OPTIFLEX 1300 C Supplementary instructions

2-wire / Guided Radar (TDR) Level Meter

Supplementary Instructions for water resource management (WHG approval)

KROHNE

1.1 Scope of the document

This document only contains configuration and operating information for devices approved for water resource management applications (WHG approval). For more data, refer to the Quick Start, the Handbook and the Supplementary Instructions for ATEX applications. These documents are available on the Internet or on the DVD-ROM supplied with device. If you do not have user documentation, please contact the nearest KROHNE office or download them from KROHNE's website, www.krohne.com.

WARNING!
If the device does not have the appropriate options and the correct device settings for WHG applications, the manufacturer does not accept responsibility for tank or channel overfill.

1.2 Revision history

Edition	Date	Description
1	December 6, 2012	First issue.

1.3 Device description

This device is a 2-wire level transmitter that uses TDR (Time Domain Reflectometry) / Guided Radar technology. The device measures the level, distance, volume and mass of liquids, liquid gases, pastes, powders, slurries and granular products. It is also suitable for the continuous and simultaneous measurement of level and interface of 2 liquids. Measurements are displayed via a DTM (device type manager) for remote communication or an optional integrated display screen with wizard-driven setup and online help functions.

The level transmitter is approved for use in potentially explosive atmospheres when equipped with the appropriate options.

1.4 Standards and approvals

This device is approved for use in water resource management applications when it is equipped with the appropriate options (WHG approval, ...) and has the correct device settings. It is registered under DIBt General Construction Approval number Z-65.16-460 dated 13 August 2008.

LEGAL NOTICE!
Wasserhaushaltsgesetz (WHG) is the German Act on Managing Water Resources dated 31 July 2009 (BGBl. I S. 2585). It was revised on 24 February 2012 (BGBl. I S. 212). The full legal text in German is available on the internet at www.gesetze-im-internet.de/. This Act follows the provisions of European Directive 2000/60/EC of 23 October 2000 that establish a framework for Community action in the field of water policy. The legal text for this Directive is available on the internet at http://eur-lex.europa.eu/.

WARNING!
Carefully read the DIBt Certificate for WHG Approval, Technical Description, and Annex 1 and Annex 2 for the Technical Description.

The documents that follow are given on the DVD-ROM which is supplied with the device:

- DIBt Certificate for WHG Approval
- Technical Description
- Annex 1 for the Technical Description
- Annex 2 for the Technical Description

You can also download the certificate from our internet site.

1.5 Nameplate

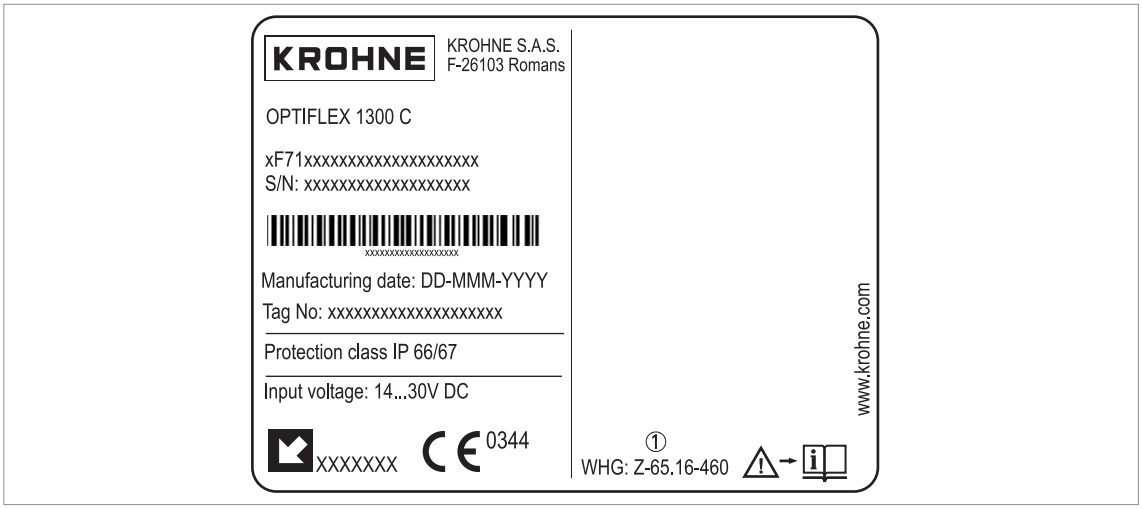

Figure 1-1: Device nameplate (device with WHG approval option)

① WHG approval code

The device must agree with conditions specified in the "Installation" chapter of the Handbook. If the device is also approved for use in potentially explosive atmospheres, refer to the Supplementary Instructions for ATEX applications.

The device must agree with conditions specified in the "Electrical connection" chapter of the Handbook. If the device is also approved for use in potentially explosive atmospheres, refer to the Supplementary Instructions for ATEX applications.

The device must agree with conditions specified in the "Start-up" chapter of the Handbook. If the device is also approved for use in potentially explosive atmospheres, refer to the Supplementary Instructions for ATEX applications.

Do a start-up check before you energize the device:

- Does the information given on the nameplate agree with the application?
- Is the device also approved for ATEX applications? If the device is approved for ATEX applications, do the start-up check given in the “Start-up” chapter in the Supplementary Instructions for ATEX applications.

5.1 General notes

For more data about device configuration and operation (function description, error messages etc.), refer to the handbook.

The multi-drop network option is not available for WHG-approved devices.

5.2 Special conditions for the LCD Display option

5.2.1 Device settings (LCD display option)

C. Advanced setup

Menu No.	Function	Description	Value
C.1 Installation setup			
C.1.13	Measuring Mode	If the menu item is set to "Direct", it agrees with WHG approval requirements. You cannot set this menu item to “Automatic” or "TBF".	Direct
C.3 Output 1(HART)			
C.3.1	Output Function	The device cannot measure the level of more than 1 liquid. If the menu item is set to "Level" or "Distance", it agrees with WHG approval requirements. You cannot set this menu item to "Volume (Mass)", "Ullage Volume (Mass)", “Interface Level”, "Interface Distance", "Interface Volume", "Layer" or "Layer Volume".	Level or Distance
C.3.5	Error Handling	If the device continues to have an error status after 5 seconds, the current output of Output 1 will increase to 22 mA. You cannot set this menu item to “3.6 mA” or “Hold”.	22 mA
C.3.6	HART Address	You cannot use the device in multi-drop networks.	0
C.4 Output 2			
C.4.1	Output Function	The device cannot measure level in tanks, pits and channels with more than 1 liquid. If the menu item is set to "Level" or "Distance", it agrees with WHG approval requirements. You cannot set this menu item to "Volume (Mass)", "Ullage Volume (Mass)", “Interface Level”, "Interface Distance", "Interface Volume", "Layer" or "Layer Volume".	Level or Distance
C.4.5	Error Handling	If the device continues to have an error status after 5 seconds, the current output of Output 2 will increase to 22 mA. You cannot set this menu item to “3.6 mA” or “Hold”.	22 mA
C.5 Device setup			
C.5.2	Passwords	–	–
C.5.2.1	Supervisor Password Enable/Disable	The password security feature is permanently in operation.	Enable

5.2.2 Save function

When you use the LCD display option to change the device configuration, it is necessary to confirm your settings 2 times. Push [↵] to confirm.

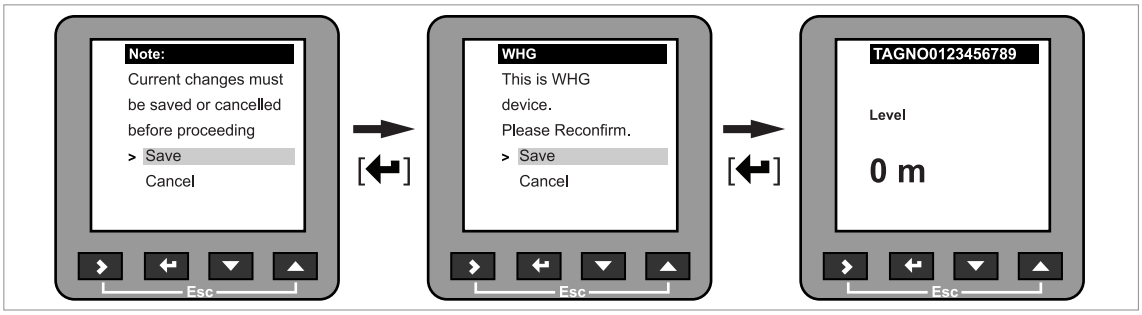

Figure 5-1: Steps to save data (WHG-approved devices)

5.3 Special conditions for PACTware™ (DTM)

5.3.1 General notes

The device has a Device Type Manager (DTM – device driver) for use with the PACTware™ software tool. You can monitor WHG status and change the device configuration from a remote workstation. If the device is in "WHG" mode, this data is shown in PACTware™.

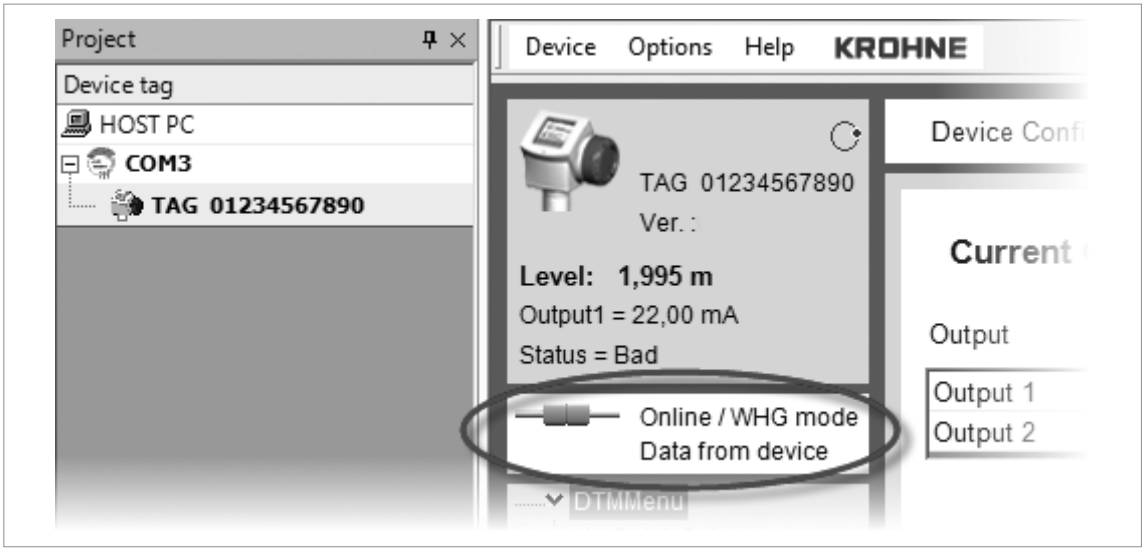

Figure 5-2: WHG mode in PACTware

The DTM has the same menu structure as the LCD display option. If the device is approved for WHG applications, some parameters cannot be changed. For more data, refer to *Device settings (LCD display option)* on page 8.

5.3.2 DTM installation

WARNING!
You must use DTM version 1.0.0.37A with the WHG-approved device. This software is supplied on the DVD-ROM delivered with the device. It can also be downloaded from the "Download center: Software" web page on the manufacturer's website.

DTM installation procedure

- Download PACTware version 4.1. The software is available on this webpage: http://krohne.com/en/dlc/software/.
- Click on the **Device** button in the main toolbar.
- Extract the files from the ZIP folder "PACTware_4-1.zip".
- Go to the folder "PACTware_4_1_0_26_Setup and double click on the "setup.exe" file.
- Install PACTware. Follow the procedure in the set-up wizard. If your computer does not have Microsoft .NET Framework, the installation package will also install this software.
- Go to **Field instrument software > 4_DTM - OPTIFLEX_ENG-DE** on the DVD-ROM supplied with the device.
- Install the DTM file for the device (version 1.0.0.37A). Follow the procedure in the set-up wizard.

➲ End of the procedure.

5.3.3 Device settings (DTM)

When you change the configuration of a WHG-approved device with the DTM and then store to the device, you must confirm the change 2 times. Do the procedure that follows:

Store to the device (procedure for WHG-approved devices)

- Change the device settings.
- Click on the “Store to device” button.

➲ The DTM opens a "Save" window and tells the user to make sure it is necessary to store the changes.

- If it is necessary to store the changes, click on the “Yes” button.

➲ The DTM opens a “WHG WARNING” window.

- If the device settings are correct, click on the “Store to device” button.

➲ The DTM opens a second “WHG WARNING” window.

- If the device settings are correct, click on the “Store to device” button.

➲ The device stores the new data to the device. Some minutes are necessary to complete this step. End of the procedure.

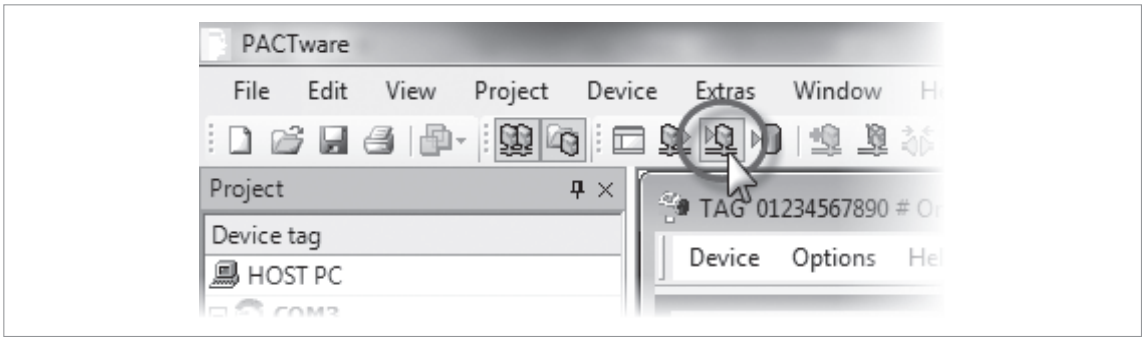

Figure 5-3: “Store to device” button

KROHNE product overview

- Electromagnetic flowmeters
- Variable area flowmeters
- Ultrasonic flowmeters
- Mass flowmeters
- Vortex flowmeters
- Flow controllers
- Level meters
- Temperature meters
- Pressure meters
- Analysis products
- Products and systems for the oil & gas industry
- Measuring systems for the marine industry

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