



Falcon Series Application Note: Installation Guide

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Installing Software, Drivers and Approving Thunderbolt 3

Successful operation of the Falcon / Raptor application and instrument requires installation of several software components and instrument drivers, and approval of the Thunderbolt 3 connection in the controller PC's operating system.

Software installation

Three software components must be downloaded separately and installed in the correct order:

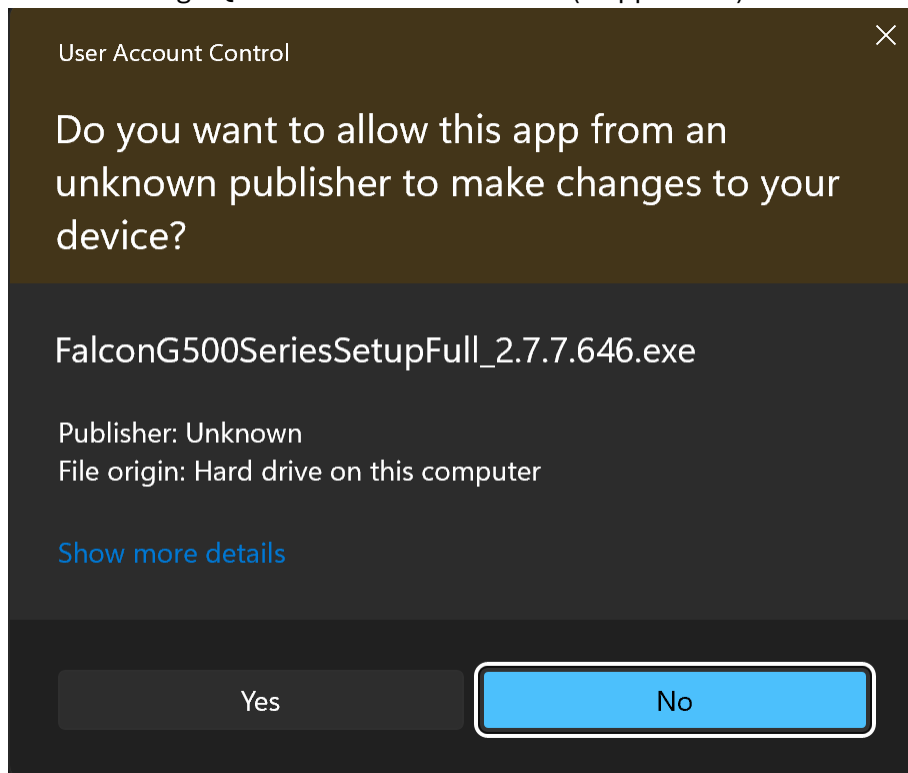
1. Download and Install Microsoft SQL Server 2017.
2. Download and Install Microsoft Visual Studio Community/Professional 2015 with Update 3 or Visual Studio Isolated Shell (see Step 2 in "Configuring software" below).
3. Download and install Falcon/Raptor application.

Only after both SQL and Visual Studio have been installed should the Falcon / Raptor application installer be launched to install the application and configure the SQL database and Visual Studios.

Download these three components from the links provided in the SW registration email.

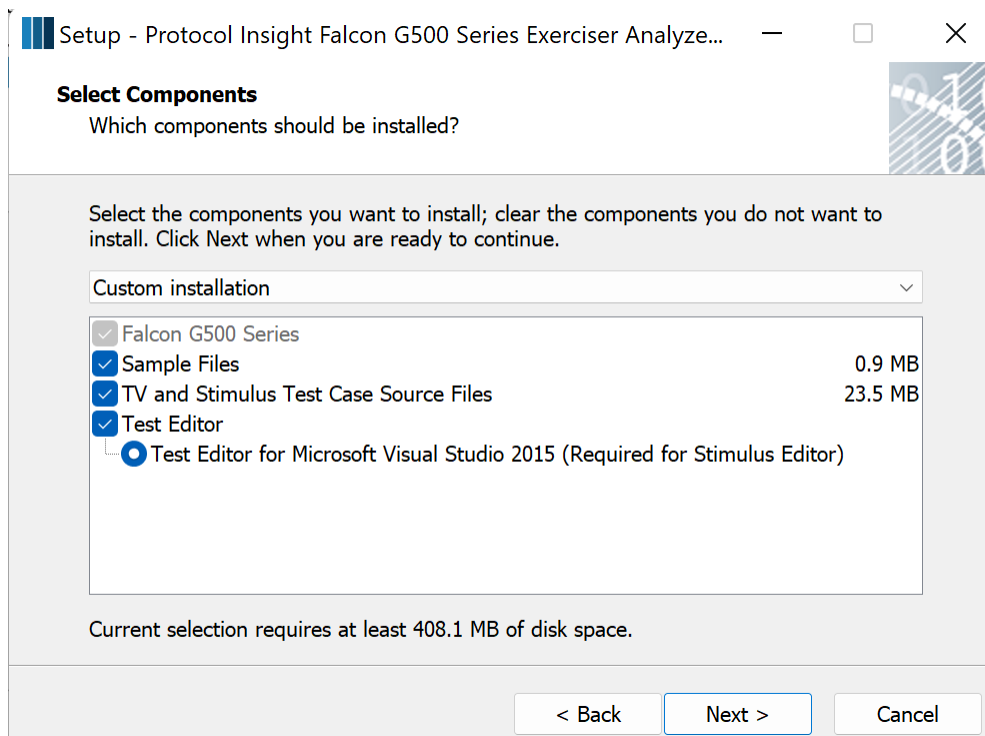
Configuring software

1. After installing SQL Server and Visual Studio (if applicable) launch Falcon Setup.





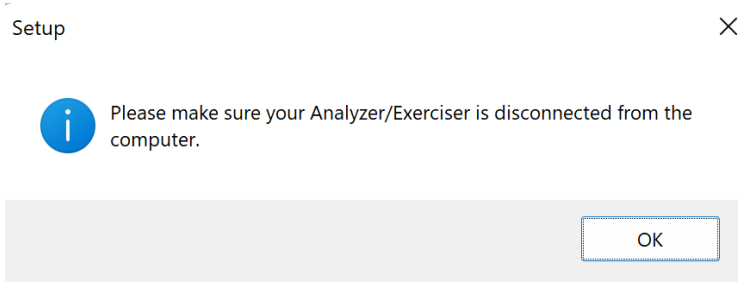
2. During installation process you will need to choose your Test Editor configuration:



- If you are configuring a Falcon Analyzer (G500) check the Test Editor Isolated Shell option.
- If you are configuring a Falcon Exerciser / Analyzer (G550) check the Test Editor for Microsoft Visual Studio option.



- During the installation process you will be prompted to disconnect the instrument hardware before proceeding:



If you are installing the application FW/SW on a remote instrument and cannot disconnect the instrument, press Shift-C to bypass the hardware when the Command window pops up. The Command window is installing the Thunderbolt drivers for the instrument.

```
C:\Windows\system32\cmd.exe
difax_uninstall_inf: err e0000302, last event 0, last error 0. ERROR_DRIVER_PACKAGE_NOT_IN_STORE
Warning: INF copy for C:\Program Files\LeCroy\UniPro M Series\driver\ProtocolInsightInstrument_driver.inf not found => not deleted.
Warning: the device (hwid:ProtocolInsightDriver) is not installed.
uninstall: completed successfully
WDREG utility v14.2.0. Build Nov 12 2019 10:20:09

Processing HWID ProtocolInsightDriver
Installing a signed driver package for ProtocolInsightDriver
LOG ok: 1, ENTER: DriverPackageInstallA
LOG ok: 1, ENTER: DriverPackageInstallW
LOG ok: 1, Looking for Model Section [DeviceList.NTamd64]...
LOG ok: 1, Installing INF file 'C:\Program Files\LeCroy\UniPro M Series\driver\ProtocolInsightInstrument_driver.inf' (Plug and Play).
LOG ok: 1, Looking for Model Section [DeviceList.NTamd64]...
LOG ok: 1, Installing devices with Id "ProtocolInsightDriver" using INF "C:\Windows\System32\DriverStore\FileRepository\protocolinsightinstrument_driver.inf_amd64_2d8d5ef245b19f8e\ProtocolInsightInstrument_driver.inf".
LOG ok: 1, ENTER UpdateDriverForPlugAndPlayDevices...
LOG ok: 0, RETURN UpdateDriverForPlugAndPlayDevices.
LOG ok: 1, Installation was successful.
LOG ok: 0, Install completed
LOG ok: 1, RETURN: DriverPackageInstallW (0x0)
LOG ok: 1, RETURN: DriverPackageInstallA (0x0)
difax_install_preinstall_inf: err 0, last event 0, last error 0. SUCCESS
install: completed successfully
WDREG utility v14.2.0. Build Nov 12 2019 10:20:09

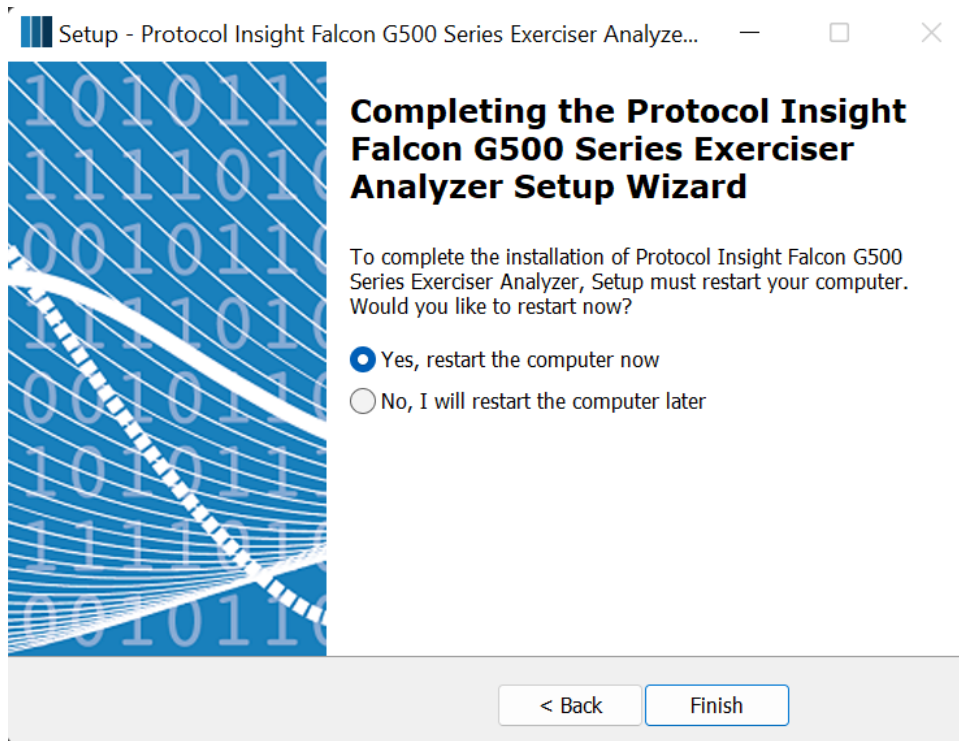
Processing HWID PCI\VEN_10EE&DEV_7034&SUBSYS_51BA4D2F&REV_00
Non-DIFxAPI uninstall, driver_in_store 0, devnode_exists 0, devnode_found 0
```

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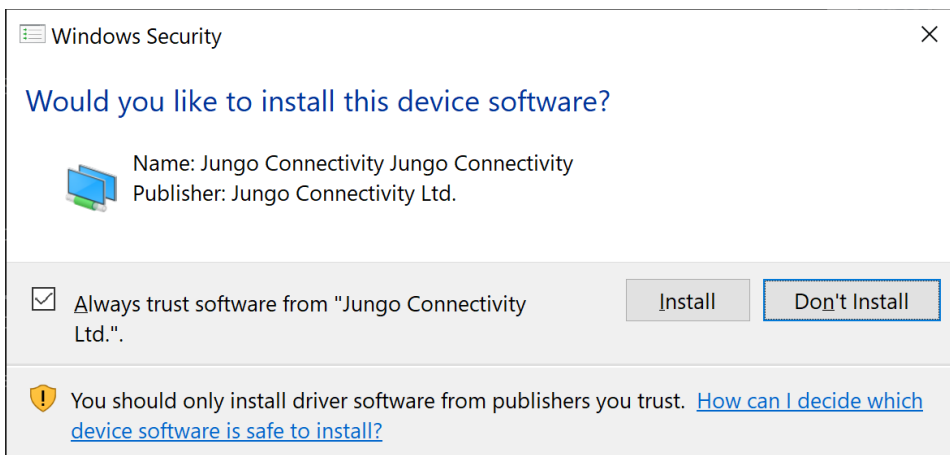
- The application software installation will complete with this dialog. Depending on what you have open at the time of the installation, you may or may not be prompted to restart your computer.



Installing the Instrument Drivers

Installation of instrument drivers should occur automatically with the installation of the Falcon/Raptor application software. However, if the instrument is not recognized after completing the application software installation follow these steps to manually install the drivers:

- With the instrument powered on, connect the instrument to the controller PC via a Thunderbolt 3 cable with Type-C connector.
- Check “Always trust” and click Install at this dialog box:



Approving Thunderbolt 3 for Windows

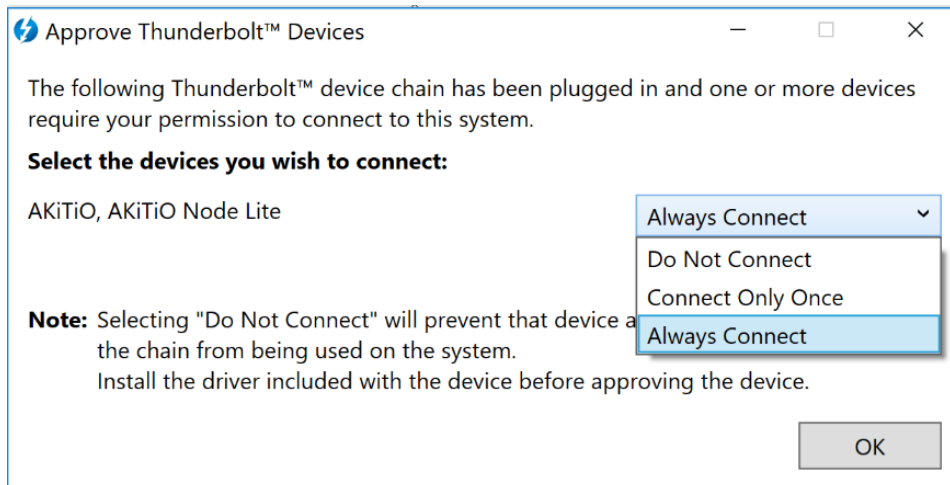
Approval of the Thunderbolt 3 drivers should occur automatically with the installation of the Falcon/Raptor application software. However, if the instrument is not recognized after completing the application software installation follow these steps to manually approve the Thunderbolt 3 drivers:

1. With the instrument powered on, connect the instrument to the controller PC via a Thunderbolt 3 cable with Type-C connector.
2. You may be asked to allow administrator privileges to configure Thunderbolt3, if so click OK:





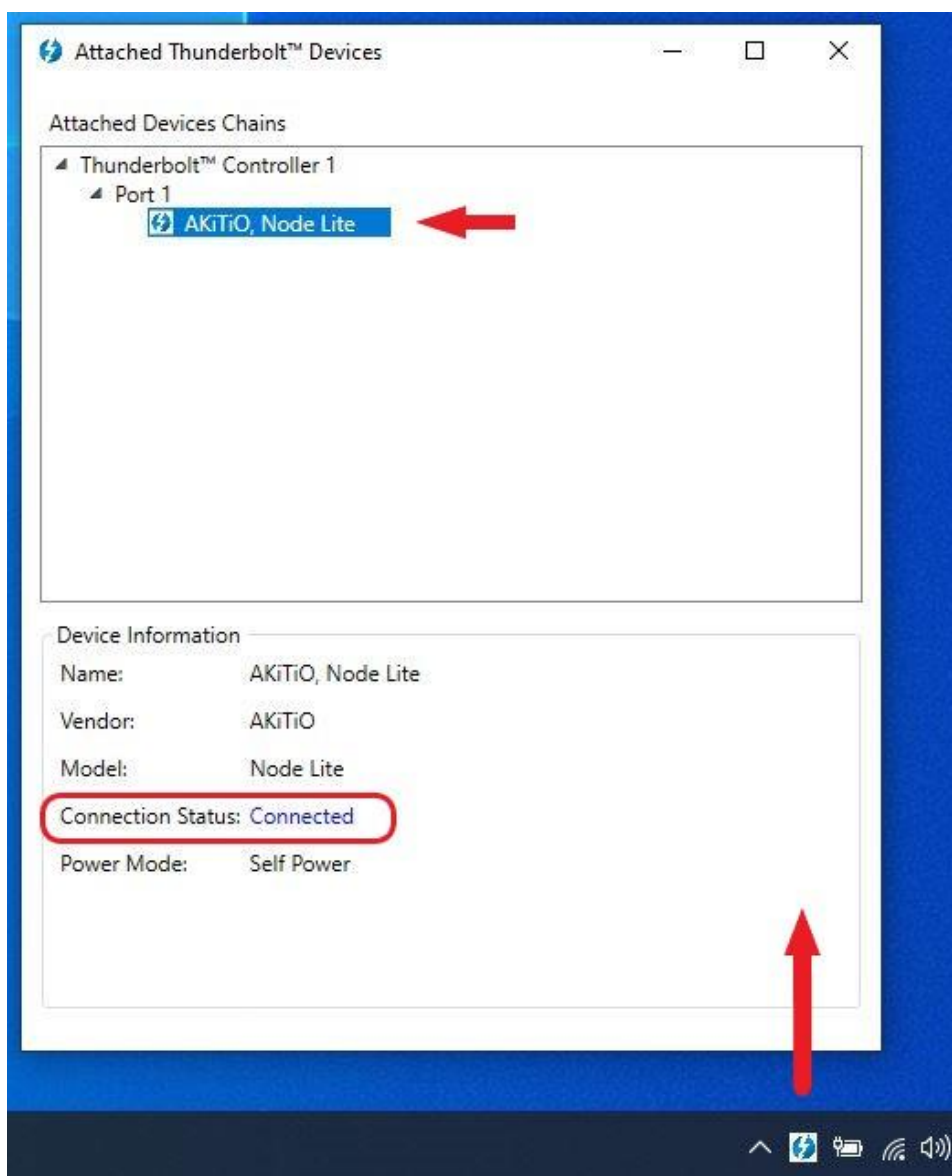
- When the Approve Thunderbolt Devices dialog appears select “Always Connect”:



If the Approve dialog does not appear, you may need to open the Thunderbolt Software applet manually from the system tray to verify that the device is approved and connected (see Step 4 below).



4. Verify that the Thunderbolt 3 device has been approved and connected. In the application tray you should see the Thunderbolt Software icon. Open it, select the Node Lite device and review the Connection Status:



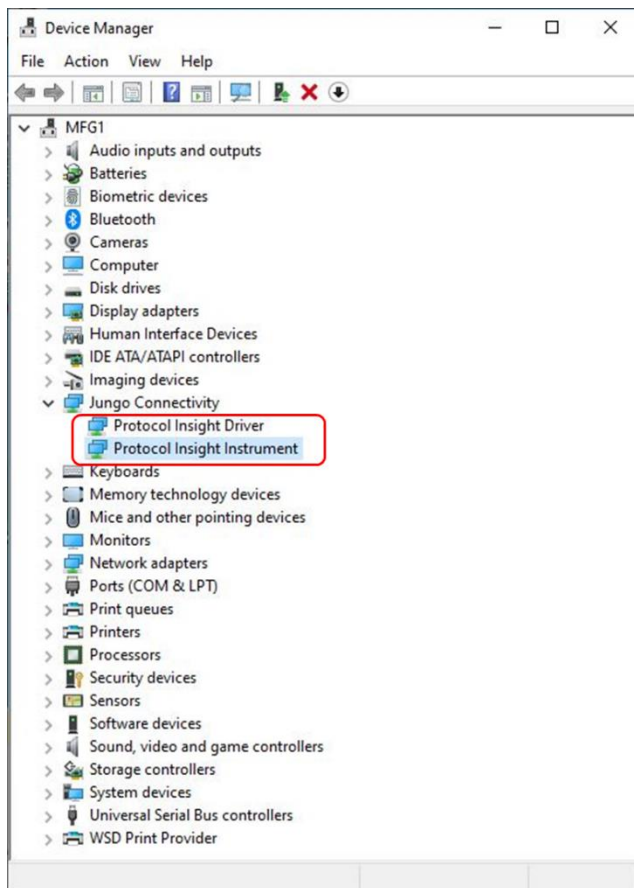
If it is “Not Connected”, click the status to re-enter the connection approval dialog.



Verifying Instrument Driver Installation

1. Go to Device Manager and verify that the instrument can be seen by the PC. In Device Manager:
 - a. Select View- > Devices by type.

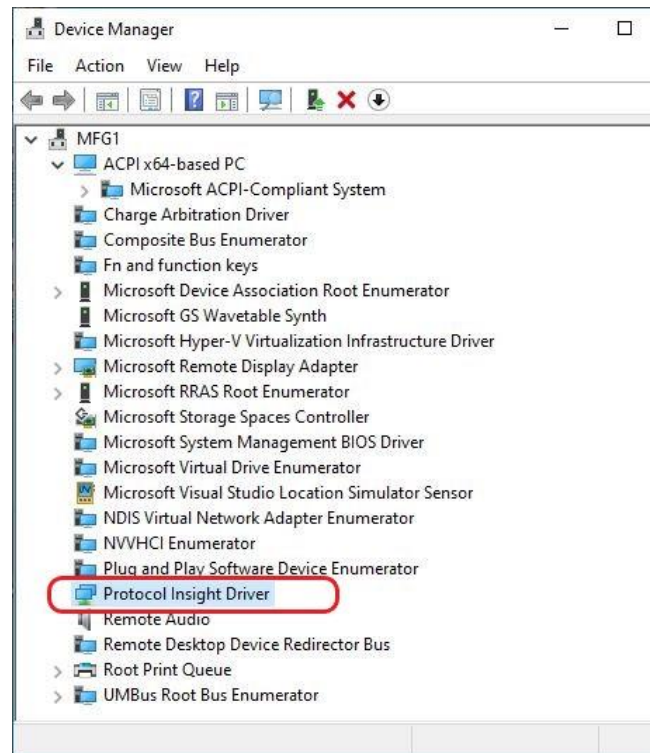
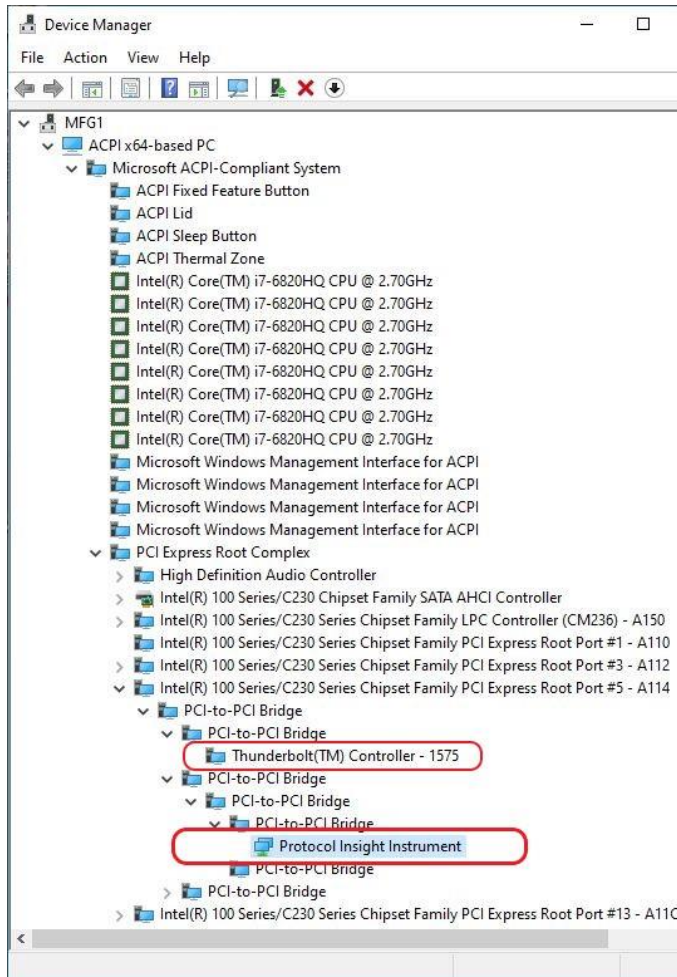
You should see the instrument drivers under Jungo Connectivity. The device names will be Protocol Insight Driver and Protocol Insight Instrument:





b. Select View -> Devices by connection.

You should see the Thunderbolt Controller, Protocol Insight Instrument and Protocol Insight Driver devices:





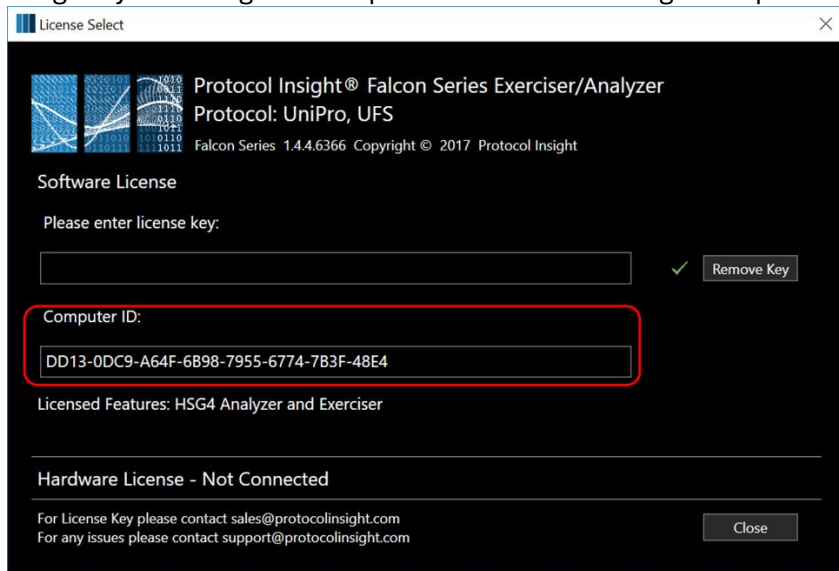
Licensing - Offline with Trace Validation, Offline with TV and Editors

Only the Falcon/Raptor Offline application software with Trace Validation and/or Editors requires a license. Offline application without Trace Validation or Editors does not require license activation.

Any PC connected to a Falcon or Raptor instrument will obtain its license from that instrument.

Download the application software from <https://www.protocolinsight.com/support-materials/>

1. Install all software and launch the application.
2. To activate Offline with Trace Validation and/or Editors, request a SW license from Protocol Insight by obtaining the Computer ID from this dialog at Help->License...:



3. Copy the 32-character Computer ID in the red box and email to Protocol Insight at support@protocolinsight.com (note: to avoid transposition errors do not send a screenshot)
4. **Specify that you are requesting an Offline with TV and/or Editors license and provide the purchase order number associated with that license.**
5. Protocol Insight will generate a license activation key from the unique machine-specific Computer ID and email back.
6. Copy the license activation key into the top box “Please enter license key” and click the close button.

Notes:

1. The Falcon/Raptor application software can be installed on a PC without a license, if it is only used in offline mode without Trace Validation or Editors. Once downloaded and installed the software can be run offline without following these steps to obtain a license key.
2. Falcon Offline Viewer with Trace Validation and/or Editors requires a license to function.
3. **Software licenses are not transferable.** Once a license has been activated on a specific computer it cannot be moved to another.

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Installing Multiple Versions of Software

You can install and run multiple versions of software with the following releases:

- Falcon Raptor G400 Series, v2.6.4.29 and greater
- Falcon G500 Series, v3.0.0.1246 and greater



Only one software instance can be running and attached to an instrument at any given time.

To install and run multiple instances of software follow the installation instructions and guidelines listed below.

Instructions for Falcon G400 Series and G500 Series Software

1. Cleanly uninstall all current Protocol Insight software instances, then reboot.
2. Install the Falcon G400C software, at the time of writing v2.6.4.29 is the latest version available.
3. Use command line switch “/addversion=yes” to install the Falcon G500C software, at the time of writing v3.0.0.1246 is the latest version available.
e.g. `FalconG500SeriesSetupFull_3.0.0.1246.exe /addversion=yes`
4. If you want to install a newer version of the v3.x.x software, follow the same process as outlined in Item #3.

Instructions for Falcon G500 Series Software

1. Cleanly uninstall all current Protocol Insight software instances, then reboot.
2. Install the Falcon G500C software, at the time of writing v3.0.0.1246 is the latest version available.
3. Use command line switch “/addversion=yes” to install another version of the the Falcon G500C software.
e.g. `FalconG500SeriesSetupFull_3.x.x.xxx.exe /addversion=yes`
4. If you want to install a newer version of the v3.x.x software, follow the same process as outlined in Item #3.



When you install multiple versions of the software the Utilities installation is shared between the versions. Newer versions of the Utilities software are backwards compatible with the older software releases.

If you want to install a new v3.x.x version and remove the prior v3.x.x version, make sure you uninstall the old v3.x.x version before installing the new one. If you reverse this order, you will likely end up with nonoperational installations. Remember to use the /addversion=yes switch listed in Item #3 above.

To avoid possible conflicts and nonoperational installations, you may find it simpler to uninstall all current software instances and then follow the instructions as listed above.



Contact Information

1. For additional information, to request a demonstration or quote, or place an order, please contact your local Protocol Insight representative or sales@protocolinsight.com
2. Support materials and examples files are available at <http://www.protocolinsight.com/support-materials/>
3. For technical support please contact your local Protocol Insight representative or support@protocolinsight.com