

PowerFlex 525 - USB application

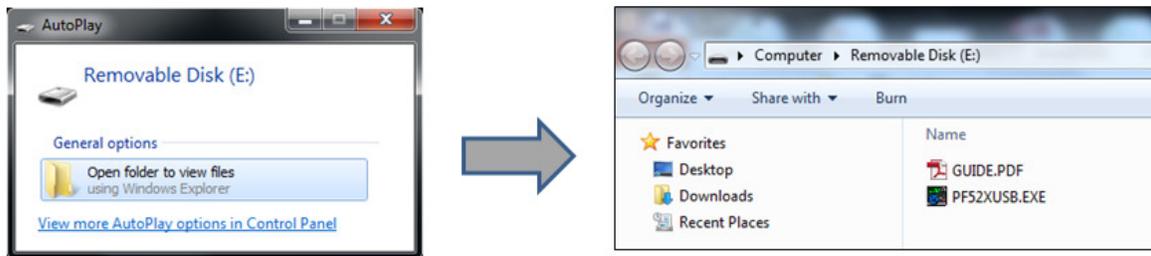
Objective

The purpose of this document is to describe the USB functionality of the PowerFlex 525 and how to work with the files created by the utility. It serves as an addition to the PowerFlex 525 user manual.

Description

Once the control module is removed from the control section (procedure described in the user manual) you will find a USB port at the back of the control module.

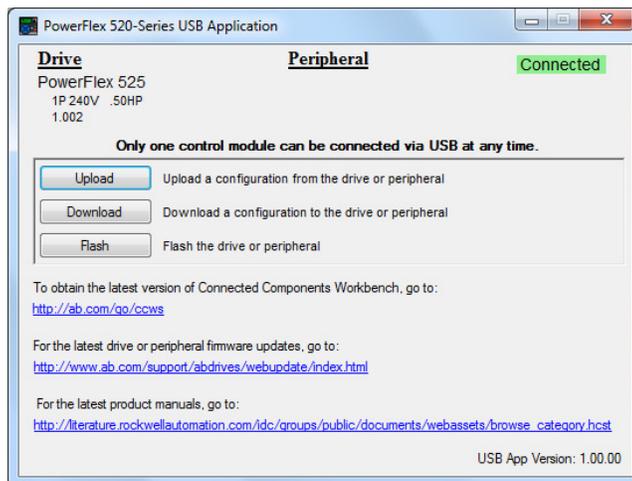
Once you connect a USB type B cable (i.e. USB printer cable) from the drive to a computer it will open up a window containing a folder. Depending on the AUTOPLAY settings in *Windows* the window may not popup automatically. Change this via Windows Control Panel → Autoplay. The files can also be located on the removable disk in Windows Explorer.



This folder contains a small pdf document with the most common fault code and parameter list as well as the

following executable file.  PF52XUSB.EXE

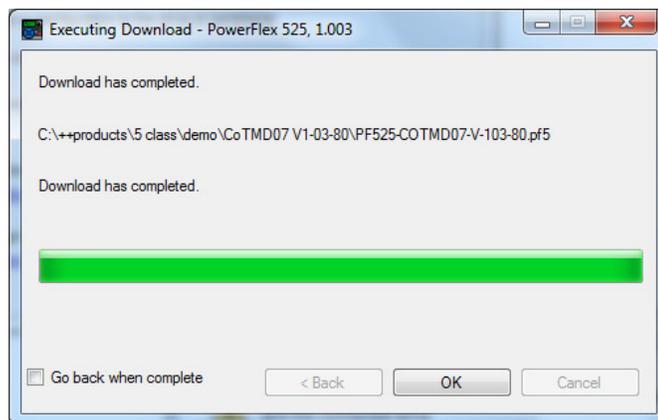
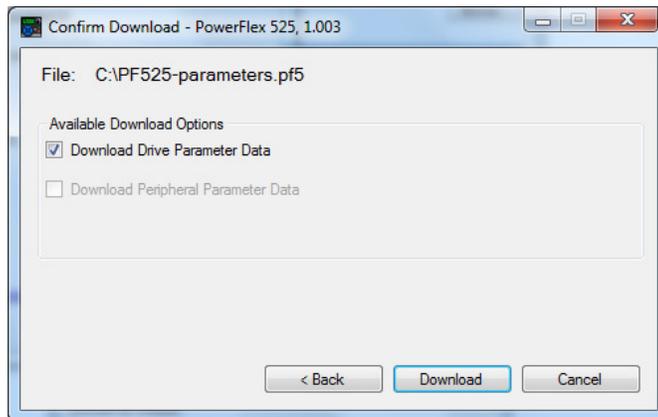
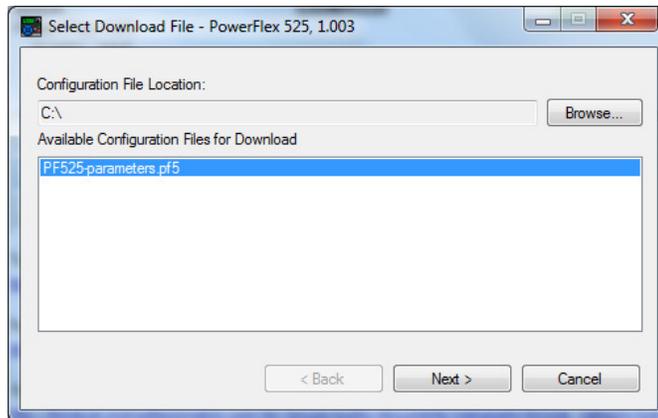
Double-clicking on the PF52XUSB.EXE file will open the following utility. It allows the users to upload and download parameter-files and to modify the drive's firmware. Parameter files are saved with a .p5f file extension.



Downloading a file via USB

Click on **Download Drive Parameter Data** and locate the stored **.pf5** file. Click on next then download to complete the action.

The second selection “Download Peripheral...” becomes visible if an optional DeviceNet or Profibus card is installed.





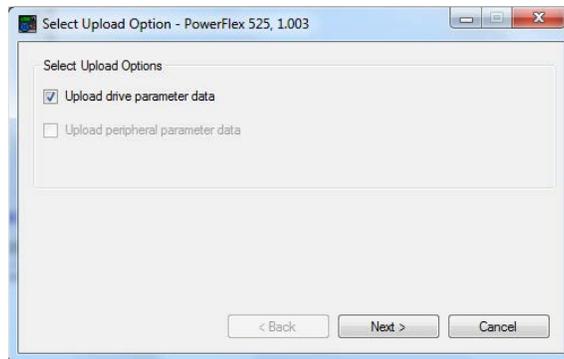
Application note

Close the download window and the PowerFlex 520-USB application. Disconnect the USB cable and mount the control module back on the drive to start operating. If the stored parameterfile had been uploaded from a differently sized drive a “mismatch warning” will popup. Click OK to continue.

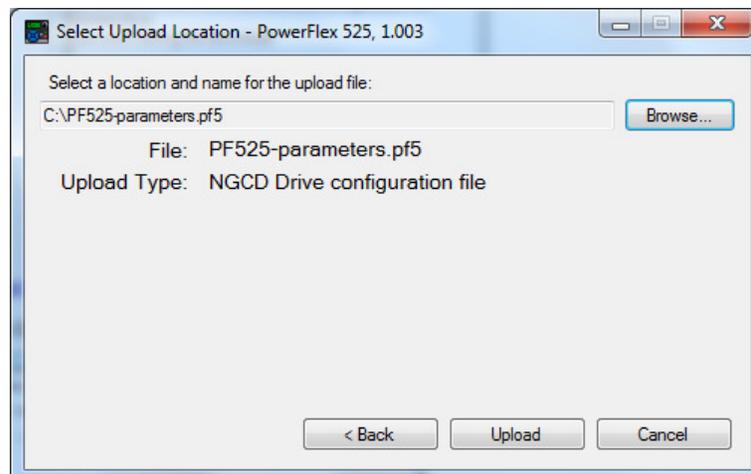


Uploading a file via USB

Tick the box for **Upload Drive parameter data** then click **Next**. Browse to the folder where the file needs to be stored and enter a name, then press **save**. The second selection “Upload peripheral...” becomes visible if an optional DeviceNet or Profibus card is installed.



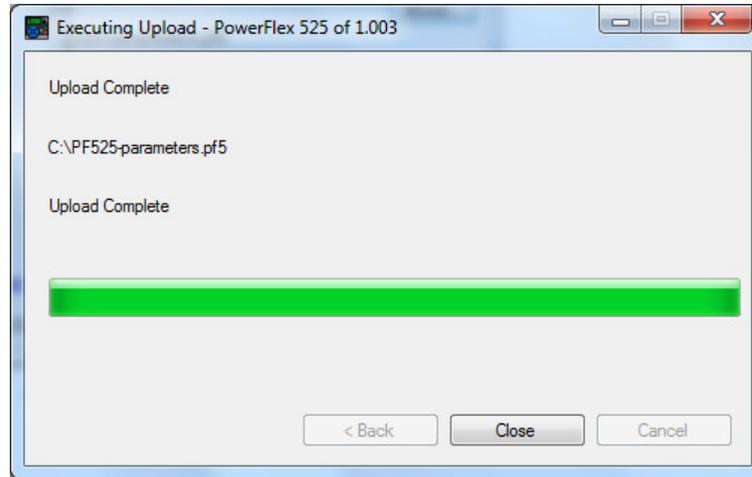
Then click **Upload**.





Application note

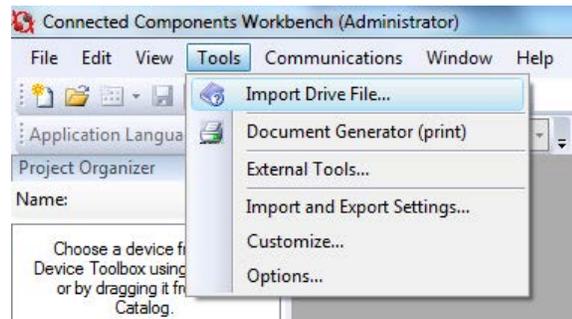
Click **Close** to complete the action.



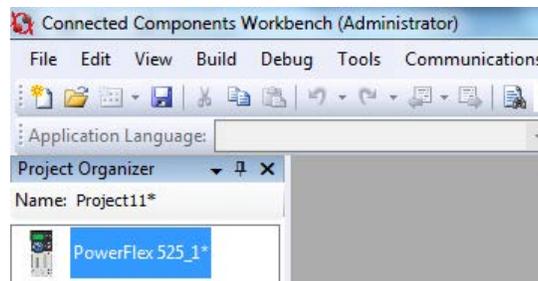
Importing-Exporting a .p5f file in Connected Components Workbench

There are 2 ways to import a stored .p5f file in Connected Components Workbench **CCW** (>V3.x).

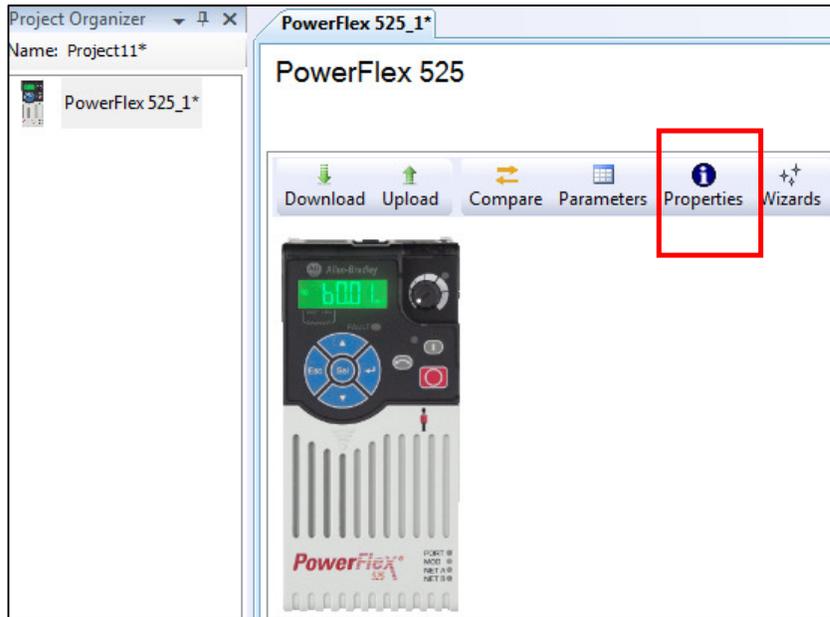
1. Select **Import Drive File** from the **Tools** pull down menu. Browse to the file location, select the file and click **open**.



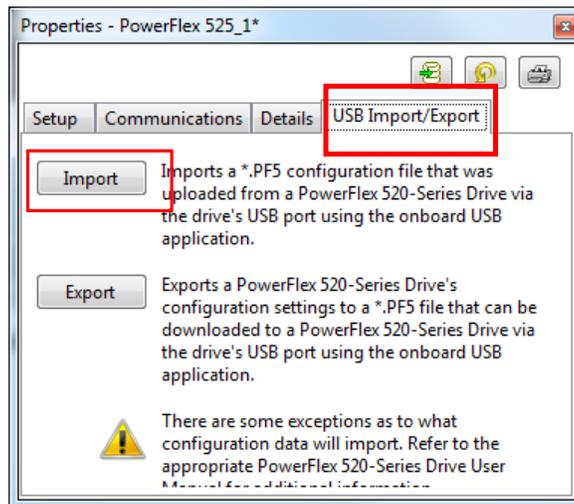
This will open the .p5f file for editing.



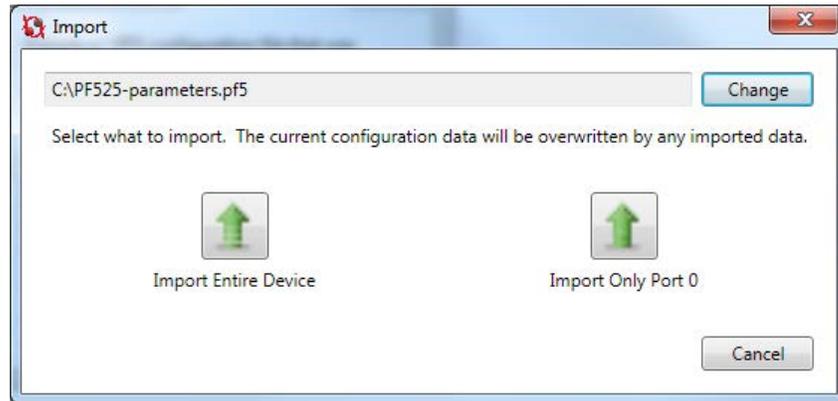
2. Select Import from the drive properties window. Double click on a drive in the Project Organizer then open the drive properties window as shown below.



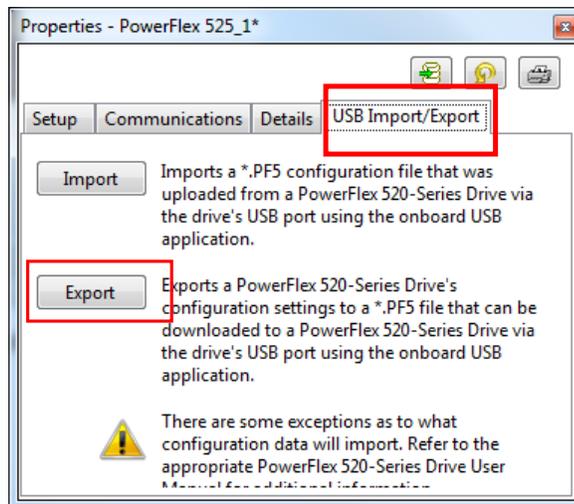
Select the **USB import** tab then click **Import**.



You will be prompted to Import Entire Device (Drive and options) or Import Only Port 0 (Drive only). The import action will overwrite the existing drive configuration in the project organizer.



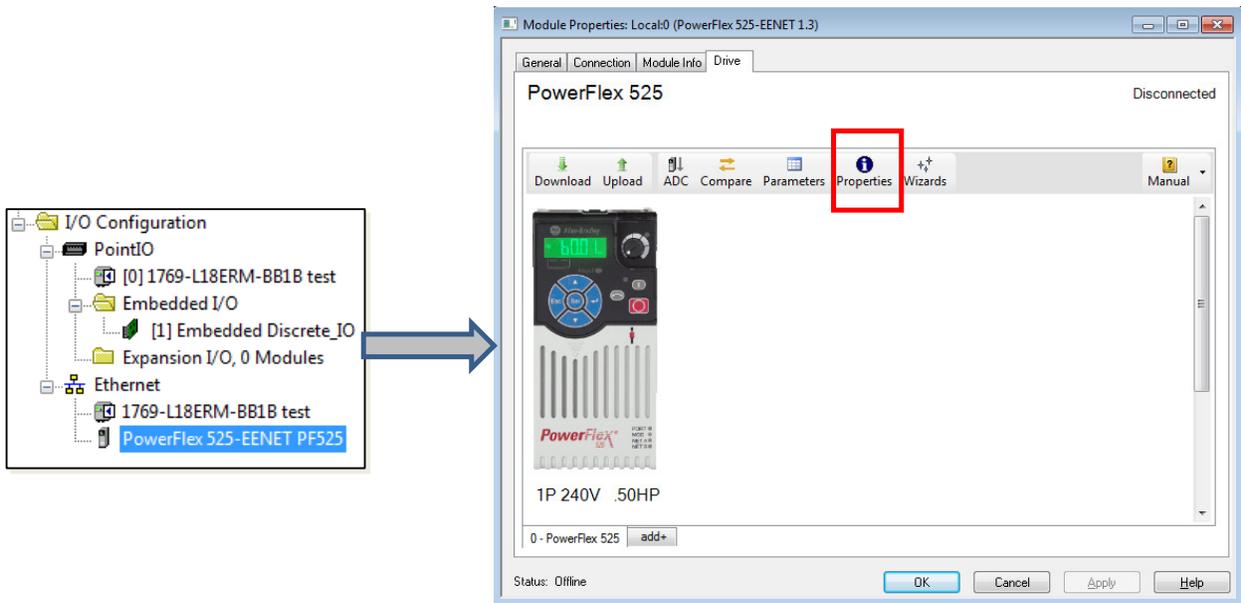
All the parameters can be edited when the file is opened in CCW. Once all the modifications have been done the **export** function can be used to store the new file as a .pf5 file. Go to the drive **properties**, select the **USB Import/Export**. Click on **Export** then browse to the location where you want to store the file and click **save**.



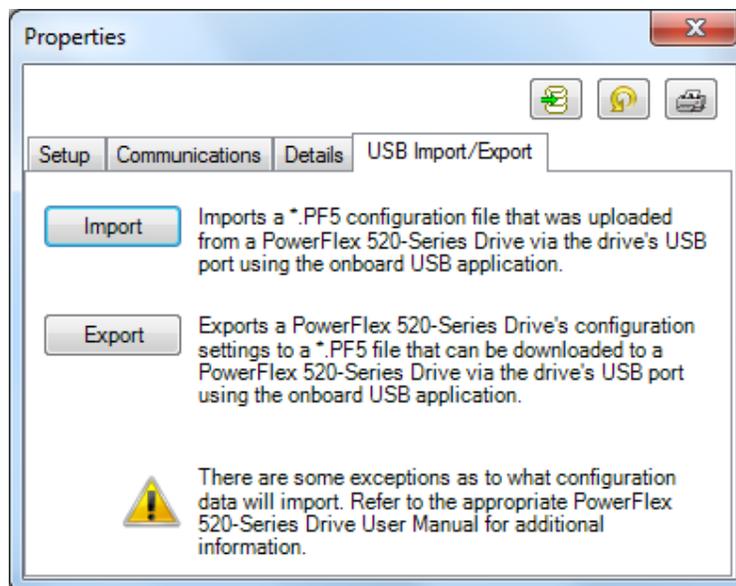


Importing/exporting a .p5f file in RSLogix 5000 or Studio 5000

Open the drive module Properties window once a drive is added to the controller IO configuration. Click on the **Drive** tab and click on the **Properties** button.

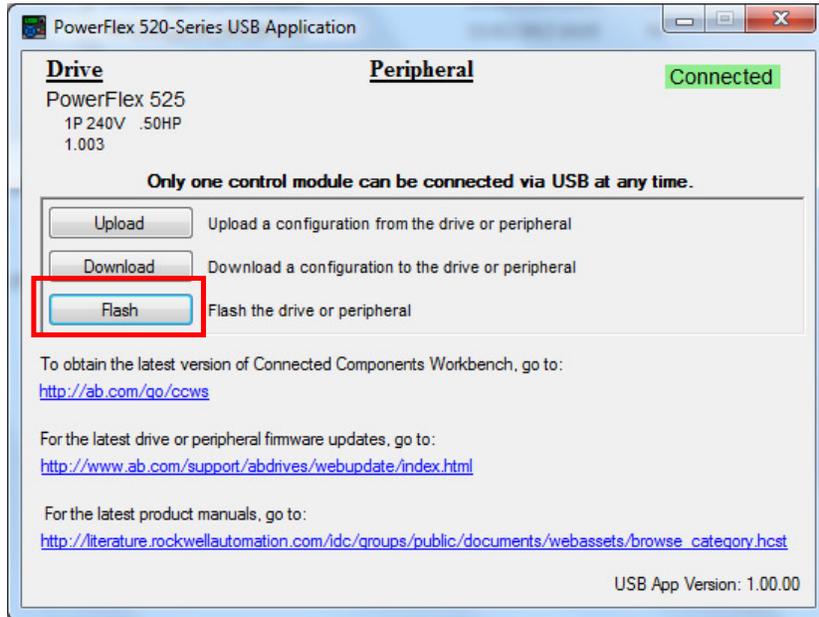


The same view, as shown on the Connected Components Workbench section, will be opened. Follow the same steps for Upload or download as described previously.

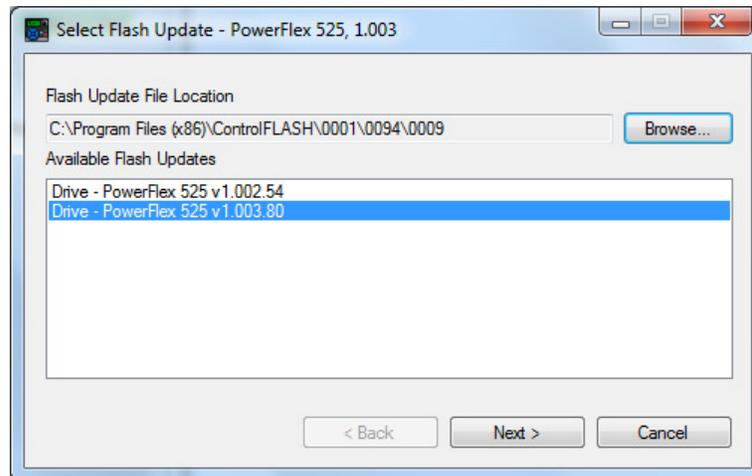


Flash the firmware using the USB application

Click on **Flash**



Select the right firmware version (V1.003.80 = original release) and click **Next**.
Firmware files can be downloaded from <http://www.ab.com/support/abdrives/webupdate/>





Application note

Click **Flash** to start the flashing process which takes about 6 minutes to complete (using the serial USB connection).

