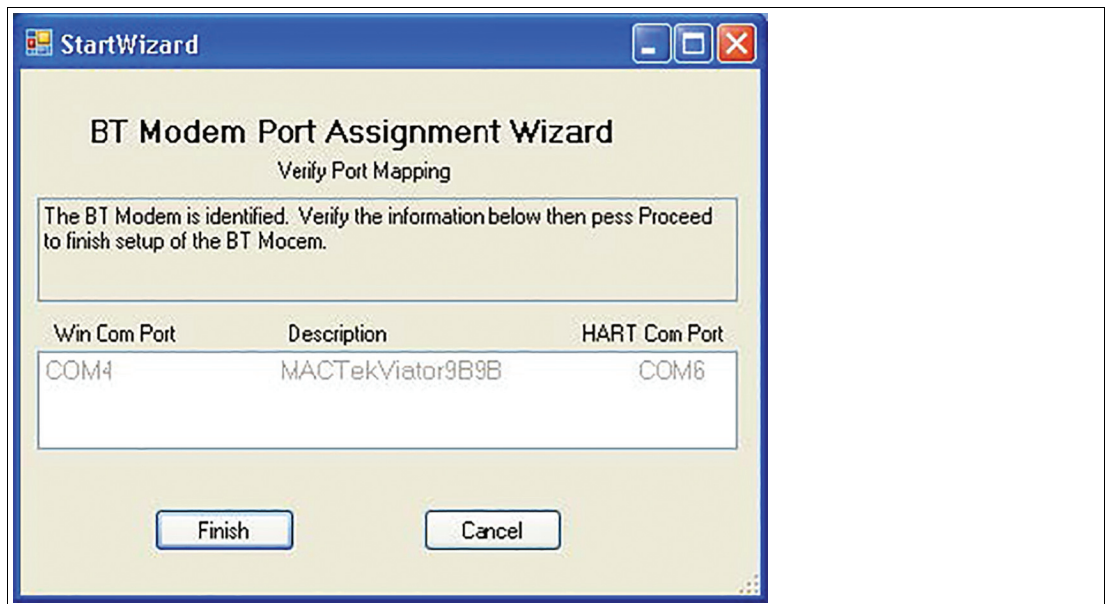


Figure 3.7

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## 3.2 HART Devices List

The HART device list displays all of the detected HART devices after a check has been performed. There are two types of checks that can be performed: **Check HART Device 0** and **Check All HART Devices**.
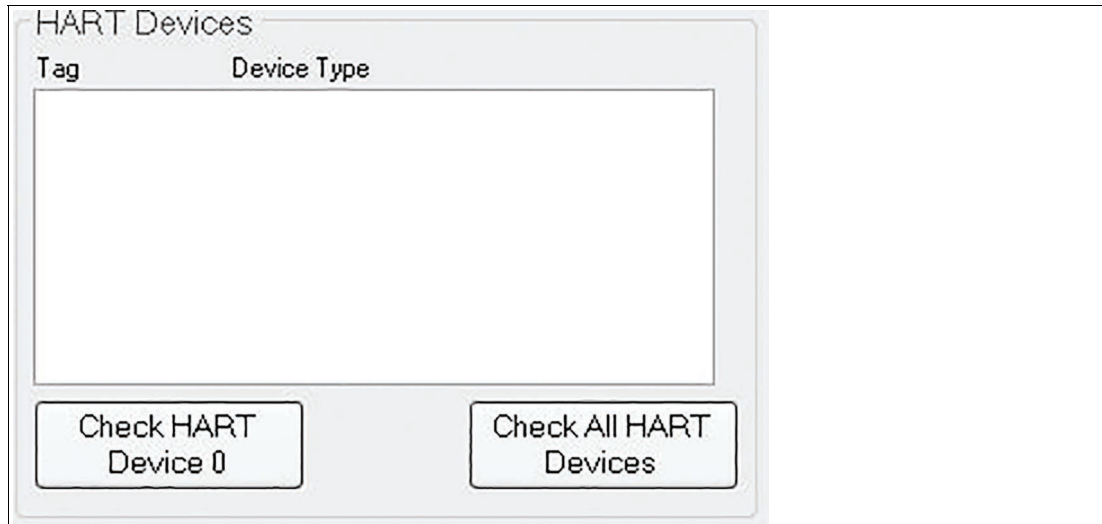


Figure 3.8

- **Check HART Device 0** checks for and displays a HART device existing on polling address 0 only.
- **Check All HART Devices** checks for and displays all HART devices existing on polling addresses 0 to 15.

When the check is complete, the first entry in the list will be selected and additional HART information will be retrieved from that device and displayed in the HART and modem information area.

If more than one device is detected, the active device can be selected by clicking on the entry in the list. When a new device is selected, additional HART information will be retrieved from that device and displayed in the HART and modem information area. After a HART device is checked, the HART Information tab displays information about the active device, such as the manufacturer ID, device ID, and the tag name.

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## 3.3 HART Device/Modem Information

The HART and Bluetooth® information area tabs display additional information about the active HART device. The tab for Bluetooth® information will only be shown if a Viator Bluetooth® modem is selected.

The port information tab allows the port mapping to be enabled or disabled for the selected device and the selection of a port from the available COM Ports to be mapped for the HART application COM port. When enabled, the mapping is shown in "Active Com Ports." If a port is shown as "(in use)," this means that a device has been previously located at this port. If you believe that this is no longer true and want to re-use one of the lower ports for applications that may only be able to work with ports COM1-8, then double-clicking on the port will switch its status to free. You can then assign a mapping to that port by selecting it and pressing **Apply**.
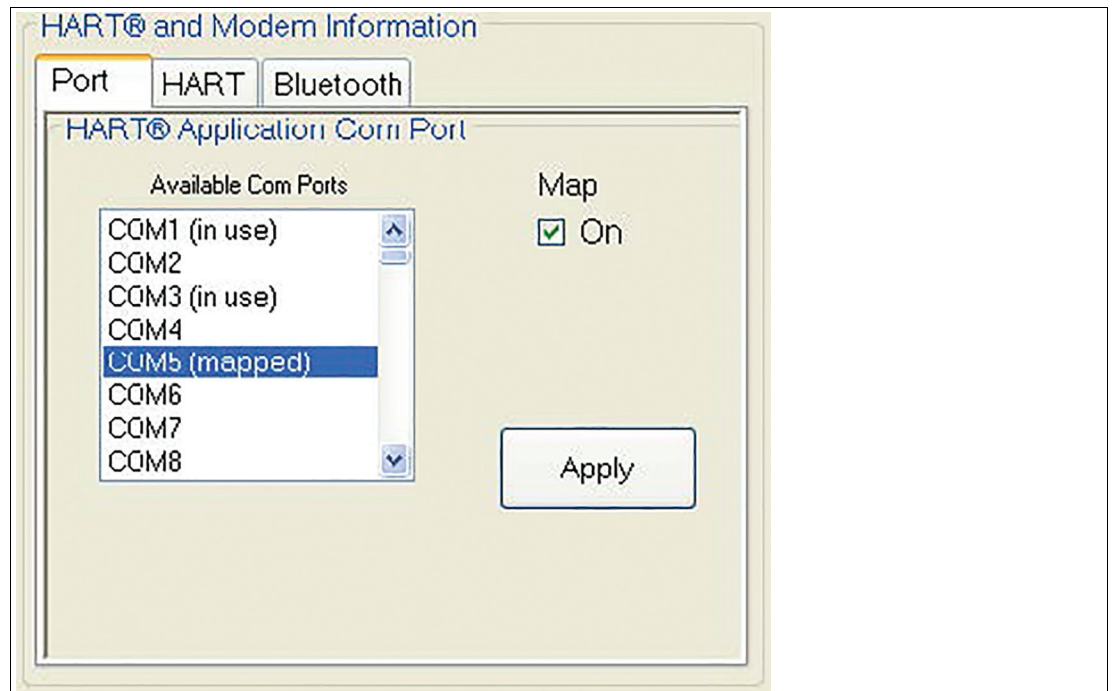


Figure 3.9

When a Bluetooth® modem is selected, the Bluetooth® tab will show the basic settings screen for the Viator interface. This screen shows the current firmware revision and a battery gauge for the Viator interface.
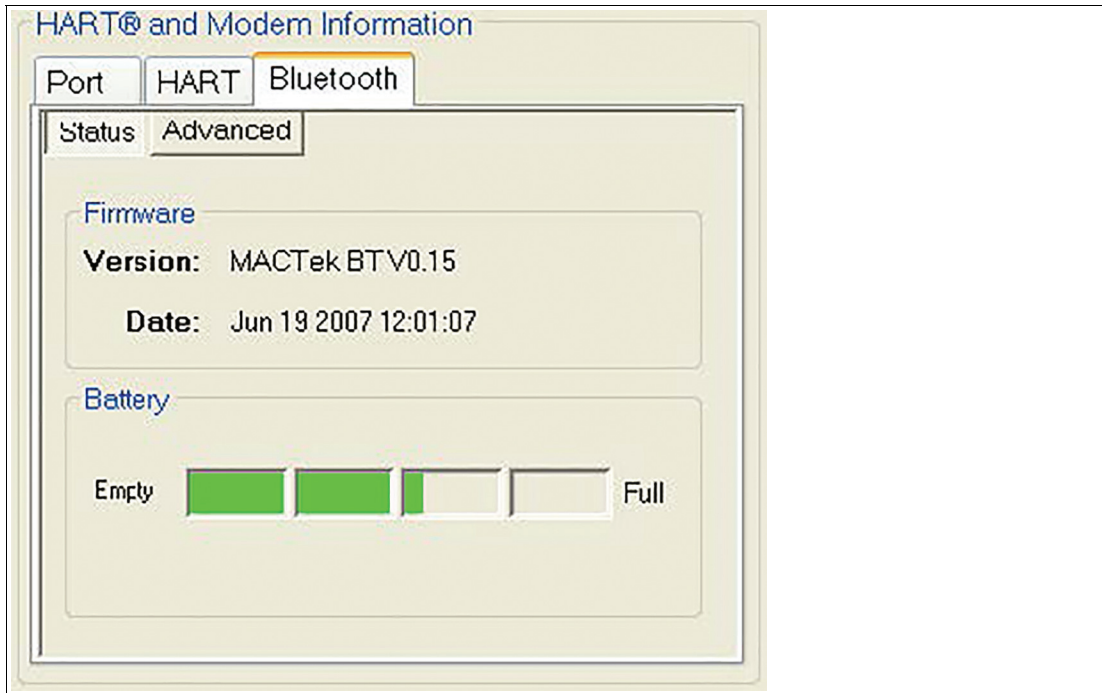
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Figure 3.10

Clicking on the Advanced Button will bring up advanced settings that can be used with the Viator Bluetooth® HART interface.

**Note**

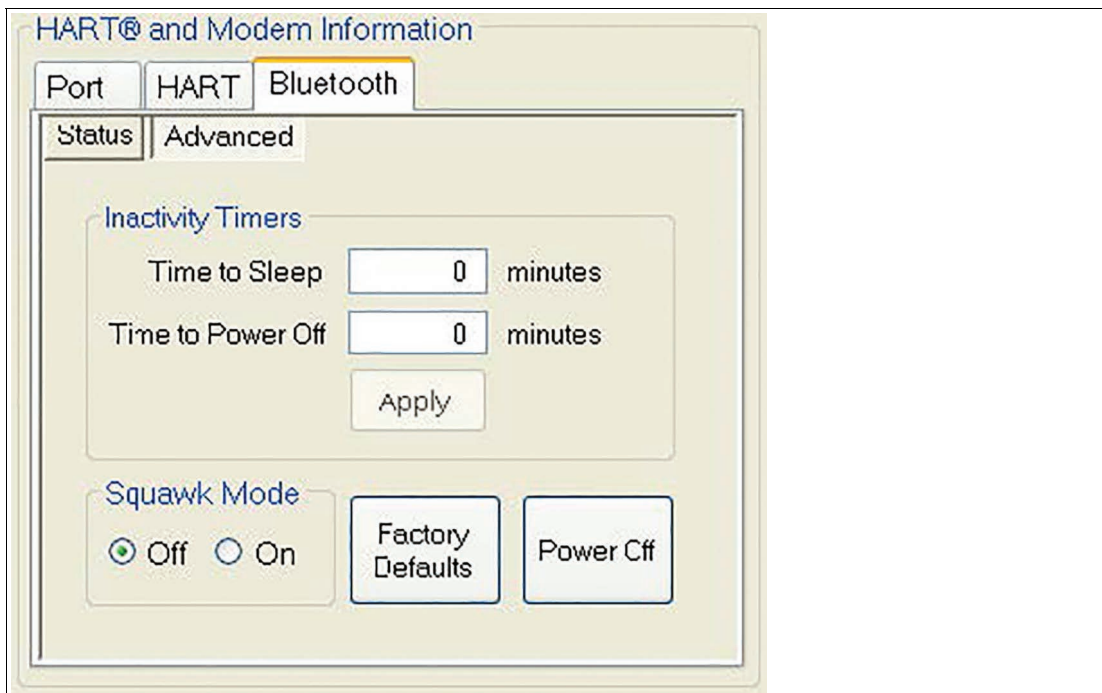Inactivity time is defined as the amount of time since the last HART message was received or transmitted.



Figure 3.11

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**Time to Sleep:** Amount of inactivity time (in minutes) after which the Viator interface will disconnect and enter a sleep mode (this helps to conserve battery life). When in sleep mode, connection can be reestablished from the PC to the Viator interface. If this setting is set to 0, the feature is disabled. To change this setting, enter in the new value and click Apply.

**Time to Power Off:** Amount of inactivity time (in minutes) after which the Viator interface will completely power off. Once the Viator is powered off, the power button must be pushed to turn it back on. If this setting is set to zero, the feature is disabled. To change this setting, enter in the new value and click Apply.

**Squawk Mode:** Set to On to enable Squawk Mode; Off will disable Squawk Mode. Squawk Mode is a way to identify a Viator interface and, when enabled, it will display a unique LED blink pattern. This is useful when multiple Viator interfaces are being used.

**Factory Defaults:** This button resets the Viator interface back to the factory default settings. Resetting to factory defaults will also initialize a number of settings with the Bluetooth® connection and takes 20 to 30 seconds to complete. While in progress, the LED on the Viator interface will blink on and off slowly until complete. This will cause the COM port to close.

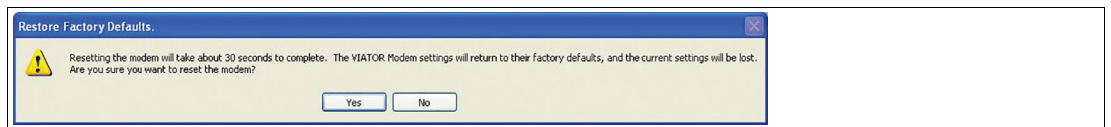The following prompt will be displayed when this item is selected:



Figure 3.12

**Power Off:** Clicking this button will turn off the Viator interface and cause the COM port to close. Once the Viator is powered off, the power button must be pushed to turn it back on.

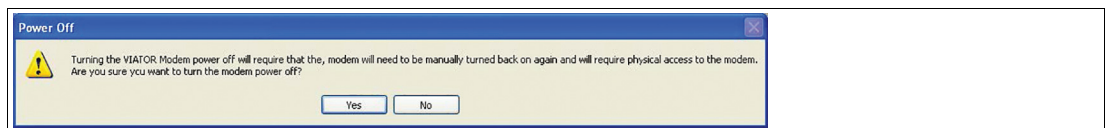The following prompt will be displayed when this item is selected:



Figure 3.13

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## 3.4 HART Device Primary Variable Readings

After a HART device has been selected in the HART Device List, the primary variable for the active device can be read. In the lower right part of this area, the HART primary variable limits are displayed for the active device.
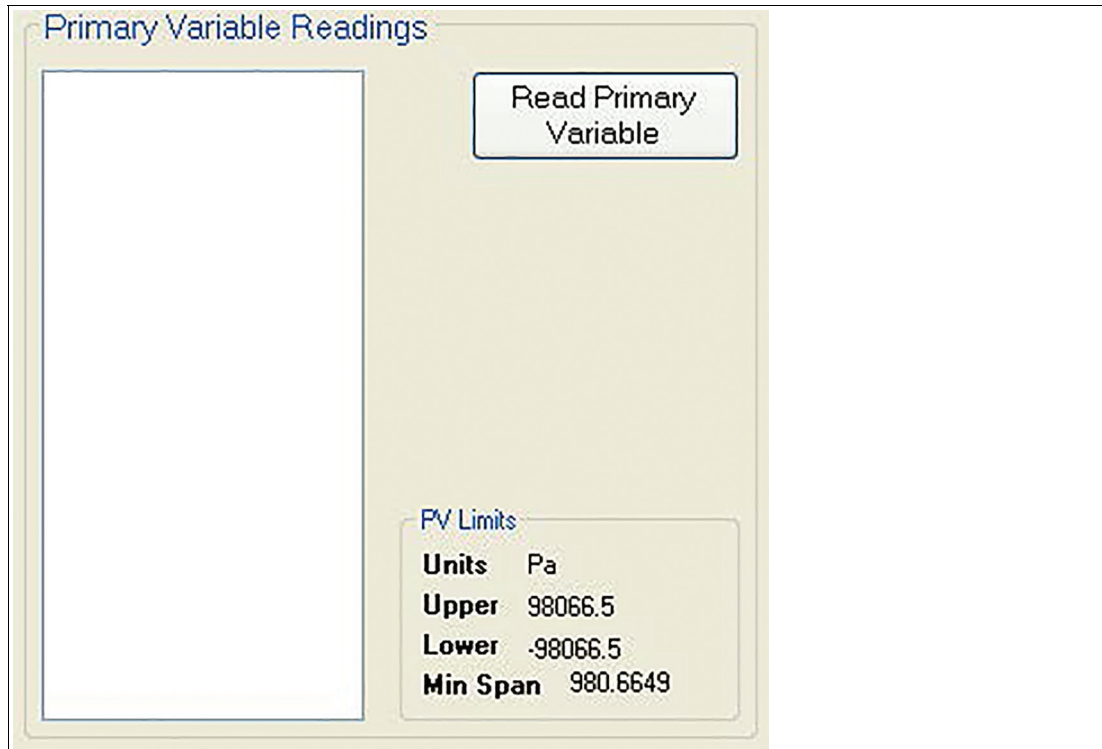


Figure 3.14

**Read Primary Variable:** Clicking this button will read the primary variable every 1 to 2 seconds from the active HART device and display it in the window. Once pressed, the button will change to say Cancel, which can be clicked to cancel the reading of the primary variable.
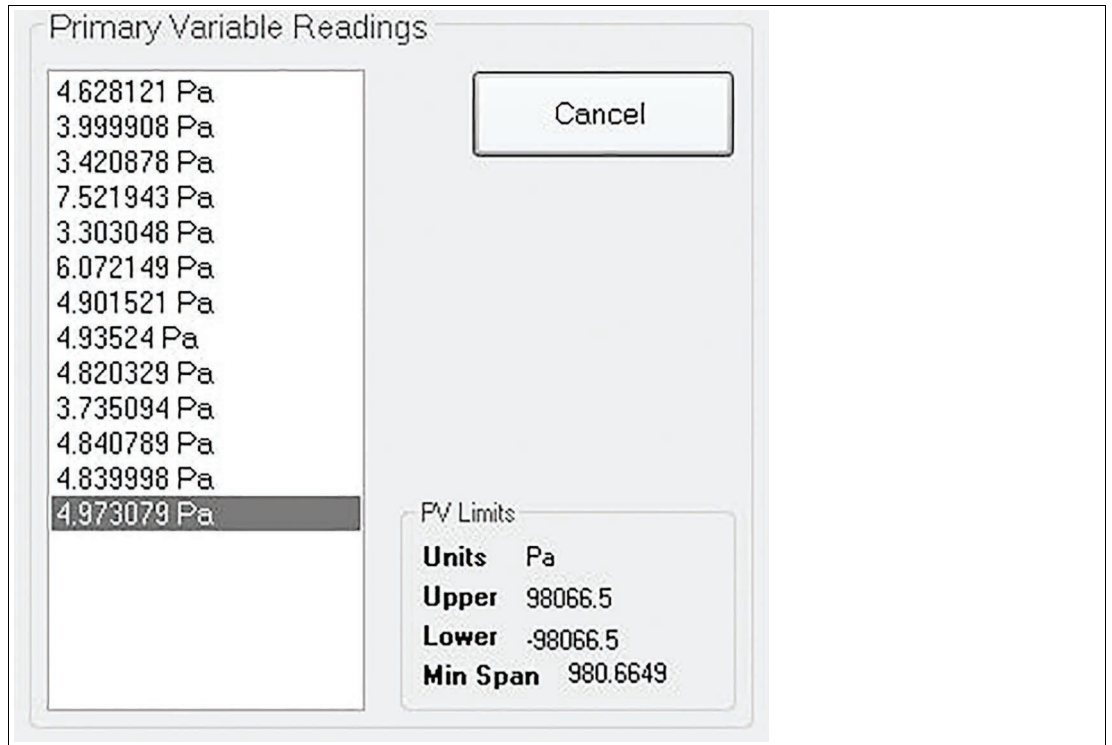
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Figure 3.15

## 3.5 Status Message Line

This line will display status information for the current operation, such as opening a COM port or reading the primary variable.



Figure 3.16

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## 3.6 Exiting ViatorCheck

When exiting **ViatorCheck**, any ports shown as mapped in the active COM ports window will get mapped if Disable Port Mapping is not checked. This mapping will cause the program VSPCF to be started for each mapped port. When active, the VSPCF program will appear in the Sys Tray. Each time ViatorCheck is started, the mapping for these ports will be discontinued until after ViatorCheck is exited. Each individual port has the ability to be mapped or not, and all mappings can be disabled by selecting Disable Port Mapping in the active COM ports window.

If mapping is enabled, the COM port mapping window will be displayed. This shows which port a HART application should use (HART COM Port) and which modem it is associated with (Win Com Port). If there are other ports that may have been mapped previously that are no longer needed, they can be selected and deleted. If any ports conflict, it will be shown here and the conflicting port can be deleted. After clicking **Exit** on this screen, the ports will be set up and VSPCF will be run for each port in the list.
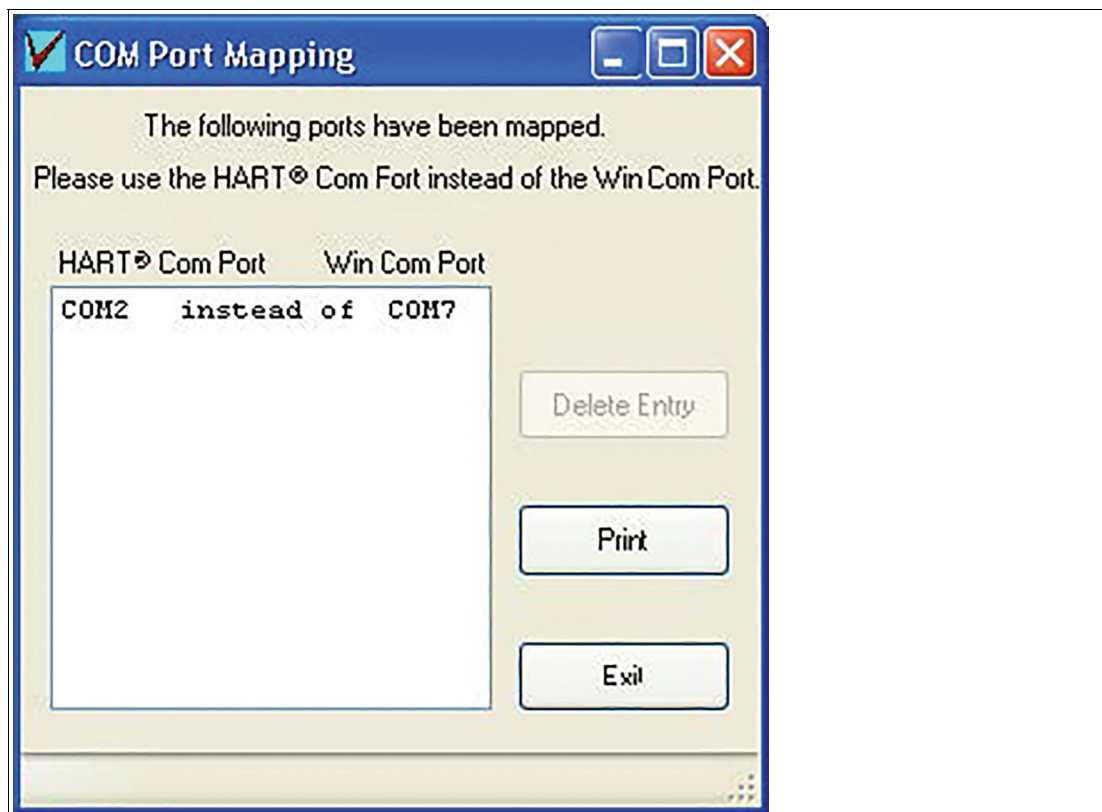


Figure 3.17

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