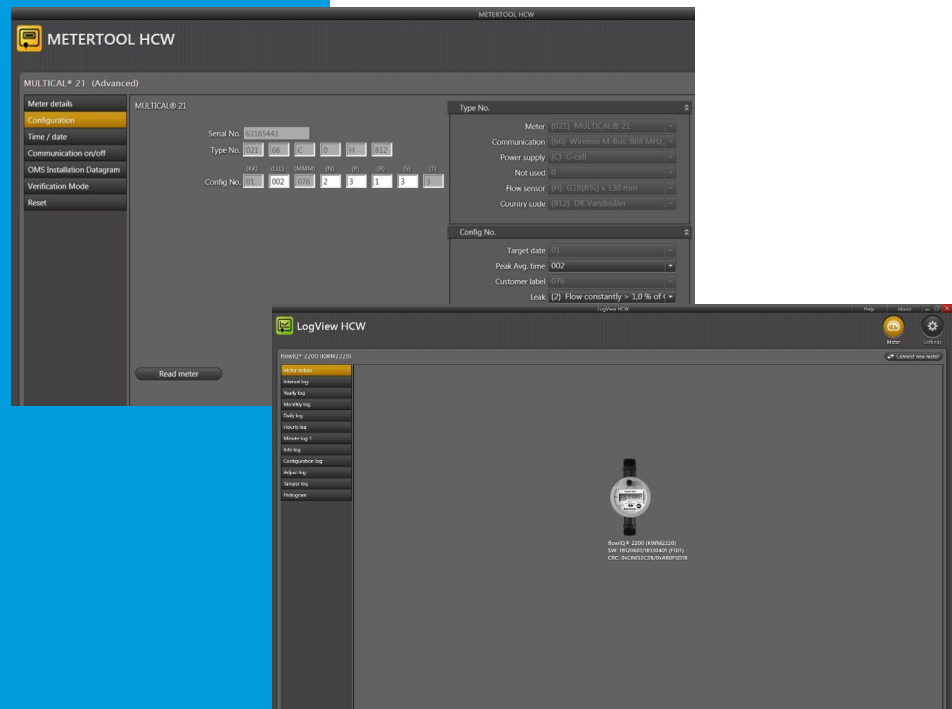


Technical guide

# METER TOOL & LogView Water Meters



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# 1. Introduction

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METERTOOL HCW and LogView HCW are license free tools that are intended for Configuration and verification of Kamstrup's heat, cooling and water products. These products include thermal energy meters, flow sensors, communication modules, water meters and many more. To get METERTOOL HCW and LogView HCW, it is necessary to register on the Mykamstrup website, after which the programs can easily be installed on a computer. In addition to the tools, you must also have a Kamstrup communication unit, such as an optical head, before you can engage with your meter. The communication interface establishes the communication between your Kamstrup product and METERTOOL HCW and LogView HCW.

This document describes METERTOOL HCW and LogView HCW when used with Kamstrup water meters.

**Note:** MULTICAL® 62, MULTICAL® 61 and MULTICAL® 41 are excluded from this document.

## 1.1 System requirements

METERTOOL HCW/LogView HCW require minimum Windows XP SP3, Windows Vista or Windows 7- Home Premium (32 and 64 bit) or newer as well as Windows Internet Explorer 5.01 or newer.

<b>Minimum:</b>	1 GB RAM	<b>Recommended:</b>	4 GB RAM
	10 GB free HD space		20 GB free HD space
	Display resolution 1280 x 720		1920 x 1080
	USB		
	Printer installed		

## 1.2 Installation

Check that the above-mentioned system requirements are fulfilled.

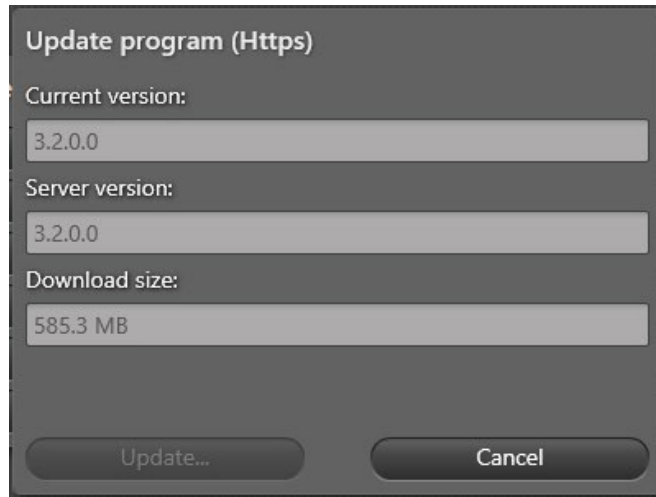
When the installation has been completed, the icon 'METERTOOL HCW', and/or 'LogView HCW' will appear in the 'All Programs' menu under 'Kamstrup METERTOOL' or 'Kamstrup LogView' (or from the menu 'start' for Windows XP) and also as a link on the desktop. Double-click on link or icon to start the required program.

## 1.3 Update program and database

In this window (see below) it is possible to verify that METERTOOL HCW and LogView HCW is updated.

If METERTOOL HCW or LogView HCW is not updated, the 'Update' button can be pressed.

Check regularly that METERTOOL HCW and LogView HCW are updated. By pressing the 'Update' button, the latest update will automatically be installed.



METERTOOL HCW contains product databases for all the supported Kamstrup HCW products. The product databases contain information on valid configurations and will be updated regularly when new functions are added to the databases. In this window, it is possible to verify that the product databases are updated.



## 2. Communication units

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It is necessary to use a communication unit for METERTOOL HCW and Logview HCW to be able to establish a connection to a Kamstrup product.

### 2.1 USB optical head

With a USB optical head, see Figure, METERTOOL HCW and Logview HCW can connect to all the supported Kamstrup products with an optical interface.



*USB Optical head*

### 2.2 Bluetooth optical head

In addition to a USB optical head, a Bluetooth optical head is also available for situations where a wireless connection is preferred. Like the USB optical head, the Bluetooth optical head can read HCW Kamstrup products with an optical interface.

**Note:** The optical head must be positioned with the correct orientation.

The cable or key chain (on the Bluetooth variants) must as a rule of thumb always point rectangular oriented away from the display. Please see examples in section 3.1.

### 3. Supported water products

These products supported by METERTOOL & LogView:

North America	flowIQ® 2250	
	flowIQ® 3250	
	flowIQ® 2100	
	flowIQ® 3101	
		flowIQ® 2200
		flowIQ® 3200
		flowIQ® 4200
Rest of World	MULTICAL® 21	
	flowIQ® 2101	
	flowIQ® 3100	
	flowIQ® 2102	
	flowIQ® 2103	
		flowIQ® 3200
		flowIQ® 4200

### 3.1 How to use METERTOOL HCW and LogView HCW for Kamstrup water meters

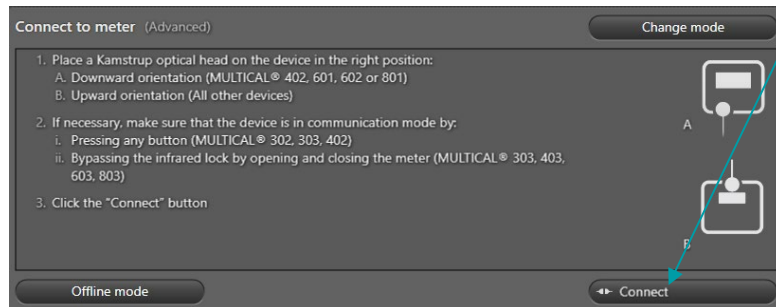
#### 3.1.1 General information

It is important to be familiar with the meter functions before engaging with the programs.

Before running the program, connect your optical read-out head to your computer and place it on the face of the meter using the optical eye holder as shown below.



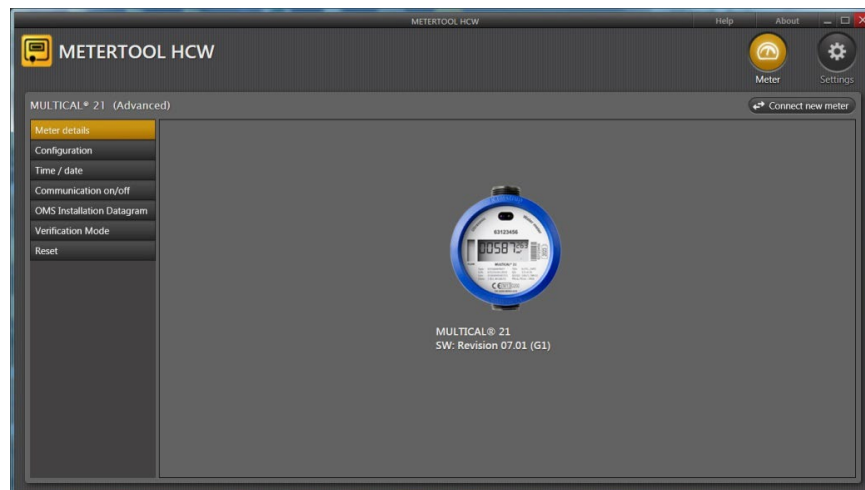
Start up 'METERTOOL HCW' or LogView HCW and click 'Connect'



METERTOOL HCW or LogView HCW responds by showing a picture of the water meter connected with rev. info. etc. (in this case a MULTICAL® 21 from METEROOL HCW)

From the menu in the left side of the screen, different options are available, depending on the water meter type and depending on if it is METERTOOL or LogView HCW.

These options will be described in the sections below.



## 4. METERTOOL HCW

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### 4.1 General information

'METERTOOL HCW' is used for re-configurations and to apply different modes to the meters, such as verification mode, transport mode, to clear histogram etc. Depending on the water meter variant different features will be available.

#### 4.1.1 Configuration

This feature is used for re-configuration of the meters after production.

##### flowIQ® x2xx

- GMT-offset
- Peak avg. time
- Leak limit
- Burst limit
- Ambient temp. low limit
- Ambient temp. high limit
- Data logger profile
- Display setup
- Temperature units
- Module configuration
- Consumption profile
- DST

##### MULTICAL® 21, flowIQ® 210x and flowIQ® 310x

- Peak avg. time
- Leak limit
- Burst limit
- Date option
- Display setup

#### 4.1.2 Time and Date

This feature is used to alter the time and date of the meter after production.

- Getting date and time
- Set date and time

#### 4.1.3 Communication ON/OFF

This feature is used to apply radio on/off to the meters and to apply radio enabled and disabled.

**flowIQ® x2xx**

- Transport mode ON
- Transport mode OFF
- Radio enabled
- Radio disabled

**MULTICAL® 21, flowIQ® 210x and flowIQ® 310x**

- Communication ON
- Communication OFF

**4.1.4 OMS installation datagram**

This feature is used to configure the meter with an OMS T1 datagram.

**MULTICAL® 21, flowIQ® 210x and flowIQ® 310x**

- Disable
- Enable

**Note:** This is only available for specific meter variants.

**4.1.5 Verification mode**

This feature is used to apply verification mode to a meter.

- Verification mode ON
- Verification mode OFF

**4.1.6 Reset**

This feature is used to clear the meter histogram or reset the meter.

**flowIQ® x2xx**

- Clear histogram

**MULTICAL® 21, flowIQ® 210x and flowIQ® 310x**

- Reset meter
- Pulse adapter mode – Pulse ON
- Pulse adapter mode – Pulse OFF

**4.1.7 Wired interface type**

This feature is used to reconfigure encoded output meter wire detection.

**flowIQ® 2100 module 22 and 23 and flowIQ® 3101 module 22 and 23**

- Auto Detect
- Encoded (3-wire)
- Encoded (2-wire)

**4.1.8 Battery replacement**

This feature is a function that is necessary to clear tamper alarms in relation to flowIQ® 4200 battery replacement exercises.

**Note:** Battery replacement is only available for flowIQ® 4200. For further information please refer to product technical descriptions.



### 5.1.4 Configuration log

This feature allows monitoring of V1, hour counter, configuration changes and number of configurations change.

### 5.1.5 Adjust log

This feature traces the flow point adjustments.

### 5.1.6 Tamper log

This feature logs if the meter has experienced a tamper alert.

### 5.1.7 Histogram

This feature makes it possible to read out the histogram from the meter.

## 5.2 Application

'Daily Log' is here used as an example:

The screenshot shows the LogView HCW application window. The interface includes a sidebar with a tree view of data registers, a central area for selecting data, and a main display area for records. Callouts point to specific features:

- Choice of data period from/to:** Points to the date selection fields (01/08/2015 and 11/08/2015).
- Activate 'Read' to collect required data from the meter:** Points to the 'Read' button.
- Or load already saved data values:** Points to the 'Load' button.
- To save the read values into a file:** Points to the 'Save' button.
- Choice of graph(s) or table presentation of data from read/loaded period:** Points to the 'Graph' and 'Export to Excel' buttons.
- Export of read/loaded data to Excel spread sheet:** Points to the 'Export to Excel' button.
- Choice of required data registers:** Points to the tree view of data registers in the sidebar.

### 5.3 How to use the application

Select the required registers by clicking the box next to the register name. If readout of all data is required, you must select all values by activating 'Select all'.

When readout has been completed the read values can be saved by clicking 'Save'. We recommend you save the read-outs to ensure that data can be reopened later for further analysis or documentation.

The values appear in graphs or list form by activating the 'Graph'/'Table' toggle function.

In order to carry out a new data readout, you just select a new period and new data registers. If the formerly read values have not already been saved, you will be asked if you want to do so. Tables can be exported direct to 'Windows Office Excel' or printed.

To zoom in: Activate the zoom function and use the mouse and left-hand mouse button.

To zoom out: Double-click left-hand mouse button.

When the zoom function is switched off, the actual value of each measuring point can be read using the mouseover function at the measuring point.

