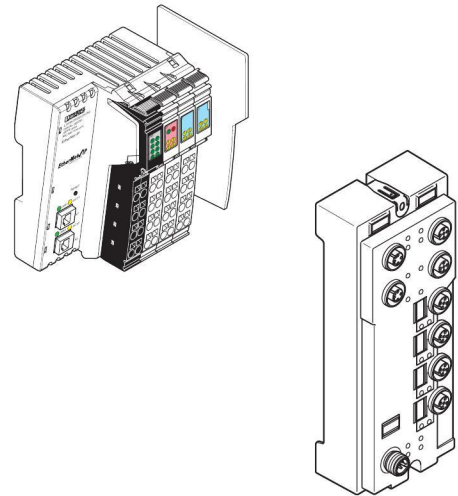# TFTP FIRMWARE UPDATE
IL/FLM EIP BK

Firmware update for Ethernet/IP bus couplers of the Inline and Fieldline product range

Application note
8283_en_01

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This document describes how to update the firmware of the IL EIP BK DI8 DO4 2TX-PAC and
FLM BK EIP M12 DI 8 M12-2TX bus couplers via the TFTP protocol using Factory Manager.

i	In the following, the term "PC" will be used as a general term for a PC and notebook, or similar.

1   System requirements

–   Factory Manager 2.3 or earlier version, if the "FL IL 24 BK-PAC" device type is supported.

2   Update requirements

The device **must** have **valid** IP parameters so that the firmware can be updated.

i	It is not possible to update the firmware using the default settings upon delivery. Start up the bus coupler and set valid IP parameters.
i	To make sure that no settings are lost during updating, take suitable measures to back up the device settings.
i	In order to establish a connection to the bus coupler, it may be necessary to deactivate the firewall of your PC.

i	This application note is valid for the following bus couplers: IL EIP BK DI8 DO4 2TX-PAC, Order No.: 2897758 FLM BK EIP M12 DI 8 M12-2TX, Order No.: 2773322
i	The firmware version 2.0 may only be used from hardware revision 03.
i	This description does not replace the module-specific data sheets and user manuals. In addition to this application note, all module-specific documents still need to be observed.Make sure you always use the latest documentation. It can be downloaded at www.phoenixcontact.net/catalog.

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3   Installing Factory Manager (if required)

Install Factory Manager if it is not yet installed on your PC. To do this, proceed as follows:

- Search Factory Manager called "FL SWT" in the download center.
- Download the setup23_xx.exe file.
  This is the latest version of Factory Manager and either an update or a demo version.
  You can use earlier versions, if the "FL IL 24 BK-PAC" device type is supported.
- To install Factory Manager, execute the setup23_xx.exe file and follow the installation instructions.
- If an error message indicates a missing SNMP service, this service must be activated on your PC.
  To do this, proceed as follows:

| **i** | To enable the SNMP service you might need administrator rights or even an operating system CD. |

- Select "Start, Control Panel, Software".
- Click on "Add/Remove Windows Components".
- In the "Windows Component Wizard" window that opens double-click on "Administrative Tools and Audit Programs".
- Activate the "SNMP" checkbox.
- Close the window.

4   TFTP firmware update

- Copy the "Cxxxxxxx.fw" firmware file to the Factory Manager folder. It can be found under:

C:\Program Files\Phoenix Contact\Factory Manager\Version x.x\download

The update can only be executed if the firmware file is stored in the "download" directory. It is not possible to start the update from another directory.

- Switch on the bus coupler.
- Start Factory Manager.
- If you can see the bus coupler in the BootP requirements list, right-click on the bus coupler.
- Select "Add New Device ... " from the context menu.
- With the "Add New Device" window open, click on "BootP ... ".
- Set the IP address of the TFTP server according to the Factory Manager software on your PC. If, for example, the PC's IP address is 192.168.1.1, then enter this address in the "TFTP Server" field.
- In the BootP parameter window, click on "Select" in the firmware file list.
- Select "All files" (*.*).
- Open the "cxxxxxxx.fw" firmware file.
- Make sure that "Enable BootP" has been selected and all other fields are provided with the correct entries.
- Then click "OK".
- Set the IP address of the bus coupler according to your requirements.
- Make sure that the Factory Manager address area is set correctly.
- Click on "Add".

The device appears in the upper window of Factory Manager.

- Wait until the green RY LED and NS LED on the Inline bus coupler start flashing. On the Fieldline bus coupler, the green MOD LED and RUN LED light up and the green NET LED flashes. This can take up to two minutes.
- Check if the status is OK.
- Select the bus coupler by clicking on it.
- In Factory Manager, click on "Web Based Management" under Device.
- Click on "Device Configuration".
- Click on "Software Update".

Figure 1   "Software Update" menu as an example for the Inline bus coupler

- In the "TFTP" area, activate "Enable" for "Software Update on Next Reboot".
- Enter the password "private". Please note that it is case-sensitive.
- Click on "Apply and Reboot". The bus coupler accepts the settings and restarts automatically.

A message is shown in Factory Manager indicating that the file has been downloaded 100%.

- Wait until the Flash has been cleared in the bus coupler and the new firmware is loaded. This process can take up to 4.5 minutes.
- Update of the **Inline bus coupler** is complete, if the LEDs indicate the following status:
  - BO LED off
  - MS LED and S1 LED green
  - RY LED and NS LED flashing green
- Update of the **Fieldline bus coupler** is complete, if the LEDs indicate the following status:
  - BO LED off
  - MOD LED and RUN LED green
  - NET LED flashing green
- Select the bus coupler by clicking on it.
- In Factory Manager, click on "Web Based Management" under Device.
- Check if the bus coupler is shown on the website.

- Click on "Device Information" and check the MAC ID and the serial number.

5   Additional documentation

Description	Type
"Inline bus coupler for Ethernet/IP with eight digital inputs and four digital outputs" user manual	UM EN IL EIP BK DI8 DO4 2TX-PAC
"Automation terminals of the Inline product range" user manual	IL SYS INST UM E
"Configuring an Ethernet/IP system using devices in the Fieldline Modular group" user manual	UM EN FLM EIP SYS PRO
"Installation of devices in the Fieldline product range" user manual	FLS FLM SYS INST UM E
"I/O modules at bus couplers" application note	AH IL BK IO LIST
Data sheet for the Inline bus coupler for Ethernet/IP	DB EN IL EIP BK DI8 DO4 2TX-PAC
Data sheet for the Fieldline bus coupler for Ethernet/IP	DB EN FLM BK EIP M12 DI 8 M12-2TX