Operating Instructions

Field Xpert SMT70

Universal, high-performance tablet PC for device configuration in Ex Zone 2 and non-Ex areas
## Change history

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1 About this document

1.1 Document function
These Operating Instructions contain all the information required in the various life cycle phases of the device: from product identification, incoming acceptance and storage, to installation, connection, operation and commissioning, through to troubleshooting, maintenance and disposal.

1.2 Symbols

1.2.1 Safety symbols

⚠️ **DANGER**
This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.

⚠️ **WARNING**
This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in serious or fatal injury.

⚠️ **CAUTION**
This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in minor or medium injury.

⚠️ **NOTICE**
This symbol contains information on procedures and other facts which do not result in personal injury.

1.2.2 Symbols for certain types of information

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
</table>
| 🔄 🔄 | Permitted
Procedures, processes or actions that are permitted. |
| 🔄 🔄 🔄 | Preferred
Procedures, processes or actions that are preferred. |
| ❌ | Forbidden
Procedures, processes or actions that are forbidden. |
| 📝 | Tip
Indicates additional information. |
| 📚 | Reference to documentation |
| 📞 | Reference to page |
| 📚 | Reference to graphic |
### 1.2.3 Field Xpert symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
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<tbody>
<tr>
<td><img src="image" alt="Power Symbol" /></td>
<td>Switch tablet on and off.</td>
</tr>
<tr>
<td><img src="image" alt="Windows Button Symbol" /></td>
<td>Windows button</td>
</tr>
<tr>
<td><img src="image" alt="Wireless Communication Symbol" /></td>
<td>Wireless communication (WLAN, WWAN, GPS, Bluetooth)</td>
</tr>
<tr>
<td><img src="image" alt="Battery Symbol" /></td>
<td>Battery</td>
</tr>
<tr>
<td><img src="image" alt="Online Dynamic Installed Base Analysis Symbol" /></td>
<td>Opens the Offline Dynamic Installed Base Analysis (DIBA)</td>
</tr>
<tr>
<td><img src="image" alt="Information and Software Settings Symbol" /></td>
<td>Information and software settings.</td>
</tr>
<tr>
<td><img src="image" alt="Additional Information Symbol" /></td>
<td>Additional information about the software.</td>
</tr>
<tr>
<td><img src="image" alt="Minimize Program Symbol" /></td>
<td>Minimize the program.</td>
</tr>
<tr>
<td><img src="image" alt="Enable Full Screen Symbol" /></td>
<td>Enable full screen.</td>
</tr>
<tr>
<td><img src="image" alt="Disable Full Screen Symbol" /></td>
<td>Disable full screen.</td>
</tr>
<tr>
<td><img src="image" alt="Close Program Symbol" /></td>
<td>Close the program.</td>
</tr>
</tbody>
</table>

*Note: The 'Information and software settings' and 'Additional information about the software' symbols are used to help in the event of a problem.*
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
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<tr>
<td></td>
<td>Scroll up</td>
</tr>
<tr>
<td></td>
<td>Scroll down</td>
</tr>
<tr>
<td></td>
<td>Update</td>
</tr>
<tr>
<td></td>
<td>Expand information.</td>
</tr>
<tr>
<td></td>
<td>Collapse information.</td>
</tr>
<tr>
<td></td>
<td>Connect automatically</td>
</tr>
<tr>
<td></td>
<td>Connect with wizard (manual connection)</td>
</tr>
<tr>
<td></td>
<td>Connect with Endress+Hauser WLAN and Bluetooth devices</td>
</tr>
<tr>
<td></td>
<td>RFID</td>
</tr>
<tr>
<td></td>
<td>Cloud</td>
</tr>
<tr>
<td></td>
<td>Favorites</td>
</tr>
<tr>
<td></td>
<td>Keypad</td>
</tr>
<tr>
<td></td>
<td>Camera</td>
</tr>
<tr>
<td></td>
<td>Link to Netilion Library</td>
</tr>
<tr>
<td></td>
<td>Attach photos and PDFs to an asset in Netilion Library</td>
</tr>
<tr>
<td></td>
<td>Start</td>
</tr>
<tr>
<td></td>
<td>Trash</td>
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### 1.3 Acronyms used

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<th>Acronyms</th>
<th>Explanation</th>
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<tr>
<td>DFS</td>
<td>Dynamic Frequency Selection</td>
</tr>
<tr>
<td>DTM</td>
<td>Device Type Manager</td>
</tr>
<tr>
<td>Acronyms</td>
<td>Explanation</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>FCC</td>
<td>Federal Communications Commission</td>
</tr>
<tr>
<td>HF</td>
<td>High frequency [RF = radio frequency]</td>
</tr>
<tr>
<td>MSD</td>
<td>Menu Structure Description</td>
</tr>
<tr>
<td>SD</td>
<td>Secure Digital</td>
</tr>
<tr>
<td>WWAN</td>
<td>Wireless Wide Area Network</td>
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### 1.4 Documentation

**Field Xpert SMT70**  
Technical Information TI01342S/04/EN

**Field Xpert SMT50**  
- Technical Information TI01555S/04/EN  
- Operating Instructions BA02053S/04/EN

**Field Xpert SMT77**  
- Technical Information TI01418S/04/EN  
- Operating Instructions BA01923S/04/EN

### 1.5 Registered trademarks

Windows 10 IoT Enterprise® is a registered trademark of Microsoft Corporation, Redmond, Washington, USA.

Intel® Core™ is a registered trademark of Intel Corporation, Santa Clara, USA.

Durabook is a registered trademark of Twinhead International Corp., Taiwan.

FOUNDATION™ Fieldbus is the trademark of the FieldComm Group, Austin, TX 78759, USA.

HART®, WirelessHART® is the registered trademark of the FieldComm Group, Austin, TX 78759, USA.

PROFIBUS® is a registered trademark of the PROFIBUS User Organization, Karlsruhe/ Germany.

Modbus is the registered trademark of Modicon, Incorporated.

IO-Link® is a registered trademark of the IO-Link Community c/o PROFIBUS User Organization, (PNO) Karlsruhe/ Germany - www.io-link.com

All other brand and product names are trademarks or registered trademarks of the companies and organizations in question.

### 2 Basic safety instructions

The Operating Instructions supplied with the device and containing the safety instructions of the tablet PC manufacturer must be observed.
2.1  Requirements for the personnel
The personnel for installation, commissioning, diagnostics and maintenance must fulfill the following requirements:
‣ Trained, qualified specialists must have a relevant qualification for this specific function and task.
‣ Are authorized by the plant owner/operator.
‣ Are familiar with federal/national regulations.
‣ Before starting work, read and understand the instructions in the manual and supplementary documentation as well as the certificates (depending on the application).
‣ Follow instructions and comply with basic conditions.

The operating personnel must fulfill the following requirements:
‣ Are instructed and authorized according to the requirements of the task by the facility's owner-operator.
‣ Follow the instructions in this manual.

2.2  Designated use
The tablet PC for device configuration enables mobile plant asset management in hazardous and non-hazardous areas. It is suitable for commissioning and maintenance staff to manage field instruments with a digital communication interface and to record progress. This tablet PC is designed as a complete solution and is an easy-to-use, touch-enabled tool which can be used to manage field instruments during their entire life cycle. It provides extensive, pre-installed driver libraries and offers access to the "Industrial Internet of Things" as well as to information and documentation during the entire life cycle of the device. The tablet PC offers a modern software user interface and the option of online updates based on a secure Microsoft Windows 10 multi-functional environment.

2.3  Workplace safety
The tablet PC is used for device configuration. Incorrect configurations may lead to unwanted or hazardous situations in a plant. The device configuration software is already installed on the tablet PC upon delivery. These Operating Instructions describe how to commission and operate the tablet PC.

- Commissioning → 21
- Operation → 23

2.4  Operational safety
Risk of injury!
‣ Operate the device in proper technical condition and fail-safe condition only.
‣ The operator is responsible for interference-free operation of the device.

Modifications to the device
Unauthorized modifications to the device are not permitted and can lead to unforeseeable dangers:
‣ If, despite this, modifications are required, consult with Endress+Hauser.
Repair
To ensure continued operational safety and reliability:
‣ Carry out repairs on the device only if they are expressly permitted.
‣ Observe federal/national regulations pertaining to repair of an electrical device.
‣ Use only original spare parts and accessories from the manufacturer.

2.5  Product safety
The tablet PC is designed in accordance with good engineering practice to meet state-of-the-art safety requirements, has been tested, and left the factory in a condition in which it is safe to operate.

It fulfills general safety requirements and legal requirements. It also conforms to the EC directives listed in the device-specific EC Declaration of Conformity. The manufacturer confirms this by affixing the CE mark to the device.

2.6  IT security
Our warranty is valid only if the device is installed and used as described in the Operating Instructions. The device is equipped with security mechanisms to protect it against any inadvertent changes to the settings.

IT security measures, which provide additional protection for the device and associated data transfer, must be implemented by the operators themselves in line with their security standards.

3  Product description
With an ultra-compact form factor, the tablet PC meets the most demanding requirements, such as ingress protection (IP65) and shock resistance (4-foot drop-test and MIL-STD 810G). The additional screen protector offers complete protection in harsh working environments. The tablet PCs good ergonomic features also protect workers’ health, keeping physical strain to a minimum.

With the increasing popularity of 4G/LTE connectivity in hazardous areas, the tablet PC ensures swift and seamless access to data. However, in situations where not even WLAN is available, the optional docking station with an Ethernet interface gives the tablet PC the necessary flexibility to link into existing network infrastructures. In addition, the latest Bluetooth standards are also supported.

After use in the field, the tablet PC can be used as an office PC with the optional office docking station, allowing the tablet to be seamlessly integrated into the office and business networks.
Front view of tablet PC

1 Program button
2 Front camera
3 Ambient light sensor
4 Microphone
5 Function key
6 DC socket (underside)
7 Dock connector (underside)
8 Windows button
9 Slot for Kensington lock (left side)
10 Volume buttons (left side)
11 On/off button (left side)

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program button</td>
<td>Go to user-defined program</td>
</tr>
<tr>
<td>Front camera</td>
<td>For video recordings (e.g. at video conferences)</td>
</tr>
<tr>
<td>Ambient light sensor</td>
<td>Measures the current ambient lighting conditions</td>
</tr>
<tr>
<td>Microphone</td>
<td>To record ambient sounds</td>
</tr>
<tr>
<td>Function key</td>
<td>The key function can be assigned via the 'Quick Menu'</td>
</tr>
<tr>
<td>DC socket</td>
<td>For connecting the power adapter</td>
</tr>
</tbody>
</table>
### Component Description

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dock connector</td>
<td>For connecting the tablet PC to a docking station</td>
</tr>
<tr>
<td>Windows button</td>
<td>Launch the Windows start screen</td>
</tr>
<tr>
<td>Slot for Kensington lock</td>
<td>For connecting a Kensington-compatible security lock</td>
</tr>
<tr>
<td>Volume buttons</td>
<td>For setting the volume</td>
</tr>
<tr>
<td>On/off button</td>
<td>For switching the tablet PC on or off</td>
</tr>
</tbody>
</table>

![Diagram of tablet PC](image)

2 Rear view of tablet PC

1 Barcode scanner
2 Camera LED flash
3 Camera
4 Battery compartment
5 Button to unlock the battery compartment
6 Loudspeaker
7 Combined audio jack
8 2 x USB 3.0
9 Memory card slot for Micro SD memory cards
10 SIM card slot
<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barcode scanner</td>
<td>For scanning barcodes.</td>
</tr>
<tr>
<td>Camera LED flash</td>
<td>For additional lighting in poor light.</td>
</tr>
<tr>
<td>Camera</td>
<td>For taking pictures.</td>
</tr>
<tr>
<td>Battery compartment</td>
<td>Contains the battery.</td>
</tr>
<tr>
<td>Button to unlock the battery</td>
<td>Press down the button and hold to unlock the battery compartment.</td>
</tr>
<tr>
<td>Battery compartment</td>
<td></td>
</tr>
<tr>
<td>Loudspeaker</td>
<td>For sound</td>
</tr>
<tr>
<td>SIM card slot</td>
<td>For inserting a SIM card for WWAN (LTE+GPS).</td>
</tr>
<tr>
<td>2 x USB 3.0</td>
<td>For connecting USB 3.0 peripheral devices.</td>
</tr>
<tr>
<td></td>
<td><strong>WARNING</strong></td>
</tr>
<tr>
<td></td>
<td>The use of the USB ports in the hazardous area is not permitted and can cause an explosion.</td>
</tr>
<tr>
<td></td>
<td>▶ In the hazardous area, always use an Ex tablet with the MACTek VIATOR Bluetooth HART modem or the mobiLink.</td>
</tr>
<tr>
<td>Memory card slot</td>
<td>For inserting Micro SD memory cards, and SD, SDXC, SDHC memory cards using an adapter.</td>
</tr>
<tr>
<td>Combined audio jack</td>
<td>For connecting headphones, external loudspeakers or a microphone.</td>
</tr>
</tbody>
</table>

### 3.1 Product design

![Network architecture](image-url)
3.2  **Field of application**

The tablet PC for device configuration enables mobile plant asset management in hazardous and non-hazardous areas. It is suitable for commissioning and maintenance staff to manage field instruments with a digital communication interface and to record progress. This tablet PC is designed as a complete solution and is an easy-to-use, touch-enabled tool which can be used to manage field instruments during their entire life cycle. It provides pre-installed driver libraries and offers access to the "Industrial Internet of Things" as well as to information and documentation during the entire life cycle of the device. The tablet PC offers a modern software user interface and the option of online updates based on a secure Microsoft Windows 10 multi-functional environment.

3.3  **License model**

The device configuration software is already installed on the tablet PC upon delivery. To use the software as designated, the software must be activated. A user account is required in the Endress+Hauser software portal for this purpose. This account might first need to be created via the "Create Account" function.

**Activating the device configuration software package**

1. Double-click **Field Xpert** on the start screen.
   - The software licensing page opens.

![Software Activation Page](image)
2. Click **Activate Software**.
   - The dialog box where you can enter the software portal data opens.

3. Enter the **E-mail address** and **Password** and click **Activate**.
   - The dialog box with the message "The application has been activated successfully." opens.

4. Click **Show license**.
   - The dialog box with the licensing information opens.

5. Click **Close**.
   - The home screen of the device configuration software program opens.

---

4. **Incoming acceptance and product identification**

4.1 **Incoming acceptance**

Visual inspection
- Check the packaging for visible damage arising from transportation
- Open the packaging carefully
- Check the contents for visible damage
- Check that the delivery is complete and nothing is missing
- Retain all the accompanying documents

The device may not be put into operation if the contents are found to be damaged beforehand. In this case, please contact your Endress+Hauser Sales Center: [www.addresses.endress.com](http://www.addresses.endress.com)

Return the device to Endress+Hauser in the original packaging where possible.
Scope of delivery
- Field Xpert SMT70 tablet PC with handle
- AC charger (100 to 240 V<sub>AC</sub>, 1.5 A, 50 to 60 Hz) with connecting cable as per order
- Software and interfaces/modem as per order
- Operating Instructions with safety instructions from Ecom

4.2 Product identification

4.2.1 Nameplate

![Nameplate Image]

1. Endress+Hauser software ID
2. Endress+Hauser product name
3. Endress+Hauser serial number
4. Manufacturer nameplate
5. Manufacturer model number
6. Manufacturer technical information
7. Manufacturer serial number

4.2.2 Manufacturer's address

Ecom Instruments GmbH is responsible for the tablet hardware and produces it exclusively for Endress+Hauser.
4.3  Storage and transport

Always use the original packaging when transporting the product.

4.3.1  Storage temperature

–20 to 60 °C (–4 to 140 °F)

5  Installation

5.1  System requirements

The software is already installed on the tablet PC upon delivery.

5.2  Installing the software

The device configuration software is already installed on the tablet PC upon delivery. The device configuration software must be activated.

Licensing model → 15
5.3 Updating the software

Software update service

The inclusive maintenance period starts when the license is created and ends automatically after one year (reference date).

Software updates can also be installed at a later stage if the software release has been published within a valid active maintenance period.

1. Click the icon on the home page of the device configuration software.
   ➤ The dialog box with the licensing information opens.

2. Click the Update tab.
   ➤ The dialog box with the update information opens.

3. Click Check for updates.
   ➤ The device configuration software searches for updates.

5.4 Removing the software

The device configuration software may not be uninstalled.

6 Operation

Avoid damage to the housing and components:
  ▶ Always place the device on a stable surface.
  ▶ Do not cover the ventilation opening, or block it by other objects.
  ▶ Keep the device away from liquids.
  ▶ Do not expose the device to direct sunshine or very dusty conditions.
Do not expose the device to excess heat or humidity.

### 6.1 Status indicators

The status indicators on the interface of the tablet PC are lit as soon as the corresponding functions are active.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Power icon" /></td>
<td>Power</td>
<td>The LED is lit green when the system is in operation. The LED flashes when the system is in sleep mode.</td>
</tr>
<tr>
<td><img src="image" alt="Wireless communication icon" /></td>
<td>Wireless communication</td>
<td>Indicates the status of wireless communication (WLAN, WWAN or Bluetooth). The LED is lit blue if at least one wireless communication option is active. The &quot;Quick Menu&quot; application must be installed to be able to display the status for wireless communication.</td>
</tr>
</tbody>
</table>
| ![Battery icon](image) | Battery | Indicates the battery charge state:  
- Green, battery is fully charged  
- Amber, battery is charging  
- Flashing amber, error while charging  
- Red, battery less than 10 % charged  
- Off, battery is empty |

### 6.2 Shutting down the tablet PC

Make sure you shut down the tablet PC properly, as this is the only way to avoid losing unsaved data.

- Tap the **Windows icon → Shut down**.

The tablet PC shuts down.

Do not disconnect the power source until the tablet PC is switched off completely.

### 6.3 Switching off the tablet PC

- Press and hold the **button** until the power LED flashes.

The tablet PC is in sleep mode.

### 6.4 Security screen

If the tablet PC is used without an external keyboard, the Ctrl+Alt+Del key combination is replaced by the key combination of simultaneously pressing the **and keys.**
1. Press the and keys simultaneously.
   The tablet PC switches to the Windows security screen.

2. Select an action.

   Possible actions:
   - Lock the device
   - Change to another user
   - Log out
   - Change the password
   - Open Task Manager
   - Shut down or restart the device

7 Commissioning

The tablet PC can be powered by the AC adapter or the lithium ion battery.
7.1 Inserting the battery

1. Insert the battery in the battery compartment.

2. Press down until the battery clicks into place.

3. Slide the battery lock into the "Locked" position.

The battery is inserted.
7.2 Charging the battery

Due to transport safety regulations, the lithium ion battery is not fully charged when purchased.

1. The battery must be inserted.
   Connect the AC adapter to the DC socket of the tablet PC.
2. Connect the AC adapter to the power cable.
3. Connect the power cable to a power outlet.

7.3 Switching on the tablet PC

- Press and hold the button until the power LED is lit.

The tablet PC starts.

7.4 Connecting the AC adapter

The AC adapter powers the tablet PC and charges the battery.

When using the AC adapter:

- Place the device sufficiently close to a power outlet that the power cable can still reach the outlet.
- Only operate the device with the type of power source indicated on the device nameplate.
- Disconnect the AC adapter from the power outlet if the device will not be used for an extended period.

1. Connect the AC adapter to the DC socket of the tablet PC.
2. Connect the AC adapter to the power cable.
3. Connect the power cable to a power outlet.

The tablet PC may only be used with the corresponding AC adapter.

If the tablet PC is connected to a socket and the battery is inserted, the tablet PC is powered via the socket.

8 Operation

NOTICE

The use of unsuitable objects to operate the device can damage the screen.
- Do not use pointed objects for the screen.
8.1 How to start

The user must accept the terms of use the first time the device configuration software is started.

- Double-click Field Xpert on the start screen.
  - The device configuration software starts.

8.2 Establishing a connection to the device

A connection can be established in one of three ways:

- Automatic
- Using a wizard (manually)
- Wi-Fi and Bluetooth
Connect the desired modem or interface. Wait until the modem or interface has been detected (e.g. USB icon).

*The following modems/interfaces are supported by the tablet PC:*

<table>
<thead>
<tr>
<th>Communication protocol</th>
<th>Connection</th>
<th>Modems/interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>HART</td>
<td></td>
<td>Commubox FXA195 4 to 20 mA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MACTek Bluetooth modem 4 to 20 mA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Memograph RSG45 (4 to 20 mA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MACTek USB modem (4 to 20 mA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FieldPort SFP20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fieldgate SFG250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tank Scanner NXA820</td>
</tr>
<tr>
<td>WirelessHART</td>
<td></td>
<td>WirelessHART adapter SWA70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WirelessHART adapter SWG70</td>
</tr>
<tr>
<td>PROFIBUS</td>
<td></td>
<td>Softing PROFlusb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Softing PBpro USB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FieldPort SFP20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fieldgate SFG500</td>
</tr>
<tr>
<td>FOUNDATION Fieldbus</td>
<td></td>
<td>NI USB</td>
</tr>
<tr>
<td>Communication protocol</td>
<td>Connection</td>
<td>Modems/interfaces</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------</td>
<td>--------------------</td>
</tr>
<tr>
<td><strong>Modbus</strong></td>
<td></td>
<td>Modbus serial</td>
</tr>
<tr>
<td><strong>Endress+Hauser service interfaces</strong></td>
<td></td>
<td>Commubox FXA291 CDI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commubox FXA291 IPC, ISS, PCP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commubox FXA193 IPC, ISS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TXU10 V2 CDI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TXU10 V2 PCP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TXU10 V1 PCP, CDI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CDI USB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CDI TCP/IP</td>
</tr>
<tr>
<td><strong>Bluetooth</strong></td>
<td></td>
<td>Endress+Hauser Bluetooth devices, also level and pressure equipment</td>
</tr>
<tr>
<td><strong>Wi-Fi</strong></td>
<td></td>
<td>Endress+Hauser Wi-Fi devices</td>
</tr>
<tr>
<td><strong>IO-Link</strong></td>
<td></td>
<td>FieldPort SFP20</td>
</tr>
</tbody>
</table>
Connection "Automatic"

Tap the ➤ icon.

The device configuration software establishes a connection to the connected device.
Connection "Assistant"

1. Tap the icon.

An overview of all the protocols available opens.
2. Select a communication protocol.
   ➔ An overview of all the modems available opens.

3. Select a modem.
   ➔ The device can be configured.
Connection "Wireless"

Tap the icon.

The live list showing all available Endress+Hauser Wi-Fi and Bluetooth devices is displayed. This list can be filtered for Wi-Fi and Bluetooth devices.

Connection "Bluetooth"

1. Tap the icon to filter for Bluetooth devices.
2. Tap the  icon next to the device that you want to configure.
   ➔ The Login dialog box appears.

3. Enter the **User Name** (admin) and **Password** and tap **Login**.
   ➔ The DTM (default) or the MSD opens.

   The initial password corresponds to the serial number of the device.
   To get the reset code, please contact your Endress+Hauser Sales Center.

**Connection "WLAN"**

1. Tap the  icon to filter for WLAN devices.
1. Tap the ▶ icon next to the device that you want to configure.
   The Connect to WLAN device dialog box appears.

2. Enter the Password and tap Connect.
   The connection window opens.

3. Do not change the IP address - leave it as is.

4. Tap the ▶ icon.

5. Tap Vendor specific.

6. The DeviceDTM opens and the device can be configured.

7. The initial password corresponds to the serial number of the device.

8. Tap Click here to connect to establish the connection directly via an IP address.

8.3 Information and software settings

- Click the ▸ icon in the main menu.
  An overview of all the information and settings opens.
8.3.1 DTM catalog

► Click the DTM Catalog tab.

↓ An overview of all the DTMs available opens.

Device driver offline view

► Double-click the desired device driver.

The offline view of the device driver opens.

This function is only possible if the device driver supports the offline view.

If other device drivers (DTMs) are required, they can be installed additionally. After an automatic or manual update, these drivers appear in the DTM catalog.
8.3.2 **Event log**

- Click the **Event Log** tab or the gray status bar.
  - An overview of all the events opens.

If event logs are already listed, they can be deleted using the **Clear** button.

8.3.3 **Favorites**

- Click the **Favorites** tab or the icon.
  - An overview of all the favorites opens.
8.3.4 Managing reports

1. Click the Reports tab.
   ➔ The overview with the "Manage saved device reports" folder opens.

2. Click the "Manage saved device reports" folder.
   ➔ An overview of all the saved device reports opens.

8.3.5 Firmware

▷ Click the Firmware tab.
   ➔ An overview of the firmware opens.
8.3.6 Settings

Language

1. Click the **Settings** tab.
   - The **Language** tab opens with an overview of all the languages available.

2. Select the desired language.

3. Click the **** icon.
   - The device configuration software closes.

4. Restart the device configuration software.
   - The selected language is saved.
Connection

- Click the **Connectivity** tab.
  - An overview of all the connections opens.

Netilion

- Click the **Netilion** tab.
  - An overview of data storage settings opens.
8.4 Additional information about the software

- Click the ![Icon](image.png) icon.
  - An overview of all the additional information opens.

8.4.1 License

- Click the ![Icon](image.png) License tab.
  - The dialog box with the licensing information opens.
Renewing the license

If the maintenance contract has expired, you must order a "Field Xpert SMT71" maintenance extension.

Renewing the license for software versions as of 1.05

Once a "Field Xpert SMT71" maintenance extension has been successfully ordered:

- You receive a notification in the Field Xpert software.

Renewing the license for software versions up to 1.04

Once a "Field Xpert SMT71" maintenance extension has been successfully ordered:

1. Click the License tab.
2. Click Update license.
3. Sign in once with email and password in the software portal.
   - The license has been renewed.

8.4.2 EULA

- Click the EULA tab.
  - The window with the Endress+Hauser Terms and Licensing Conditions opens.

8.4.3 Info

This tab contains information about the software currently installed, the manufacturer and the software source text.
1. Click the **About** tab.

   An overview of all the information opens.

2. Click the ☐ icon to view the information.
8.5 Automatic DTM update

1. Click the icon in the status bar.
   ➤ The "Sign in to Netilion Library" dialog box opens.

2. Click Sign in.

3. Choose subscription (Basic/Plus/Premium).

4. Sign in with the Netilion data.
   ➤ The tablet searches for DTMs in the background, and they are downloaded.

5. Confirm download.
   ➤ Installation starts.
8.6 Netilion Library

8.6.1 Uploading a device report to the Netilion Library

This function is possible with HART, PROFIBUS, FOUNDATION Fieldbus and IO-Link devices as well as via the Endress+Hauser Service interface (CDI).

1. Click the icon in the status bar.
   - The "Sign in to Netilion Library" dialog box opens.

2. Click Sign in.

3. Choose subscription (Basic/Plus/Premium).
4. Connect device and open DTM.
   - Device is automatically stored in the Netilion Library.
5. Click "Save device report".
   - The device report is appended to the device in the Netilion Library.

8.6.2 Uploading a photo to the Netilion Library
1. Establish a connection to the device and open the DTM.
   Click the 📷 icon.
   - The camera opens.
2. Create a device photo.
   - The "New image found" dialog box opens.
3. Click Yes.
   - The photo is uploaded to the Netilion Library for the existing asset.

Uploading a photo from Camera Roll
1. Establish a connection to the device and open the DTM.
   Click the 📷 icon.
   - The dialog box opens.
2. Select the file type.
3. Select the photo from a directory in Field Xpert.
4. Click Yes.
   - The photo is uploaded to the Netilion Library for the existing asset.

8.6.3 Uploading a PDF to the Netilion Library
1. Establish a connection to the device and open the DTM.
   Click the 📷 icon.
   - The dialog box opens.
2. Select the file type.
3. Select the PDF from a directory in Field Xpert.
4. Click Yes.
   - The PDF is uploaded to the Netilion Library for the existing asset.

8.6.4 Uploading parameter data records to the Netilion Library
1. Click the ✉ icon in the status bar and sign in.
2. Connect device and open DTM.
3. In the Program functions menu, click Save device data.
   - The parameter data records are uploaded to the Netilion Library for the existing asset.
8.6.5 Offline use case

Scanned devices, new photos, device reports (PDF) and parameter records are automatically saved in the offline cache. They are uploaded automatically once a new Internet connection is established.

1. Click the icon in the status bar.

   The "Sign in to Netilion Library" dialog box opens.
2. Click the **Offline** tab.  
   - The "Offline data storage information" dialog box opens.

3. Click **Show assets**.  
   - An overview of all assets and documents appears.

4. Click the icon to remove assets and documents.
5. Click the **Online** tab and sign in.
6. Click **Upload asset data**.  
   - The dialog box with all of the data to upload opens.
7. Click **Upload**.
8.6.6 Link to Netilion Library
1. Click the icon in the status bar.
   ➔ The Netilion Library dialog box opens.
2. Sign in to the Netilion Library.

8.7 Uploading a Heartbeat Verification report to the Netilion Library
1. Click the icon.
   ➔ A connection to the desired device is established.
2. Start the Heartbeat wizard.
3. Follow the Heartbeat wizard and start a Heartbeat Verification.
4. When the Heartbeat Verification is finished, save the result as a PDF.
   ➣ A dialog appears where you can select the storage location for the PDF file.
5. Select the storage location and click **Save**.
   ➣ A dialog for saving in the Netilion Library appears.
6. Click **Yes**.
   ➣ A dialog appears where you can select the document type.
7. Select Heartbeat Verification Report and click **Yes**.
   ➣ The Heartbeat Verification Report is uploaded to the Netilion Library for the existing asset.
1. Click the icon in the status bar.
   ➥ The "RFID TAG Editor" dialog box opens.

2. Plug in the RFID scanner.

3. Click **Read tag**.

4. Place the RFID tag on the scanner, and click **Device Viewer**.
   ➥ The Device Viewer opens in Internet Explorer.

5. Change the tag or serial numbers and click **Write tag**.
   ➥ The RFID tag is changed.
9 Accessories

Accessories currently available for the product can be selected via the Product Configurator at www.endress.com:

1. Select the product using the filters and search field.
2. Open the product page.
3. Select Spare parts & Accessories.

10 Technical data

For detailed information on the "technical data": see the Technical Information →  9

11 Appendix

11.1 Protecting mobile devices

These days mobile technology is an important part of modern business enterprises, since more and more of our data is stored on mobile devices. Furthermore, these devices are now just as powerful as conventional computers. As these mobile devices frequently leave the business
premises, they need even more protection than desktop devices. Below you can find four quick tips to help you protect mobile devices and the information they contain.

- **Switch on password protection**
  Use a sufficiently complex password or a PIN.

- **Run security updates**
  All manufacturers release regular security updates to protect the device. This process is quick, easy and free. Under your settings, make sure that the updates are installed automatically. If the manufacturer does not plan to release any more updates for the device, the device must be replaced with an up-to-date version.

- **Run app and operating system updates**
  Update all installed applications and the operating system regularly with patches released by the software developers. These updates not only add new functions but also fix any security vulnerabilities that may have been detected. The Endress+Hauser software update function provides automatic notification of new updates. This requires Internet access. For staff it is important to know when the updates are available, how they are installed, and that this must be done as quickly as possible.

- **Do not connect to unknown WLAN hotspots**
  The easiest precaution to take is to never connect to the Internet through unknown hotspots and to use the 3G or 4G mobile communications network instead. Via virtual private networks (VPNs), your data is encrypted before being transmitted over the Internet.

### 11.2 Federal Communication Commission (FCC)

This device has been tested and complies with the limit values for Class B digital devices in accordance with Part 15 of the FCC regulations. These limit values ensure adequate protection against electromagnetic interference when operating in residential areas. This device generates, uses and can emit radio frequency energy and can interfere with wireless communication if it is not installed and used as specified in the Operating Instructions. However, it is not possible to guarantee that interference will not occur in certain installations. If the device causes interference with radio and television reception - which can be determined by switching the device off and on again - it is the responsibility of the user to rectify the problem.

### 11.3 Canada, Industry Canada (IC) Notices / Canada, avis d'Industry Canada (IC)

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne
doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

11.3.1  Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized. This device has been evaluated for and shown compliant with the IC Specific Absorption Rate (“SAR”) limits when installed in specific host products operated in portable exposure conditions.

Informations concernant l'exposition aux fréquences radio (RF) La puissance de sortie émise par l’appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d’Industry Canada (IC). Utilisez l’appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal. Ce périphérique a été évalué et démontré conforme aux limites SAR (Specific Absorption Rate – Taux d'absorption spécifique) d’IC lorsqu'il est installé dans des produits hôtes particuliers qui fonctionnent dans des conditions d'exposition à des appareils portables.

11.4  Warning Explosion Hazard

Class I, Division 2, Groups A, B, C, D, T Code T5

Model R11XXXXXX, Rugged Tablet PC, Battery Powered (Battery P/N R11AH or R11AH2XXXXXX rechargeable lithium-ion battery pack), Ambient Temperature Range: 0°C to +40°C. Note: The "X" in the model designations may be any alphanumeric character or blank denoting minor mechanical options, system configuration options and/or safety extra low voltage secondary circuit options.

Conditions of Safe Use:

Connection to or from this device, which enters or leaves the system enclosure, must be completely restricted in Class I, Division 2 Hazardous Locations.

Rugged Tablet PC is to be charged by the supplied charging adaptor, type FSP065-RAB, manufactured by FSP Group, in Non-Hazardous Location only.

Suitable for use in Class I, Division 2 Groups A, B, C and D hazardous locations or non-hazardous locations only;

“WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.”

AVERTISSEMENT - RISQUE D'EXPLOSION - LA SUBSTITUTION DES COMPOSANTS PEUT IMPAIR LA CONFORMITÉ À LA CLASSE I, DIVISION 2.

“WARNING: TO PREVENT IGNITION OF A HAZARDOUS ATMOSPHERE, BATTERIES MUST ONLY BE CHARGED IN AN AREA KNOWN TO BE NON-HAZARDOUS.”

“AVERTISSEMENT - RISQUE D'EXPLOSION - AFIN D'ÉVITER TOUT RISQUE D'EXPLOSION, S’ASSURER QUE L’EMPLACEMENT EST CONSIDÉRÉ NON DANGEREUX AVANT DE CHANGER LA BATTERIE.”

“WARNING - EXPLOSION HAZARD - DO NOT CONNECT OR DISCONNECT WHILE CIRCUIT IS LIVE UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS.”

“AVERTISSEMENT - RISQUE D’EXPLOSION. NE PAS BRANCHER OU DÉBRANCHER TANT QUE LE CIRCUIT EST SOUS TENSION, À MOINS QU'IL NE SAGISSE D'UN EMPLACEMENT NON DANGEREUX.”

11.5  Class 1 laser product

Class 1 laser product in accordance with EN 60825
This device contains a laser system and is categorized as a "Class 1 laser product". To use this device correctly, you must read this manual carefully and keep it in a safe place so that it is also available for future reference. If you encounter any problems with this model, please contact your nearest "Authorized service point". To avoid direct laser radiation, do not attempt to open this housing.