Operating Instructions Field Xpert SMT70

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





Change history

Product version	Operating Instructions	Changes	Comments
1.00.xx	BA01709S/04/EN/ 01.17	-	-
1.02.xx	BA01709S/04/EN/ 02.18	New chapter 8.5	HART via PROFINET via Fieldgate PAM SFG600
1.03.xx	BA01709S/04/EN/ 03.18	New chapter 8.6	Automatic DTM update
		New chapter 8.7	Uploading HART device report to IIoT Library
		New chapter 8.8	RFID
		New screenshots	-
1.04.xx	BA01709S/04/EN/	New screenshots	-
	04.19	Chapter 1.2.3	New symbols
		Chapter 4.2.2	Manufacturer address
		Chapter 8.2	"Bluetooth" connection
		Chapter 8.4	Renewing the license
		Chapter 8.7.1	Offline use case
		Chapter 8.7.2	Link to Netilion Library
		Chapter 8.8	Uploading a photo to the Netilion Library
1.05.xx	BA01709S/04/EN/	New screenshots	-
	05.20	Chapter 1.2.3	New symbols
		Chapter 4.2.1	Nameplate
		Chapter 8.2	"Bluetooth" and "WLAN" connection
		Chapter 8.4	Renewing the license
		Chapter 8.7	New Netilion Library chapter
		Chapter 8.8	Scanner App
		Chapter 8.9	Uploading a Heartbeat Verification report to the Netilion Library
1.06.xx	BA01709S/04/EN/ 06.22	New screenshots	Screenshots in English from this version
		Chapter 5.3	Software update service
		Chapter 10.1	Battery
		Appendix	Protecting mobile devices
1.07.xx	BA01709S/04/EN/ 07.22	Chapter 1.2.3	Explanation of symbols updated
		Chapter 1.3	Acronyms used
		Chapter 8	Screenshots adapted
	1	1	1

Product version	Operating Instructions	Changes	Comments
		Chapter 8.3.6	New Bluetooth
1.08.xx	BA01709S/04/EN/	Chapter 1.2.3	Field Xpert symbols: Note added
	08.23	Chapter 1.4	Revised
		Chapter 3.1	Figure revised
		Chapter 5.3	Revised
		Chapter 8.2	Fieldgate PAM SFG600
		Chapter 8.5 removed	Fieldgate PAM SFG600 via PROFINET
		Chapter 8.8 removed	Scanner App

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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

A 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.

ACAUTION

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

Symbol	Meaning
	Permitted Procedures, processes or actions that are permitted.
	Preferred Procedures, processes or actions that are preferred.
×	Forbidden Procedures, processes or actions that are forbidden.
i	Tip Indicates additional information.
Ĩ	Reference to documentation
	Reference to page
	Reference to graphic

Symbol	Meaning
	Notice or individual step to be observed
1., 2., 3	Series of steps
L.	Result of a step
?	Help in the event of a problem
	Visual inspection

1.2.3 Field Xpert symbols

Symbol	Meaning
	Switch tablet on and off.
1	Windows button
((_T))	Wireless communication (WLAN, WWAN, GPS, Bluetooth)
4	Battery
<u> (4</u>	Opens the Offline Dynamic Installed Base Analysis (DIBA)
	This function is only available for Endress+Hauser Service.
A	Open the home screen of the device configuration software.
<	Jump back to the last page opened.
	Information and software settings.
?	Additional information about the software.
	Minimize the program.
スゴ	Enable full screen.
<u>ж</u>	Disable full screen.
\times	Close the program.

Symbol	Meaning
	Scroll up
•	Scroll down
Ċ	Update
\odot	Expand information.
\odot	Collapse information.
	Connect automatically
₹ _{€o}	Connect with wizard (manual connection)
((r•	Connect with Endress+Hauser WLAN and Bluetooth devices
Þ	RFID
\bigcirc	Cloud
☆	Favorites
	Keypad
6	Camera
~	Link to Netilion Library
Q	Attach photos and PDFs to an asset in Netilion Library
	Start
Ť	Trash

1.3 Acronyms used

Acronyms	Explanation
DFS	Dynamic Frequency Selection
DTM	Device Type Manager

Acronyms	Explanation
FCC	Federal Communications Commission
HF	High frequency [RF = radio frequency]
MSD	Menu Structure Description
SD	Secure Digital
WWAN	Wireless Wide Area Network

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.

FOUNDATIONTM 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, preinstalled 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 →
 ⁽²⁾ 21
- Operation $\rightarrow \cong 23$

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-theart 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.

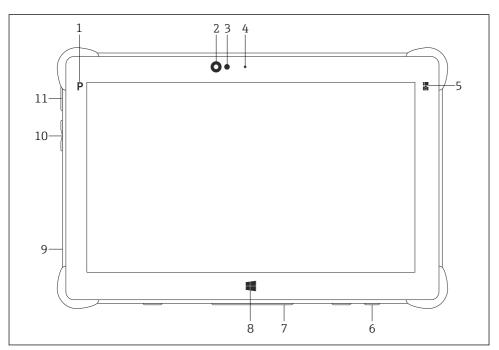
IT security measures, which provide additional protection for the device and associated data transfer, must be implemented by the operators themselves in line with their security standards.

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 PC's 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.

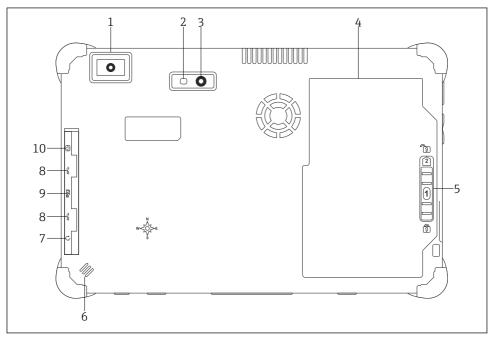


I Front view of tablet PC

- 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)

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

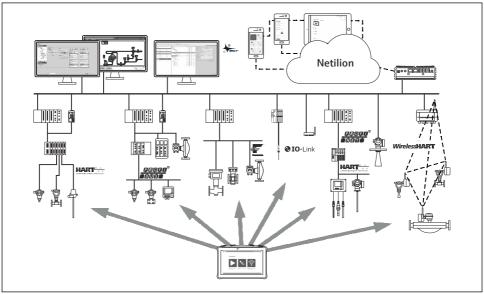
Component	Description
Dock connector	For connecting the tablet PC to a docking station
Windows button	Launch the Windows start screen
Slot for Kensington lock	For connecting a Kensington-compatible security lock
Volume buttons	For setting the volume
On/off button	For switching the tablet PC on or off



- 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

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

3.1 Product design



☑ 3 Network architecture

A0053038

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.



2. Click Activate Software.

└ The dialog box where you can enter the software portal data opens.

★ <		$ \frac{\kappa}{\kappa}$ \times
	To activate the software you need access to the Software Portal. Please fill in your credentials or register to get a new account.	
	I have forgotten my password Activate Create Account Cancel	
	N# 🦚 🛧	11:33 35% 28/11/2018

- 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

Return the device to Endress+Hauser in the original packaging where possible.

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

Scope of delivery

- Field Xpert SMT70 tablet PC with handle
- AC charger (100 to 240 V_{AC} , 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





- 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.

Hardware

Ecom Instruments GmbH Industriestraße 2 97959 Assamstadt Germany www.ecom-ex.com

Software

•

Endress+Hauser Process Solutions AG Christoph Merian-Ring 12 4153 Reinach Switzerland www.endress.com

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 \rightarrow 🗎 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.

License Update EULA	About			- "," ×
	DTMs/Drivers Update			
	You need to have an Endress+Hauser Netilion Librar; symbol in the status bar) to activate the automatic D After signing in, the DTMs will be downloaded in the possible, the DTMs will be installed silently.	TM update function.		
	Last check for update	6/26/2019 3:13 PM		
	Check for update			
	Application Software Update			
	Last check for update	6/26/2019 9:59 AM		
	Field Xpert application update service will expire on	1/8/2020 11:59 PM		
	Check for update			
			◎ № 🛆 🕁	99% E 1:01 PM

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.

H

• 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.



Symbol	Meaning	Description
	Power	The LED is lit green when the system is in operation. The LED flashes when the system is in sleep mode.
((_T))	Wireless communication	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 "Quick Menu" application must be installed to be able to display the status for wireless communication.
4	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

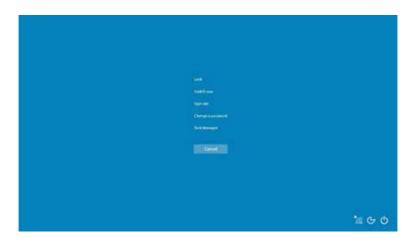
▶ Press and hold the 🕁 button until the power LED flashes.

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.

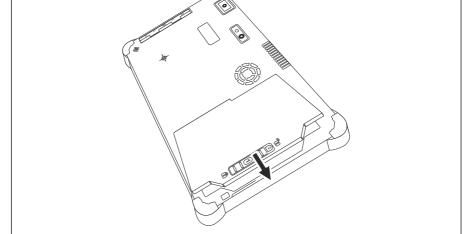
Possible actions:

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

7 Commissioning

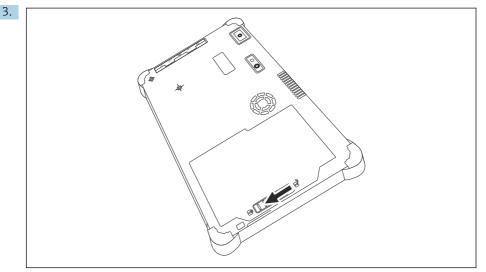
The tablet PC can be powered by the AC adapter or the lithium ion battery.

7.1 Inserting the battery1.



Insert the battery in the battery compartment.

2. Press down until the battery clicks into place.



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.

- 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

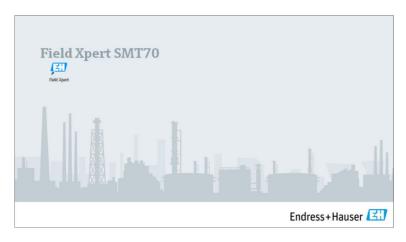
The use of unsuitable objects to operate the device

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:

Communication protocol	Connection	Modems/interfaces
HART		Commubox FXA195 4 to 20 mA
	T.	
		MACTek Bluetooth modem 4 to 20 mA
	t _{to}	
	L .	Memograph RSG45 (4 to 20 mA)
		MACTek USB modem (4 to 20 mA)
	t _{to}	
		FieldPort SFP20
	ч.,	
	t _{to}	Fieldgate SFG250
	ч.,	Tank Scanner NXA820
WirelessHART	•••	WirelessHART adapter SWA70
	•••	WirelessHART adapter SWG70
PROFIBUS	4 .	Softing PROFIusb
	4 .	Softing PBpro USB
	ч.,	FieldPort SFP20
	ч.,	Fieldgate SFG500
FOUNDATION Fieldbus	* e0	NI USB

Communication protocol	Connection	Modems/interfaces
	ч _ю	FieldPort SFP20
	ч _ю	Softing FFusb
Modbus	₹ _{€0}	Modbus serial
Endress+Hauser service interfaces		Commubox FXA291 CDI
	₹ _{€o}	
	₹ _{₹0}	Commubox FXA291 IPC, ISS, PCP
	₹ _{to}	Commubox FXA193 IPC, ISS
	₹ _{to}	TXU10 V2 CDI
		TXU10 V2 PCP
	₹ _{€o}	
	₹ _{to}	TXU10 V1 PCP, CDI
	►	CDI USB
	₹ _{to}	
	₹ _{₹o}	CDI TCP/IP
Bluetooth	A0041855	Endress+Hauser Bluetooth devices, also level and pressure equipment
Wi-Fi	((10	Endress+Hauser Wi-Fi devices
IO-Link	A0041855	FieldPort SFP20
	₹ _{€o}	

Connection "Automatic"

Connection:					0 - 53
	(Connection:			
			Ч _е	(((0	
Automatic Connect to HART and IO- Assistant Connect to device step-by- Wireless Connect to Endress-Hauser Link device automatically step Bluetooth and WLAN device		utomatic Connect to HART and IO- nk device automatically	Assistant Connect to device step-by- step	Wireless Connect to Endress+Hauser Bluetooth and WLAN device	

Tap the 🕨 icon.

└ The device configuration software establishes a connection to the connected device.

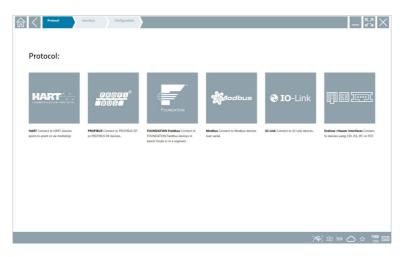
1

Connection "Assistant"

		≡ © = 2	$\langle \times \rangle$
Connection:			
Automatic Connect to HART and IO- Link device automatically	Assistant Connect to device step-by- step	Wireless Connect to Endress+Hauser Bluetooth and WLAN device	

Tap the ⊾ icon.

└ An overview of all the protocols available opens.



2. Select a communication protocol.

└ An overview of all the modems available opens.

	Interface Configuration				- 52 X
Interface:					
● 	•	•< (8)"	•	۶	品
Commubox FXA195	MACTek Viator USB	Softing mobiLink	Vector InfoTech HART	MACTek Viator Bluetooth	Memograph RSG45
器	器	品			
Fieldgate SWG70	Fieldgate SFG250	Tank Scanner NXA820			
					🔨 🕹 🎫 📖 7:57 AM

3. Select a modem.

└ The device can be configured.

Connection "Wireless"

		≡ © = S ×
Connection:		
Automatic Connect to HART and IO- Link device automatically	Assistant Connect to device step-by- step	Vireless Connect to Endress+Hauser Bluetooth and WLAN device

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.

命・	\langle		_ <u>\$</u> 2
	8 🔻 🔺 💙 🗹		T 0' 🗟
Device Status	Tag.	Process Values	Signal Strength
0	M591_CM82		<u></u>
0	EH_Promass 300 500_1002000	Physical address (MAK): 00:07:05:11:af:d0, Secured	\$\blackstrightsquare\$
0	2618_234_M01		R
\checkmark	DCM-FMR20	PV: 0.725 m	<u> </u>
0	Gamma Factory		>
0	MCT 1 SB factory		≈ ►
0	MTMT71_S8_admin		<u> </u>
0	Picomag 7kb		<u></u>
0	TMT72_DH		≈ ►
0	MFMR56 SB admin		>
\checkmark	MFEL62 SB factory	PV: bde_enum_forkcovered SV: 569.8 Hz	<u></u>
0	EH_Promag 300 500_0C19000	Physical address (MAK): 00:07:05:13:1e:3a, Secured	Ref.
Do you haw	e your WLAN device configured as a cl	ient in your network?	Click here to connect
Number of	items: 26		
			実 @ № 🛆 ☆ 攔

Connection "Bluetooth"

1. Tap the **i** icon to filter for Bluetooth devices.

- 2. Tap the icon next to the device that you want to configure.
 - └ The Login dialog box appears.

Credentials will be avered Hitt: Vich the Bureton Statings for dranging the saving options Additional Information:	
	^{0.17} 3
41 5	6
· · · · · · · · · · · · · · · · · · ·	9
TAB 🛧	BACK
· •	•
GLAR SYM (INTER

- 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.

- 2. Tap the **b** icon next to the device that you want to configure.
 - → The Connect to WLAN device dialog box appears.

	Cardigues Connection MAM device Cardigues Connectifit Cardigues WAM device	$\langle \rangle$
	Connect to WLAN device	
	Device name DL (Promes 300 500_1001000	
	Connet	
	☆ ○ ≥ ◎ ※	f 📖 📰
3.	Enter the Password and tap Connect .	
4.	Do not change the IP address - leave it as is.	
5.	Tap the ▶ icon.	
б.	Tap Vendor specific.	
7.	The DeviceDTM opens and the device can be configured.	
i	The initial password corresponds to the serial number of the device.	
F	Гар Click here to connect to establish the connection directly via an IP add	ress.

8.3 Information and software settings

- ▶ Click the imes 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.

	DTM Device Type	Version	Manufacturer	Date	Protocol	State	
	_DO-MIO-Ex12.FF Rev 1	DDRev 0x4	Pepperl+Fuchs GmbH (IDTM)	2017-01-03	Fieldbus FF H1	ок	
	0000E00004 Name not available Rev 1	DD Rev 0x1	Manufacturer Expansion (IDTM)	2019-05-14	HART	OK	
	006003E064 Name not available Rev 1	DD Rev 0x1	Power-Genex Ltd. (IDTM)	2019-05-14	HART	OK	
ł.	0990 Fieldbus Switch Box Rev 4	DORev 0x1	EL-O-MATIC BV (IDTM)	2000-09-01	Fieldous FF H1	ок	
	1000 Rev 3	DORev 0x1	ROSEMOUNT ANALYTICAL DIVISION (IDTM)	2001-05-09	Fieldbus FF H1	ок	
	1056 Rev 1	DD Rev 0x1	Rosemount Analytic (IDTM)	2019-05-14	HART	ОК	
	1056 Rev 2	DD Rev 0x1	Rosemount Analytic (IDTM)	2019-05-14	HART	ок	
•	1066 Rev 1	DD Rev 0x1	Rosemount Analytic (IDTM)	2019-05-14	HART	ок	
	1066 Rev 2	DD Rev 0x1	Rosemount Analytic (IDTM)	2019-05-14	HART	ок	
ŧ	1066-C/T-FF Conductivity Analyzer Rev 1	DDRev 0x3	ROSEMOUNT ANALYTICAL INC. (IDTM)	2011-12-16	Fieldbus FF H1	ОК	
	1066-DO/CL/OZ-FF Amperometric Analyzer Rev 1	DDRev 0x3	ROSEMOUNT ANALYTICAL INC. (IDTM)	2012-01-18	Fieldbus FF H1	ОК	
	1066-P-FF Fieldbus Transmitter Rev 1	DDRev 0x5	ROSEMOUNT ANALYTICAL INC. (IDTM)	2010-12-21	Fieldbus FF H1	ок	
	1151 Rev 1	DD Rey 0x1	Rosemount (IDTM)	2019-05-14	HART	ок	
	1151 Rev 2 DD Rev 0x1		Rosemount (IDTM)	2019-05-14	HART	0K	

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.

A	< "	OTM Catalog	Event Log	Favorites	Reports	Firmware	Settings	— KX X
	Time		Dent					
	6/26/2019 3:16 6/26/2019 3:13 6/26/2019 3:13 6/26/2019 3:13	:14 PM :11 PM	DTMs and d Checking for Bluetooth se	rivers are up-to-date. r updates of DTMs and dr erver LiveList subscribed.		ssfully attached to asset in	Netilion library.	
	6/26/2019 9:59	:10 AM	Connected b	a Bluetoath server.				
Vumber	r of Items: 5							Clear

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.

The Costalog	Event Log Fave	rites Reports	Firmware	Settings		$ \frac{1}{2}$ \times \times
Name	Description					Actions
Number of items: 0						+
					N N Addiss Stand Addiss Addis Addis	12:10 PM 100% 6/27/2019

8.3.4 Managing reports

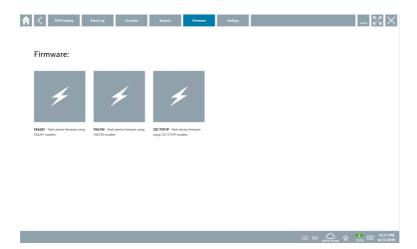
- 1. Click the **Reports** tab.
 - └ The overview with the "Manage saved device reports" folder opens.

A Catalog	Event Log	Favorites	Reports	Firmware	Settings				X
Manage save	d device rep	oorts:							
Ê									
	-								
							\bigcirc	s 🕶 📼	12:11 PM

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

8.3.5 Firmware

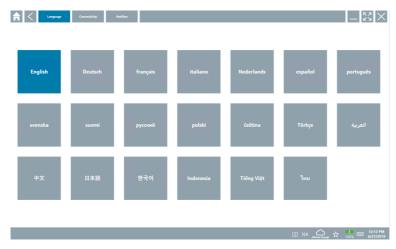
- ► Click the **Firmware** tab.
 - ← An overview of the firmware opens.



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 \times 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.

Language Connect	vicy Netilian Bluetoeth		_ 52 X
Status Name Descriptio		Unk	Actions
Number of Items: 0			+
0.		漢	№ 🛆 ☆ 📼

Netilion

- ► Click the **Netilion** tab.
 - └ An overview of data storage settings opens.

Regular Connectivity Nettline		- 57 ×
Data storage settings		
V Use Netilion central data storage		
✓ Lipland anset Information when going online to device ✓ Lipland canader reports		
	🗊 Ni 💭 Adrias Stangt	12:13 PM 100% 6/27/2019

Bluetooth

- Click the **Bluetooth** tab.
 - └ The Bluetooth device security data function opens.

命く 🗳	guage Cannectivity Nection Bloctorth	-
	SmartBlue Password settings	
	Save Password for all the Bluetooth devices	
Ш.		€₩64

8.4 Additional information about the software

- ▶ Click the ? icon.
 - └ An overview of all the additional information opens.

8.4.1 License

- ► Click the **License** tab.
 - └ The dialog box with the licensing information opens.

⊨ < License	Update	EULA	About	_ الأكم الأكم
				ense Management
			Product	FieldCare SFE300
			Version	1.04.00
			Serial number Software ID	
			Licensee	ULBVS-POBXB-2U4J8-HSG7H-RBV4G Adrian Stangl / mull
			License usage Usage period	
			usage period	THE PRODUCT SHOPPING.
			Ree	snew License Return License
				💿 N4 🔿 🕁 🕌 📼 🔐 1901 PM

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.

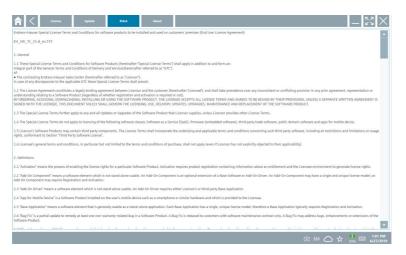
Renewing the license for software versions up to 1.04

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

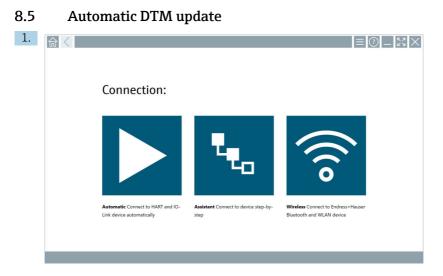
This tab contains information about the software currently installed, the manufacturer and the software source text.

1. Click the **About** tab.

╘╼	ĥ	License Update EULA About		- Ľ¥ ×
		Imprint Endress+Hauser		
		Open Source Open Source Software		
		Version 1.04.00		
		Release Notes Field Xpert - 1.04.00 - What's new?		
			@ NI 🔿 🕁 🚦	1:02 PM 9% - 6/27/2019

An overview of all the information opens.

2. Click the \odot icon to view the information.



Click the \bigcirc icon in the status bar.

└ The "Sign in to Netilion Library" dialog box opens.

↑ <	office Online	- KA KA
	Sign in to Netilion Library	
	E-Mail	
	Password	
	Sign in	
	reete an account: sign up Forgot your password? Reset password	
		I NØ C ☆ 99% III 6/27/2019
		<u> </u>

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).



Click the 🛆 icon in the status bar.

└ The "Sign in to Netilion Library" dialog box opens.

and the offline	Online		_ 52 ×
Sign	in to Netilion Library		
E-Mail			
Passwo	d		
		Sign in	
	account? Sign up our password? Reset password		
			I:03 PM I:03 PM G/27/2019

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 <a>[a] 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

- Establish a connection to the device and open the DTM. Click the i 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.	合 <			≡ ⑦ – № ×	I
		Connection:			
		Automatic Connect to HART and IO- Link device automatically	Assistant Connect to device step-by- step	Wineless Connect to Endress+Hauser Buetooth and WLAN device	

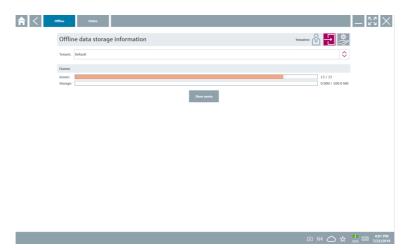
Click the 🛆 icon in the status bar.

└ The "Sign in to Netilion Library" dialog box opens.

♠ < offline	Online	
Sign	in to Netilion Library	
E-Mail		
Passwo	d	
	Sign In	
	account? Sign up our password? Reset password	
		NI △ ☆ ¹⁰³ PM 6/27/2019

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.

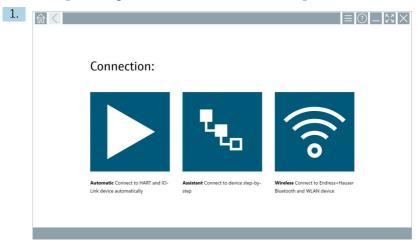
usset filter			
enant: Default			
anufacturer	Product	Serial number	Created Actions
8	TTX300 series	001A00080000058F9F7	7/4/2019 8:40:05 AM
Documents		Pictures	
Category Name Number of Items: 0		File name Number of items: 0	
sdress+Hauser		M5008D02000	7/4/2019 7:24:16 AM
dress+Hauser	Prowirl 200 PA	KAD5BA19000	7/4/2019 7:43:32 AM
dress+Hauser		K100140438C	7/4/2019 7:56:42 AM
dress+Hauser	Cerabar S	99068F018E8	7/4/2019 8:08:46 AM
dress+Hauser		H7000004428	7/4/2019 8:30:49 AM
dress+Hauser	TMT125	LB04030426B	774/2019 8:55:18 AM
dress+Hauser	Cerabar S PMx7x	9401140109C	7/4/2019 9:40:42 AM
dress+Hauser	Deitabar S xMD x3x	dsmmy_00110009000002000FD	7/4/2019 10:30:48 AM
dress+Hauser	iTemp TMT182	dummy_001100C8000000598625	7/4/2019 10/42/45 AM
dress+Hauser	Cerabar S PMx x3x	dsmmy_00110007000000521D02	7/4/2019 11:12:59 AM

- 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



Click the ▶ icon.

← A connection to the desired device is established.

C Program functions ~ DTM functions	✓ Additional functions ✓ Device report ✓	_	- 23	\times
Device same: 19962 Device same: 19962 Device tax:	- 2002 9 2000 - 2000 - 2002 9 2000 - 2000 - 2002 9 2000 - 20000 - 2000 - 20000 - 2000 - 20000 - 20000 - 2000 - 2000 - 2000 - 200			
Pienu / Rake Unit				
Mospitt fix PO Deposition 1: SH1Currento PO Remedy information: 1: Check proce PO Access status being: Maintenance	Heartbeat Verification			
Community	A constraint of the state of th			
() ⊒ Dela kopon () ⊒ Dela chech () ⊒ Dela checha () ⊒ Dela checha				
0 🖾 tuet			1 A = C 2	3
		1	4 7 FL 5	6
		**	7 B	9
			•	-
		T	AB 1	BACK
			F 4	
23 Orline The Connected D D D D D D D D D D D D D D D D D D D	D Red D Cond		ear sym	ENTER
		☆ 🤇)• ~ 1	

- 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.

8.8 RFID

命く			=	? <u>-</u> \$3×
Connect	tion:			
Automatic Connect Link device automat		Assistant Connect to device step-by- tep	Wireless Connect to Endress - Hauss Bluetooth and WLAN device	r

Click the 🔤 icon in the status bar.

└ The "RFID TAG Editor" dialog box opens.

♠ <		_ [2] ×
RFID TA	G Editor	_
N(1) 01.00.00	a	lear
Serial number:		
Manufacturer:		>
Short description:		
Tag line 1:		
Tag line 2: Tag line 3:		
rag inte 5:		
	Read tag Write tag	
		1 -08 PM
] № 🛆 ☆ 🏓 📼 1:08 PM 6/27/2019

- 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 \rightarrow 🗎 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 all 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 SUBSTITUTIOND E COMPOSANTSP EUTR ENDRE CE MATERIEL INACCEPTABLE POUR LES EMPLACEMENTS DE 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- RISQUED 'EXPLOSION- AFIN D'EVITER TOUT RISQUE D'EXPLOSION, S'ASSURER QUE L'EMPLACEMENT EST DESIGNE 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 QUIL NE S'AGISSE 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.



71619004

www.addresses.endress.com

