



1 Safety-related information

- Before using this product, carefully read these instructions for use and those of the associated products.
- Strictly follow the instructions for use. The user must fully understand and strictly observe the instructions. Use the product only for the purposes specified in the intended use section of this document.
- Do not dispose of the instructions for use. Ensure that they are retained and appropriately used by the product user.
- Only trained and competent users are permitted to use this product.
- Comply with all local and national rules and regulations associated with this product.

2 Intended use

The firmware programming tool is used to update the firmware of FPS-COM 5000 communication units via FPS-COM 5000 update cable (part number R62750).

3 Installation

3.1 Prerequisites

To install and use the firmware programming tool the user must be familiar with PCs equipped with Microsoft Windows. The user needs administrator rights for the respective PC for the installation.

The PC on which the software is to be installed must meet the following minimum requirements:

- Operating system: Windows 7, Windows 10
- Free hard disc space: 1 GB
- 1 free USB port

3.2 Installing the firmware programming tool

Note: To make sure that the installation will be successful, store the installation files locally, but not on a network drive.

1. Select **Setup.exe** from a local folder on your PC.
2. Follow the instructions of the install wizard.
Do not change the given destination directories.
The installer will install both the programming tool and all needed National Instruments drivers.
3. When the installation is finished, select **Next**.
The installer will start another install wizard.
4. Select **Extract** to start the installation procedure.
5. Follow the instructions of the install wizard.
The installer will install FTDI's Virtual COM port drivers for the communication cable.
6. When the installation is finished, select **Finish**.
The installer will start another install wizard.
7. Select **Next** to start the installation procedure.
8. Follow the instructions of the install wizard.
The installer will install SignaKlara development tools (EDK 4).
9. Follow the instructions of the install wizard.
10. Restart the computer if necessary.

4 Updating a communication unit

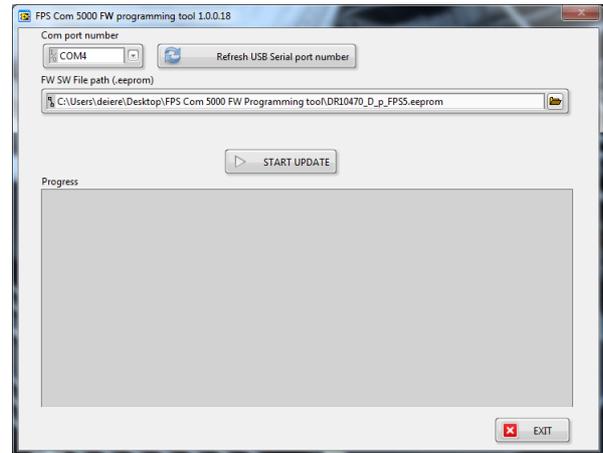
4.1 Update procedure

1. Connect the update cable to the PC. Wait until the update cable driver is installed on the computer.

Windows will automatically assign a virtual COM port to the update cable. The COM port is indicated in the Windows Device Manager under **Ports (COM & LPT)**.

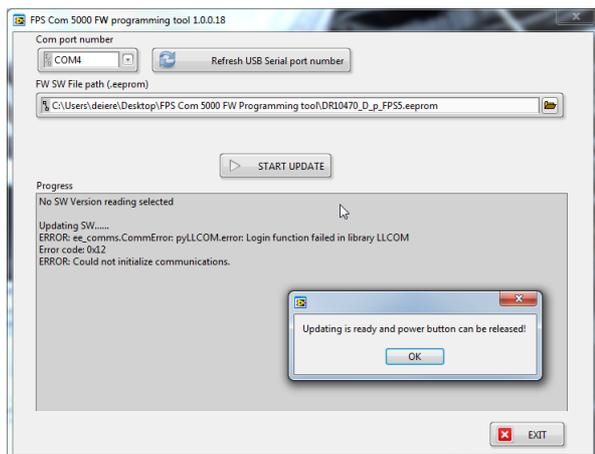
2. Start the FPS-COM 5000 firmware programming tool.

The following window will appear:



3. Check the COM port number. It must be smaller than 8 to ensure that the update works. If it is not, proceed as described in section 4.2 on page 2.
4. Select the correct firmware file by clicking the folder icon in the **FW SW file path (.eeprom)** line.
The correct firmware file name is given in the release note.
5. Select **START UPDATE**.
6. Make sure that batteries are inserted in the battery compartment and that the battery cover is closed (torque: max. 0.5 Nm).
7. Connect the update cable to the communication unit.
Tighten it properly (torque: 0.5 Nm).
8. Press and hold the on/off button of the communication unit until instructed otherwise.
9. Select **OK** to start the firmware update.
10. Acknowledge the message when the update is finished.
11. Check the progress field for any error message. The firmware version must have changed to the version detailed in the release note.

Note: The dialog will indicate a successful update even if an error occurred and the update failed. In case of any update failure, you may repeat the update without any danger of destroying the communication unit.



12. Register the serial number of the updated communication unit according to the local requirements.
13. If you want to update another communication unit, connect the update cable to the new unit, select **START UPDATE**, and follow the instructions above.

4.2 Update errors

Note: If an error occurred, repeat the update. This might usually help.

Fault	Cause	Remedy
Firmware version is not indicated in the FW SW file path (.eeprom) line.	Path name is too long.	<ul style="list-style-type: none"> Copy firmware update file to another location (for example C:\).
Error code 0x12 is indicated.	Communication with FPS-COM 5000 failed.	<ul style="list-style-type: none"> Check that the batteries are inserted correctly. Check that the update cable is securely connected to both PC and communication unit. Check that the referenced COM port in the programming tool equals the COM port assigned to the update cable in the Windows Device Manager and that the port number is lower than 8. If necessary, assign a lower COM port number in the Windows Device Manager's advanced settings. Make sure that there is no conflict to any other USB device on your computer. If necessary, remove all other USB devices.
COM port number is LPT1.	Update cable was not available at program start.	<ul style="list-style-type: none"> Select Refresh USB serial port number. The COM port number should change. If the COM port number does not change, the update cable is not connected. Remove and reinsert update cable. Manually assign a COM port number in the Windows Device Manager.
COM port number exceeds 8.	Windows will assign a new virtual COM port number for every new update cable. If the number is higher than 8, the firmware programming tool will not work.	<ul style="list-style-type: none"> Manually assign a lower COM port number in the Windows Device Manager.