

Updating Firmware FieldGuard LoRaWAN Stations.

Firmware is an essential part of the FieldGuard Stations. Firmware is the internal software running inside the Stations onboard processor, controlling all operations. We continuously work to improve the firmware making the station more robust, consume less energy or integrate new sensors and features for the FieldGuard Station. When updating the firmware station settings stay intact, so you don't have to re-configure the station with sensor settings and measurement intervals etc. This manual describes how you can update your FieldGuard Station with the latest firmware.

Before updating the firmware, check if the firmware you want to update is applicable for your type of station. Currently we have 4 different versions of the firmware available for the stations as mentioned below:

01xDE6	: This is the latest version available for the FieldGuard Mini Stations
02xFF2	: This is the latest version available for the FieldGuard Delta-T stations
03xFF2	: This is the latest version available for the FieldGuard AquaCer Stations (ground water Level)
04xDEB	: This is the latest version available for the Rain Collector Stations

Updating process:

1. Download the firmware bootloader from our website
2. Download the latest firmware from the FieldGuard website
3. Connect your computer to your FieldGuard Station
4. Run the firmware bootloader program
5. Check current version of the installed firmware and open the new firmware file
6. Confirm that you want to update the firmware -> NEXT
7. Press Finish after the update is completed

After finishing the updating process you can run the bootloader again to check if the firmware update was successful.

The bootloader software as well as the latest Firmware for your station can be downloaded from our website. To go directly to the download page click on the link below.

<https://www.fieldguard-stations.com/download/software.html>

If you need support with this procedure or if you have questions regarding the new version of the Firmware you can always call us at +31 (0)543 472 334 or send an email to info@fieldguard-stations.com

A detailed description of the update procedure is found on the next pages.

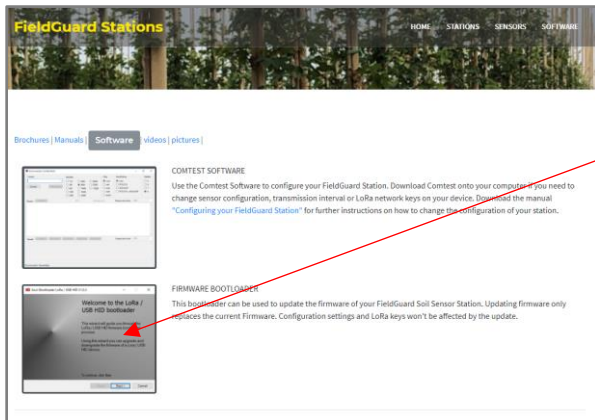
Detailed description of the firmware updating process:

ESTEDE | Technologies bv

Vierde broekdijk 1, 7122 JD Aalten (the Netherlands)

Phone: +31 (0)543 472 334, Email: info@fieldguard-stations.com, Website: www.fieldguard-stations.com

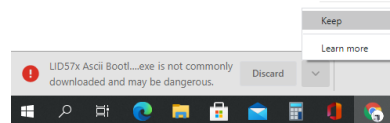
1. Downloading the firmware and bootloader from our website:



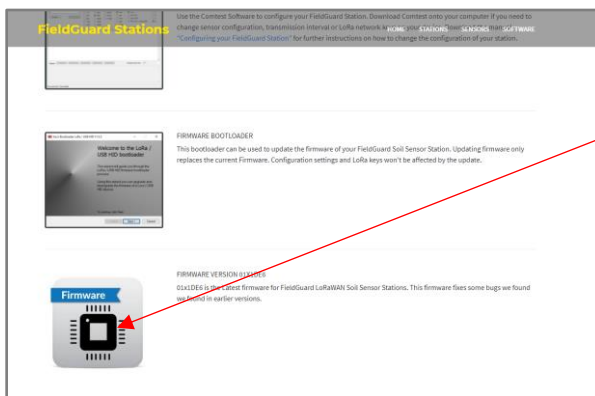
Go to :

<https://www.fieldguard-stations.com/download/software.html>

The bootloader will be downloaded to the download folder on your computer. Your computer might give you a warning when downloading the software (because it is a .EXE file) Just press the down button (behind discard) en then press Keep to download the software anyway. (see image below)



2. Download the latest firmware from the FieldGuard website



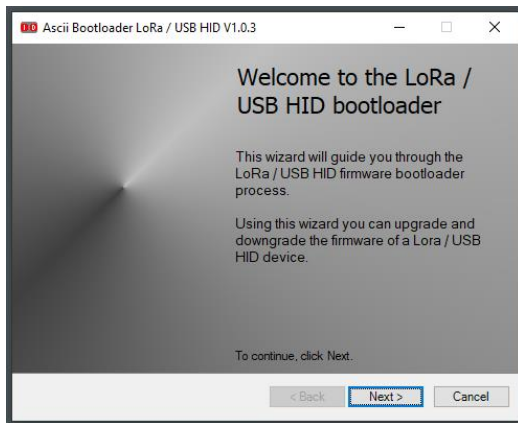
Latest firmware for your FieldGuard Station.

Look on the Download page for this picture and check the description of the Firmware to see if this Firmware is applicable for your station.

3. Connect your computer to your FieldGuard Station

Connect your FieldGuard Station to your computer using a USB to Mini USB cable. For more information about how to connect your computer to the station see the Manual "CONNECTING YOUR FIELDGUARD STATION TO YOUR COMPUTER" available on our download page on the website <https://www.fieldguard-stations.com/download/manuals.html>

4. Run the firmware bootloader program



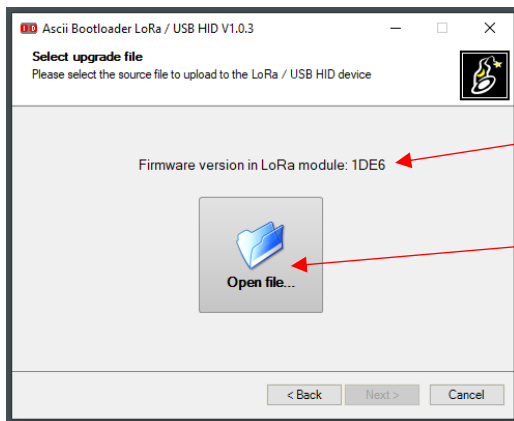
Go to the download folder on your computer and look for ESTEDE Bootloader.exe.

Double click on the icon to start the bootloader software. In some cases you might need to right-click on the icon and select open the bootloader as Administrator.

Once opened you get the bootloader Welcome Screen.

Click on NEXT.

5. Check current version of the installed firmware and open the new firmware file

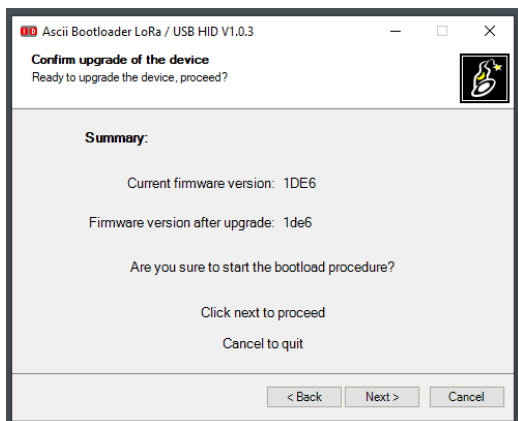


After pressing NEXT you enter the Firmware Select Screen.

This Screen will show you the current Firmware version in your LoRa Module (1DE6 in this case).

Click on Open file and then select the new Firmware file from your Download Folder. The name of this file looks like 0x1DE6.eDidHex

After that press NEXT.

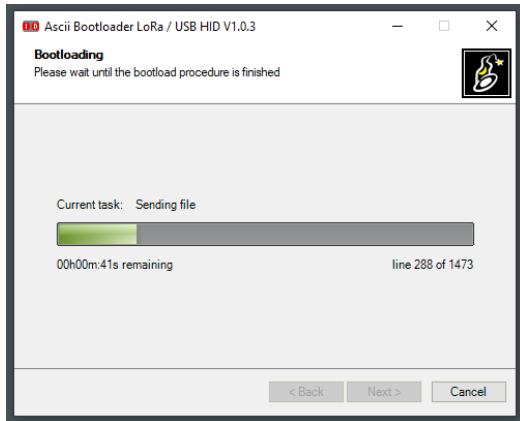


After pressing NEXT you enter the Firmware Select Screen.

This Screen will show you the current Firmware version in your LoRa Module (1DE6 in this case).

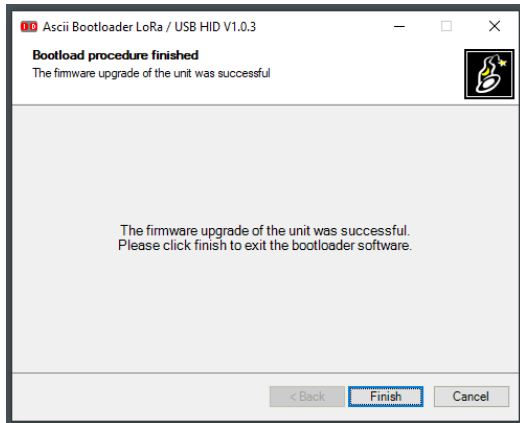
Click on Open file and then select the new Firmware file from your Download Folder.

After that press NEXT.



After pressing NEXT the Bootloader will send the new Firmware File to the FieldGuard Station. This process will take about 60 sec. We recommend that you do not interrupt this process.

During the Firmware update process only the Firmware is renewed. The Station's Configuration File isn't changed. So therefore you don't need to re-configure the station's Sensors and measurement interval.



After the Firmware is uploaded successfully the Boot load procedure finished screen is shown. Indicating that the update procedure was successful.

Click on the FINISH button to leave the Boot load Program.