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User Guide

mobiLink Power

Version: EN-032024-1.60

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Disclaimer of liability

The information contained in these instructions corresponds to the technical status at the time of printing of it and is passed on with the best of our knowledge. Softing does not warrant that this document is error free. The information in these instructions is in no event a basis for warranty claims or contractual agreements concerning the described products, and may especially not be deemed as warranty concerning the quality and durability pursuant to Sec. 443 German Civil Code. We reserve the right to make any alterations or improvements to these instructions without prior notice. The actual design of products may deviate from the information contained in the instructions if technical alterations and product improvements so require.

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OpenSource

To comply with international software licensing terms, we offer the source files of open source software used in our products. For details see https://opensource.softing.com/

If you are interested in our source modifications and sources used, please contact: info@softing.com

Scan the QR code for more product information.

Table of Contents

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1 About this guide

1.1 Read me first

This guide must be read carefully and fully understood by any person working with the mobiLink Power to ensure safe and proper use of the device. Softing does not assume any liability for damages due to improper installation or operation of this product.

This document is not warranted to be error-free. The information contained in this document is subject to change without prior notice. If you have any problems understanding the information and instructions in the guide, please report them to us in writing. Visit the [product website](#) to obtain the most current version of this guide.

1.2 Objective

This guide explains how to connect and start mobiLink Power and how to use the device to configure and maintain field devices over the USB interface with software applications supported on PCs.

1.3 Target audience

This user guide has been written for experienced operation personnel and network specialists responsible for configuring and maintaining field devices including HART, FOUNDATION fieldbus and Profibus PA devices. Any person using a mobiLink Power must have read and fully understood the safety requirements and working instructions in this guide.

1.4 Typographic conventions

The following conventions are used throughout our product documentation:

Keys, buttons, menu items, commands and other elements involving user interaction are set in bold font and menu sequences are separated by an arrow	Open **Start → Control Panel → Programs**
Buttons from the user interface are enclosed in brackets and set to bold typeface	Press **[Start]** to start the application
Coding samples, file extracts and screen output is set in Courier font type	`MaxDlsapAddressSupported=23`
Filenames and directories are written in italic	Device description files are located in *C:\<Application name>\delivery\software\Device Description files*

CAUTION

This symbol is used to indicate a potentially hazardous situation which, if not avoided, may result in minor to moderate damage or injury.

Note

This symbol is used to call attention to notable information that should be followed during installation, use, or servicing of this device.

Hint

This symbol is used when providing you with helpful user hints.

1.5 Document history

Document version	Modifications compared to previous version
1.00	Initial version
1.01	Minor editorial changes
1.30	New licensing, increased battery lifetime and Bluetooth Low Energy features added.
1.60	Section DirectHARTMode[13] added, section on licensing[21] updated. Document version updated to 1.60 to sync with firmware version.

1.6 Related documentation

The following documentation describes the initial startup of your mobiLink Power and how to operate the device with the supported application software. See the product website for more info and downloads:

▪ Getting Started - Quick Guide V1.00 (shipped with boxed product)

▪ Communication Configuration Tool - User Guide V2.23

▪ MOBILINKdtm - User Guide V1.30

1.7 Document feedback

We would like to encourage you to provide feedback to help us improve the documentation. You can add your comments to the PDF file using the editing tool in Adobe Reader and email your feedback to support.automation@softing.com.

If you prefer to send us your feedback only by email, please include the following information:

▪ name of document

▪ document version (as shown on cover page)

▪ page number

2   About mobiLink Power

mobiLink Power is a mobile communication device which interfaces via the USB port with FDI any common FDT frame application and configuration tool (e.g. Communication Configuration Tool) on your PC or tablet. Using a specific driver mobiLink Power also connects to the Yokogawa Field device management tool FieldMate.

2.1   Intended use

mobiLink Power is designed to configure, manage and power HART, FOUNDATION Fieldbus or PROFIBUS PA field devices. It may be used both in full-scale field installations and offsite on the workbench. As mobiLink Power supplies power to the connected devices, a powered HART loop or powered fieldbus segment is not required.

mobiLink Power must not be used in hazardous areas with intrinsic safe circuits. If you need to access intrinsic safe circuits please use our standard mobiLink.

Note

Avoid interference with a running system. Exercise utmost care when using mobiLink Power in operational plants. Ensure that working with mobiLink Power does not cause process disruption leading to damage, injury, or death. Follow all safety precautions and work procedures in this document!

2.2   Delivery and downloads

The following components are shipped in the product box:

- mobiLink Power unit

- USB cable (2m)

- set of testing cables red/black with clamp (1m)

- printed Getting Started Guide

The following components are available for download from the product page:

- mobiLink Manager

- Communication Configuration Tool

- MOBILINKdtm

- PACTware

- mobiLink FDI commServer

2.3   Functional description
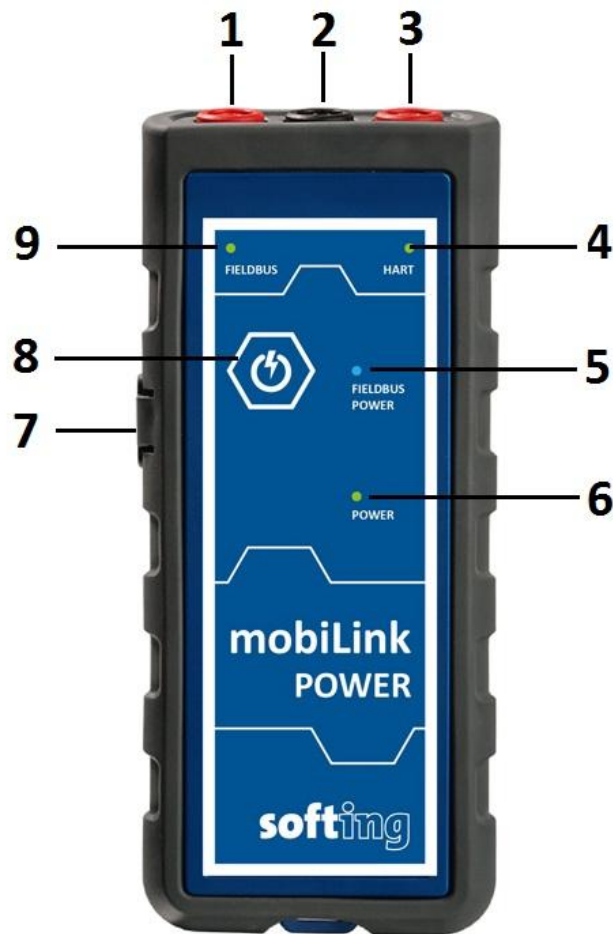
Position	Function
1 FIELDBUS red (connector)	Foundation Fieldbus (DATA +) PROFIBUS PA (PA+)
2 Common black (connector)	Foundation Fieldbus (DATA -) PROFIBUS PA (PA-) HART (HART N)
3 HART red (connector)	HART (HART P)
4 HART (LED)	indicates that the device is in HART communication.
5 Fieldbus Power (LED)	power supply to field device is preparing (flashing) , active (steady), or overload (slow flashing)
6 Power (LED)	steady green: USB is connected
7 USB (connector)	USB-C Type for communication and power supply
8 Power (button)	ON/OFF power supply
9 FIELDBUS (LED)	indicates that the device is in fieldbus communication

3 Safety

mobiLink Power must be operated by qualified personnel only. The operator is responsible for the transportation, operation and maintenance of the product. Personal safety and protection of the equipment is ensure only if mobiLink Power is used as intended.

To ensure the safety of personnel and equipment, mobiLink Power must be used as intended by the manufacturer and in accordance with this manual. Local laws and regulations applicable to the use of this device must be observed.

3.1 Warning of use

During startup mobiLink Power tries to verify the operation mode against the connected fieldbus. If fieldbus terminals are connected to an operating 4-20 mA link this will compromise the analog process value. Make sure to use the correct connections and mode.

3.2 Cleaning and maintenance

Cleaning

Periodically wipe the case with a damp cloth. Do not use abrasives or solvents.

Maintenance

mobiLink Power does not contain any serviceable parts. The device may only be maintained and repaired by Softing. Opening the housing renders the warranty null and void.

4 Installing and using mobiLink Power

4.1 Unpacking and inspecting mobiLink Power

mobiLink Power is shipped with the parts listed in Chapter [Delivery and downloads](#)[7] .

Prior to use:
Before you install mobiLink Power check the integrity of the device as any of the following poses a safety risk:

- external damage to the housing

- damage to insulation of the test leads

- exposure to voltages exceeding the specified parameters

- incorrect storage of the unit

- damage sustained in transit

- incomplete or illegible certificates or labels

> **Note**
> If the device is damaged, contact Softing Support immediately.

4.2 Preparing for startup

Before using mobiLink Power in combination with the FOUNDATION Fieldbus or PROFIBUS PA protocol for the first time, make sure that your mobiLink Power is running the latest firmware version for the supported protocols. See the [product website](#) for the latest firmware version and Chapter [Updating the firmware](#)[23] on how to install the firmware.

When you connect mobiLink Power to a host device over the USB port, mobiLink Power automatically starts USB communication.

4.3   Using mobiLink Power in a HART environment

HART communicates on a 4-20 mA current loop that powers the connected HART devices and indicates the primary process value. mobiLink Power comes with a built-in power supply for 4 .. 20 mA HART devices (including 300 ohm load resistor). No further external components are required. mobiLink Power can source up to 22 mA at 16VDC. This is sufficient for most devices. The analog value as indicated by the device will not be evaluated by mobiLink Power.

Beside this bench operation, mobiLink Power also interfaces with already installed and powered HART loops. This is detected automatically and internal power supply will not be activated under any circumstances.
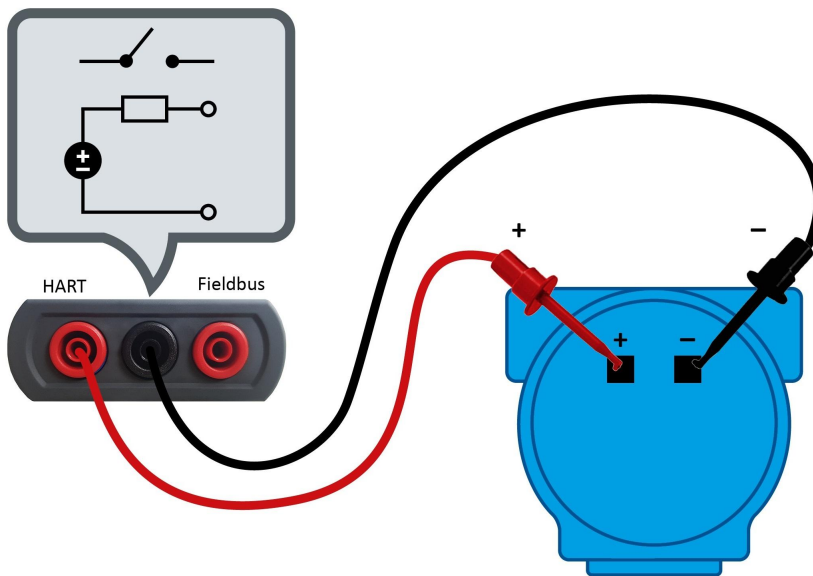
Setting up a HART connection

1.   Connect mobiLink Power to a HART environment as shown above.

⚠️ **CAUTION**

mobiLink Power may only be connected in parallel to a field device and NEVER in parallel to the load resistor. Otherwise, power detection may fail and the additional voltage supplied over FIELDBUS POWER will distort the measuring results.

2.   Connect mobiLink Power via the USB port with your PC.
      It will start automatically.

3.   Press the <u>power button</u>^{□8}   for about 2 seconds. The FIELDBUS POWER LED starts flashing.

ℹ️ **NOTE**

The power supply may also be enabled via the mobiLink Power API software.

4.   Start an application of your choice on your PC.

5.   Select mobiLink Power as HART interface.

NOTE

The mode of operation is selected by the application used (MOBILINKdtm or ComConf). mobiLink Power checks if the electrical conditions on the interface match the selected mode. mobiLink Power must therefore be connected to a HART device or fieldbus segment before the application is started.

6. Verify that the HART LED is indicating HART mode.
   The LED is flashing every 2 seconds. When mobiLink Power is powering the Fieldbus link, the FIELDBUS POWER LED is ON. When the Fieldbus link has its own power supply, FIELDBUS POWER LED is OFF.

CAUTION

mobiLink Power will not power the HART loop if an active power source is in use and detected. However, if an external power is added later, the power output will not be deactivated automatically. An additional external power source may damage the system.

If mobiLink Power detects an overload condition or a short circuit on the HART loop, it will deactivate the power supply within less than a second. This mode is indicated by a slowly flashing Fieldbus Power LED flashing slowly. mobiLink Power check the loop at 5 sec intervals, if the overload or short circuit is resolved and restores power if applicable.

4.3.1   Prerequisites

- mobiLink Power must be connected with your PC.

- The mobiLink Power Manager must have been downloaded from the product website to your PC.

4.3.2 DirectHARTMode

mobiLink Power typically runs a HART stack when HART operation is enabled. The stack checks the timing and timeout, calculates the HART frame checksum and performs automatic retries when a slave does not respond in time or responds with an incorrect checksum. Dedicated applications like the MOBILINKdtm or DevCom are using the mobiLink Power HART stack accordingly.

Unlike mobiLink Power, other HART master implementations on your PC may use a HART modem only as physical interface to the HART network. Timing, checksum calculations and retries due to lost or incorrect responses from HART slaves are handled by these applications. The HART modem has a virtual com port (serial interface) that is used by the application.

While the AMS device manager supports HART device integration in this way, other applications such as PACTware or DevCom support both the optimized HART stack or a generic approach via a USB serial HART modem. As of version 1.60, mobiLink Power supports DirectHARTMode. The mobiLink Power driver supports a virtual com port in addition to a mobiLink Power interface board. When you connect your mobiLink Power on the USB port, the Windows device manager now displays two HART entries.

> **Note**
>
> If you are using an older mobiLink Power version you will need to re-install the mobiLink Power driver V1.60 in addition to updating the firmware to the latest version!

> **Note**
>
> DirectHART is currently not supported for connections via Bluetooth. The DirectHARTMode has to be enabled explicitly after your mobiLink Power is powered on.

The DirectHARTMode must be enabled explicitly after a mobiLink Power is powered on. This is done in the mobiLink Power Manager or a console application as described in the following chapters. Enabling the DirectHARTMode requires a connection to the mobiLink Power. Therefore, make sure that no application has opened the virtual com port assigned to the mobiLink Power. For instance, when using the AMS device manager, it is not sufficient to stop the AMS device manager but it is also necessary to use the Terminate All Server application from AMS because the virtual com port is still used in the background even if the AMS device manager GUI is stopped.

There are two ways to terminate the DirectHARTMode:

1. If you have selected the option **use inactivity timeout** and you have entered a timeout value in seconds in the mobiLink Power Manager, the DirectHARTMode is automatically turned off when no host activity is detected on the related virtual com port. It is also possible to disable the timeout supervision by specifying a timeout value 0. The timeout is given in seconds with a minimum value of 30 seconds.

2. If you have not set a timeout value in the mobiLink Power Manager, simply terminate the DirectHART Mode by power cycling your mobiLink Power device.

4.3.3 Using mobiLink manager to enable DirectHARTMode

1. Start the mobiLink Manager on your PC.

2. Select the DirectHARTMode tab.
    The window will display all mobiLink Power devices you are connected to.

3. Select a mobiLink device. The first entry in the list of mobiLink devices is selected by default.

4. Check the **use inactivity timeout** option and enter the required timeout value in seconds in the **DirectHARTMode inactivity timeout in s** field. Acceptable timeout values range 30 to 4294967 seconds. If no timeout supervision is required, uncheck the **use inactivity timeout** option.
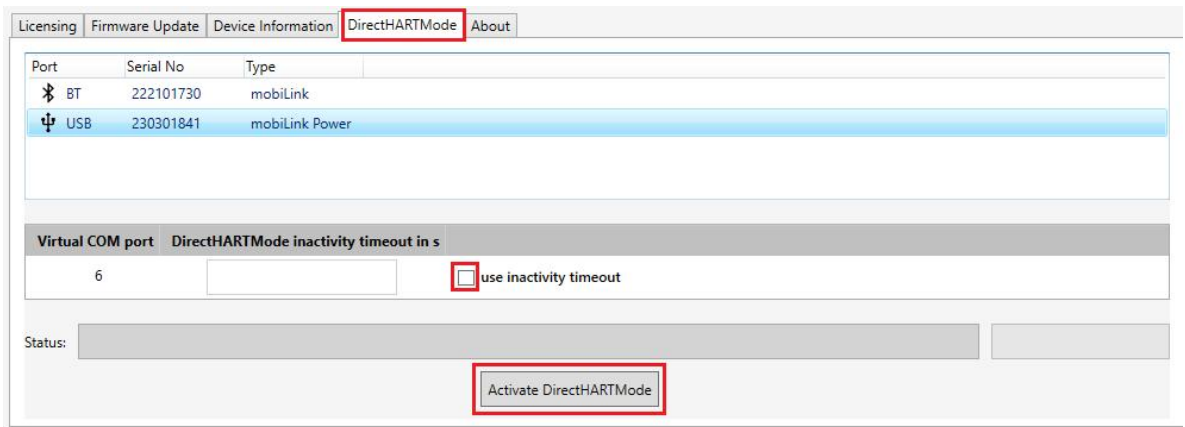
5. Click **[Activate DirectHARTMode]**.
    mobiLink Power will now run in DirectHARTMode. It will remain visible in the mobiLink Manager when it is not opened by an application. If the *Activate DirectHARTMode* request fails an error message is displayed in the Status field in the DirectHARTMode tab.

> **Note**
>
> When a mobiLink Power is operating in DirectHARTMode access from the mobiLink Power Manager to the mobiLink Power is not possible. Retrieving firmware versions or license status is not possible in this mode.

4.3.4 Using console application to enable DirectHARTMode

The installation of the console application is contained in the mobiLink Power Manager setup. You will find the console application executable under *c:\Program Files (x86) \Softing\directHARTMode\DirectHARTMode.exe*. The installation also creates a shortcut in the start menu under folder Softing named DirectHARTMode.

When the short cut is used or when the *DirectHARTMode.exe* file is launched by double click, the console application is executed. However, no argument can be passed nor are the outputs visible. It is therefore recommended to proceed as follows:

1. Open a CMD prompt.

2. Enter command *cd c:\Program Files (x86)\Softing\directHARTMode* and start the console application by typing DirectHARTMode.exe or DirectHARTMode

4.3.4.1   Parameters

The setup also installs a HART.ini file in the folder *[ALLUSERSPROFILE]\ Softing\mobiLink* which usually applies to *c:\ProgramData\Softing\mobiLink\HART.ini*. The content of this file or command line arguments can be given for specifying the serial number of the mobiLink Power that should be accessed or the timeout value for the supervision of host accesses using the DirectHARTMode.

The following table shows the attributes that can be used in the HART.ini and their meaning. The key attributes have to be in a section [HART cut-through settings] within the HART.ini file. The entries have to be in the form:

<KeyAttribute>=<Value>

Key attributes	Values	Description
SerialNumber	0 9 digit serial number	0 can be used to address any mobiLink Power connected via USB. If an explicit serial number is specified, the specified mobiLink will be accessed.
Timeout	0 30 - 4294967	Specifies the supervision timeout for the DirectHARTMode. If no application is accessing the mobiLink Power in DirectHARTMode the supervision timer would expire. Value 0: Disable timeout supervision 30 – 4294967: Supervision timeout in seconds 1—30: Use supervision timeout 30 s

Example 1:
```
[HART cut-through settings]

SerialNumber    =   0

Timeout         =   1200
```

> **Note**
> This is the same setting that would be used when no HART.ini file is present or the key attributes are not contained in the file. The timeout is set to 1200 seconds or 20 minutes. Any mobiLink Power will be accessed.

Example 2:
```
[HART cut-through settings]

SerialNumber    =   233600502

Timeout         =   1200
```

> **Note**
> Timeout is set to 1200 seconds or 20 minutes. mobiLink Power with serial number 233600502 will be accessed.

Example 3:
```
[HART cut-through settings]

SerialNumber    =   233600502

Timeout         =   0
```

Note

The timeout supervision is disabled, mobiLink Power with serial number 233600502 will be accessed. You can also specify command line arguments to determine the supervision timeout or the serial number of the mobiLink Power that should be accessed. The value given as a command line has a higher precedence than the value specified via the HART.ini entry. The following list shows the supported command line parameters.

Argument	Values	Description
-s\<serialNumber>	0 9 digit serial number	Same as SerialNumber attribute in HART.ini file
-t\<timeoutValue>	0 30 - 4294967	Same as Timeout attribute in HART.ini file

Example 1:

```
DirectHARTMode
```

Note

The attribute values from HART.ini file or default values are used.

Example 2:

```
DirectHARTMode -s233600502
```

Note

If you access the mobiLink Power with serial number 233600502, timeout is set to the value specified via the HART.ini file or is set to the default value.

Example 3:

```
DirectHARTMode -t120
```

Note

Use supervision timeout of 120 seconds (2 minutes), the serial number will be used either from the HART.ini file or the default value would be used.

Example 4:

```
DirectHARTMode -s233600502 -t1200
```

Note

Use supervision timeout of 1200 seconds (20 minutes), access mobiLink with serial number 233600502.

If a value is not defined via the *HART.ini* file or a command line argument a default value is used. The following table shows the used default values:

Attribute	Default value	Description
Serial Number	0	Access any connected mobiLink
Timeout Value	1200	Supervision timeout 20 minutes (1200 seconds)

4.3.4.2   Virtual Com Port

You can determine the virtual com port assigned to your mobiLink Power in the COM & LPT section of the device manager. You can find the same information in the DirectHARTMode application. The information is printed to the console as shown in the following example:

```
Using device with S/N:0 (using program argument value), timeout for HART
direct mode: 0 (using program argument value)

Number of virtual com port assigned for this mobilink is 13

HART direct mode is enabled now, no further FBAPI service will work before
mobiLink power cycle is done
```

In addition, a text file is created in the same directory where the *HART.ini file* resides *([ALLUSERSPROFILE]\ Softing\mobiLink -> c:\ProgramData\Softing\mobiLink)*. The name of the file is *mobiLink<SerialNumber>_ComPort.txtl,* where *SerialNumber* is the serial number of the mobiLink that has been accessed. So when using serial number 0 for the console application this shows which mobiLink is accessed.

Content of the file *mobiLink<SerialNumber>_ComPort.txt*:

com port ss for used mobiLink with S/N: nnnnnnnnn

Example:
com port 13 for used mobiLink with S/N: 200200906

4.4 Using mobiLink Power in a fieldbus environment

FOUNDATION Fieldbus and PROFIBUS PA use the same physical layer on your mobiLink Power. The device checks the fieldbus voltage and the polarity during start-up. If a problem is detected, mobiLink Power will not set up a connection.mobiLink Power supplies power to field devices. So no further external components are required. In comparison to standard power supplies some limitations apply. As mobiLink Power supplies only up to 40mA and cannot power an entire fieldbus segment. A typical use case is supplying one single device to be configured and parameterized in bench operation mode.

Beside this bench operation mobiLink Power interfaces with fully installed and already powered (and terminated) links. In this case internal power supply will not be activated and mobiLink Power will draw 10mA from the link.

CAUTION

 If an external power supply is connected and activated, mobiLink Power draws approximately 10 mA from the fieldbus segment when connected to your PC. Ensure that the fieldbus power supply covers the additional current. If the power supply is running near its capacity, connecting the mobiLink Power may result in loss of communication.

NOTE

If you intend to access field devices over FOUNDATION Fieldbus or PROFIBUS PA you will need to acquire a separate license. See Chapter <u>Licencing mobiLink Power for FF and PA</u>[21] for details.
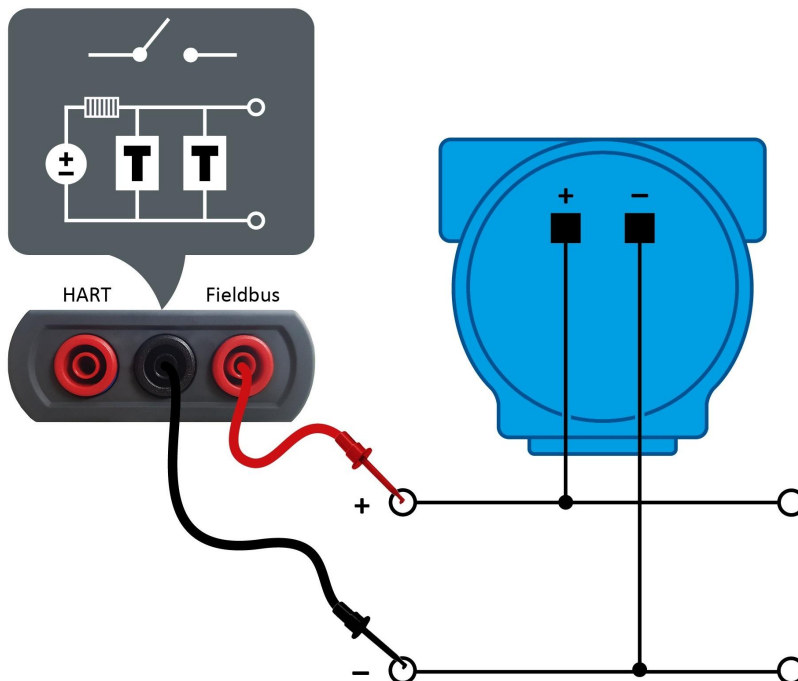
Setting up a fieldbus connection

1. Connect mobiLink Power to a fieldbus environment as shown above.

2. Connect mobiLink Power to your PC via USB.

3. Press the [power button](#)[8] for about 2 seconds. The FIELDBUS POWER LED will start automatically. Power will only be supplied after the FF or PA protocol has been started by the application (Step 5).

> **NOTE**
>
> The power supply may also be enabled via the mobiLink Power API software.

4. Start an application of your choice on your PC.

5. Select mobiLink Power as fieldbus interface.

> **NOTE**
>
> The mode of operation is selected by the application used (MOBILINKdtm or ComConf). mobiLink Power checks if the electrical conditions on the interface match the selected mode. mobiLink Power must therefore be connected to a HART device or fieldbus segment before the application is started.

6. Verify that the FIELDBUS LED is indicating fieldbus mode.
   The LED is flashing every 2 seconds. When mobiLink Power is powering the Fieldbus link, the FIELDBUS POWER LED is ON. When the Fieldbus link has its own power supply, FIELDBUS POWER LED is OFF.

> **CAUTION**
>
> mobiLink Power will not power on the FF/PA segment if it an active power source is in use and detected. However, if an external power is added later, the power output will not be deactivated automatically. An additional external power source may damage to the system.

If mobiLink Power detects an overload condition or a short circuit on the FF/PA segment, it will deactivate the power supply within less than a second. This mode is indicated by a slowly flashing Fieldbus Power LED flashing slowly. mobiLink Power check the loop at 5 sec intervals, if the overload or short circuit is resolved and restores power if applicable.

4.4.1   FF/PA Segment Termination

mobiLink Power has built-in segment terminators which are automatically activated when power is supplied to the segment. When the segment draws on an external power supply, no terminator is activated by default.

Terminators can be activated and deactivated in the mobiLink API software. If an internal power supply is active, at least one terminator will be switched on (which means it is not possible to deactivate both terminators in this case).

4.4.2   Special notes for PROFIBUS PA

All PROFIBUS PA masters must use the same bus parameters per PA segment. mobiLink Power has been tested and approved in conjunction with the following PA Masters:

- Softing Gateways (pnGate PA/PB, mbGate PA)

- Siemens PA Link (IM-153)

- Pepperl + Fuchs SK3

- Pepperl + Fuchs Basic Segment Coupler

Restrictions:

The following PA masters are not able to communicate with mobiLink Power:

- Pepperl + Fuchs SK1 & SK2

For details on how to set the bus parameters see the corresponding *MOBILINKdtm* User Guide.

4.4.3 Licensing mobiLink Power for FF and PA

To use mobiLink Power for FOUNDATION Fieldbus and PROFIBUS PA you will need to activate a corresponding license. The license is optional and is not included in the standard delivery.

1. Open the mobiLink Power Manager you downloaded previously to read out the Host ID.

2. Select the **Licensing** tab.

3. Click **[Read]** for the mobiLink Power you wish to license. The Host ID is displayed.

4. Click **[Copy]**.

5. Go to the Softing Industrial website and click the 👤 icon in the upper right corner to register yourself or select this My Softing Portal link. When you are registered and logged in you are directed to the **My Softing Dashboard**.

6. Select **Licenses → Activate License** in the side menu.
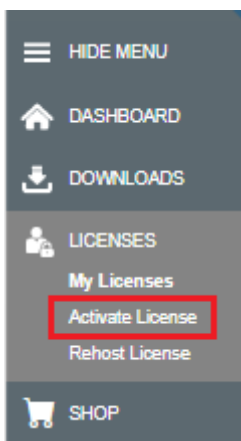
7. Enter the **license key** from your License Certificate in the license key input field.
   You will have received the License Certificate when you purchased the FOUNDATION Fieldbus or PROFIBUS PA license.

8. Paste the host ID you copied in Step 4 into the **Host ID** field of the My Softing page.

9. Click **[Activate License]**.
   A license file is generated and downloaded to your PC.

10. Switch to the mobiLink Power Manager application.

11. Select the mobiLink Power with the corresponding Host ID.

12. Click the icon ⟦…⟧ to search for the license file on your PC and click **[Open]**.

License File:	✓ C:\mobiLink\mobiLinkTest\mobiLinkTest\lic\FFStack210401265.lic	…
License Info:	License file content valid. Host ID: 37525047-0C8A77F1-052D3530-7B78113C. Protocol: FF	
Status:		
	Transfer License	
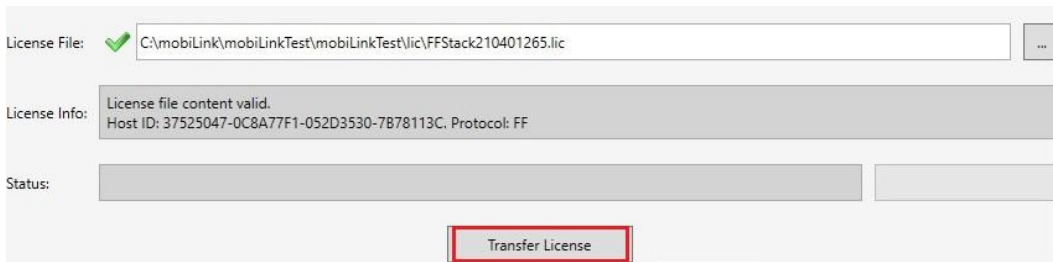
13. Click **[Transfer License]**.
    The progress bar shows the installation status.
    You will be notified when the installation is completed.

4.5   Updating the firmware

For updating the mobiLink Power firmware you can choose among three different firmware files each addressing one of the supported protocols: HART, FOUNDATION Fieldbus and PROFIBUS PA.

1.   Download the latest firmware version from the [mobiLink product site](#) to your PC.
      Each supported protocol has its own firmware version. So you will have to choose one or all three files (HART, FF, PA) for download.

2.   Start the mobiLink Power Manager on your PC.

3.   Select the **Firmware Update** tab.

4.   Select a mobiLink Power device.
      The window will display all devices to which you are connected.

5.   Click the icon [...] to select the firmware file you just downloaded.
      The version of the firmware is shown in the **Firmware Tag** field.
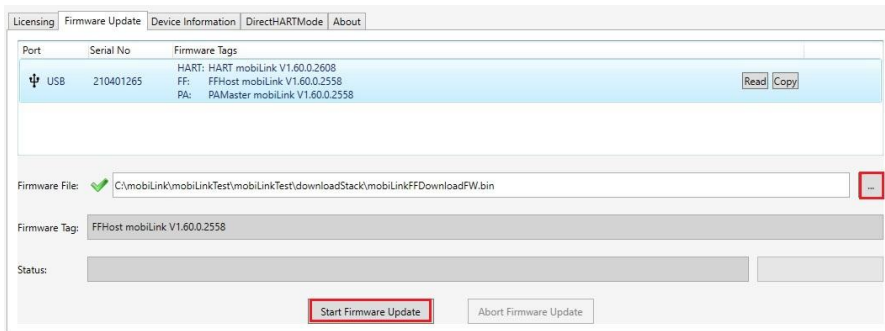
6.   Click **[Start Firmware Update]**.
      The progress bar in the bottom right corner indicates the update status. When the update is completed you will see the status message **Firmware update succeeded**.

5   Installing mobiLink Power applications

Before you can work with your mobiLink Power you have to install either a mobiLink FDI Communication Server (for FDI host systems), the MOBILINKdtm (for FDT frame applications) or the Communication Configuration Tool (ComConf). To update the mobiLink Power firmware and manage optional licenses you will also need to install the mobiLink Manager. You can download all software applications from the mobiLink product site.

1. Download the latest software application.

2. Double-click the setup file to start the installation.

> **Note**
>
> You will need administration access rights to install the software. Start the setup as described above and authorize the installation with your access data in a UAC dialog. Make sure that "Softing AG" is mentioned in the UAC dialog as verified publisher. If you are logged on as administrator you will only need to confirm your choice.

3. Select the installation language.

4. Follow the install wizard instructions.

> **Note**
>
> Contact Softing Support if an error occurs during installation.

5. Repeat the download and installation steps for the mobiLink Manager.

6 Technical data

Fieldbus Interface (Foundation Fieldbus / PROFIBUS-PA)	
Connection	Polarized 4 mm banana type jacks (red /black)
Physical Layer	according to IEC 61158-2, Type 1: 31.25 Kbit/s, voltage mode
Nominal input current (Fieldbus)	10 mA (with $U_{fieldbus}$ > 9.0 V)
Fieldbus Terminator	2 Fieldbus Terminators included (switchable by software)
Input Voltage	+9 … +32 V
Fieldbus Power Output (switchable by software)	10,5 … 25,5V, 40mA
HART Interface	
Connection	4mm banana type jacks (red / black)
Physical Layer	HART FSK compliant modem
switchable HART Power Supply	min. 16V @22,5mA internal resistor 300Ohm max. 25,5V
USB	
Speed	USB 2.0 Full Speed
Connector	USB Type C
Electrical	5 V, 500 mA port sensible to ESD
Environmental Conditions	
Ingress protection	IP54 (with USB covered with cap)
Operating temperature	-20 °C .. +50 °C
Drop	1 m

7   Declaration of conformity

This product is in conformity with the provisions of the following European Directives.

- 2014/30/EU "EMC"

  The EMC Directive 2014/30/EU "Electromagnetic Compatibility" ensures that electrical and electronic equipment does not generate, or is not affected by, electromagnetic disturbance.

- 2011/65/EU "RoHS"

  The RoHS Directive 2011/65/EU "Restriction of Hazardous Substances" covers the use and the amount of certain hazardous substances that can be used in electrical and electronic equipment to prevent these substances from entering the production process and thereby keep them out of the waste stream.

- 2012/19/EU "WEEE"

  The WEEE Directive 2012/19/EU "Waste of electrical and electronic equipment" is closely linked to the Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive). It ensures that customers can return there WEEE free of charge.

EU-Konformitätserklärung
EU Declaration of Conformity

softing

Wir
We

Softing Industrial Automation GmbH
Richard-Reitzner-Allee 6
D-85540 Haar

erklären hiermit in alleiniger Verantwortung, dass das Produkt
declare under our sole responsibility that the product

Modell / Typ
Model / Type

mobiLink Power

mit den Anforderungen der folgenden Richtlinien übereinstimmt
complies with the requirements of the following directives:

EMV Richtlinie 2014/30/EU
EMC directive 2014/30/EU
ROHS-Richtlinie 2011/65/EU, ergänzt durch DELEGIERTE RICHTLINIE (EU) 2015/863
ROHS directive 2011/165/EU, amended by COMMISSION DELEGATED DIRECTIVE (EU) 2015/863

Angewandte harmonisierte Normen
Applied harmonised standards:

EN 61326-1:2013

EN IEC 63000:2018

Haar, 27.07. 2020
....
Ort, Datum
Place, Date

....
Geschäftsführer
Managing Director

Template: V1.09

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7.1   Certification marks

mobiLink Power is an internationally certified product conforming with the required standards and regulations indicated by the following certification marks:

CE
The CE mark indicates that the product conforms to EU health, safety and environmental requirements and that compliance with the above EU Directives has been made and can be requested from Softing Industrial Automation GmbH.

WEEE
The WEEE mark (Waste of Electrical and Electronic Equipment) indicates that the product including batteries must be disposed of separately from normal waste at the end of its operational lifetime. Packaging material and worn components shall be disposed of in compliance with national law and local waste-disposal regulations.

HART
The HART mark indicates that this product support the HART communication protocol (Highway Addressable Remote Transducer) on 4-20mA loops.

Fieldbus Foundation
The Fieldbus Foundation mark indicates that this product supports the Fieldbus specification for host devices.

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