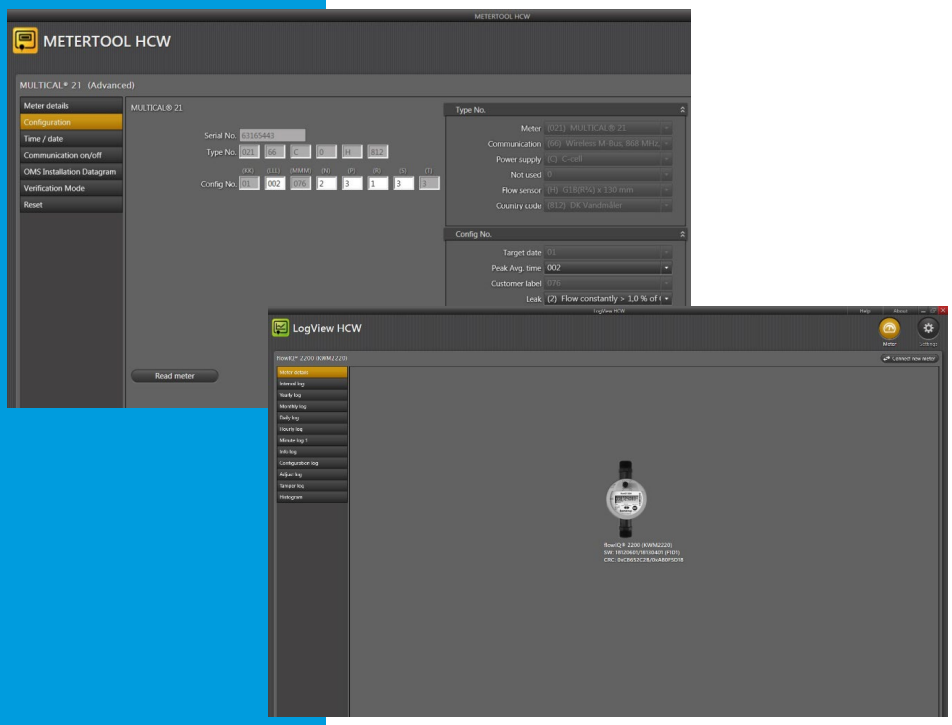
kamstrup

Technical guide

METERTOOL & LogView Water Meters



Contents

1. Introduction

METETOOL 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.

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

1.2 Installation

Check that the above-mentioned system requirements are fulfilled.

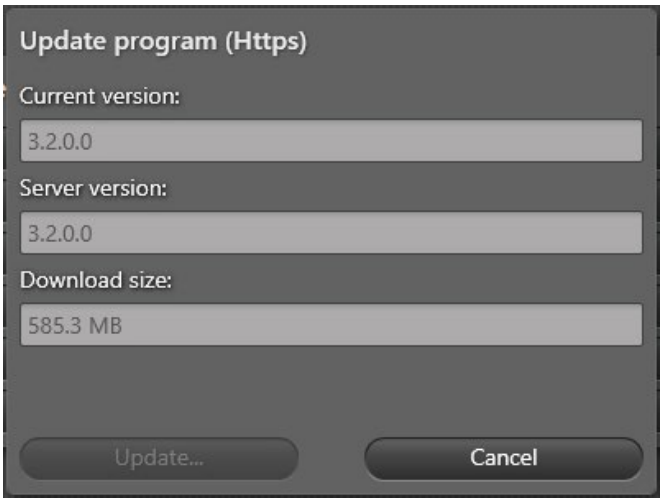
When the installation has been completed, the icon 'METERTOOL HCW', and/or 'LogView HCW' will appear in the 'All Programs' menu under 'Kamstrup METERTOOL' or 'Kamstrup LogView' (or from the menu 'start' for Windows XP) and also as a link on the desktop. Double-click on link or icon to start the required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

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® 2200 flowIQ® 3200 flowIQ® 4200

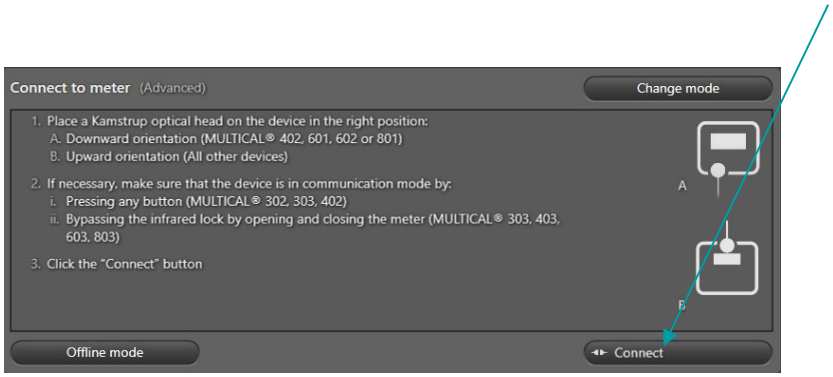
3.1 How to use METERTOOL HCW and LogView HCW for Kamstrup water meters

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.

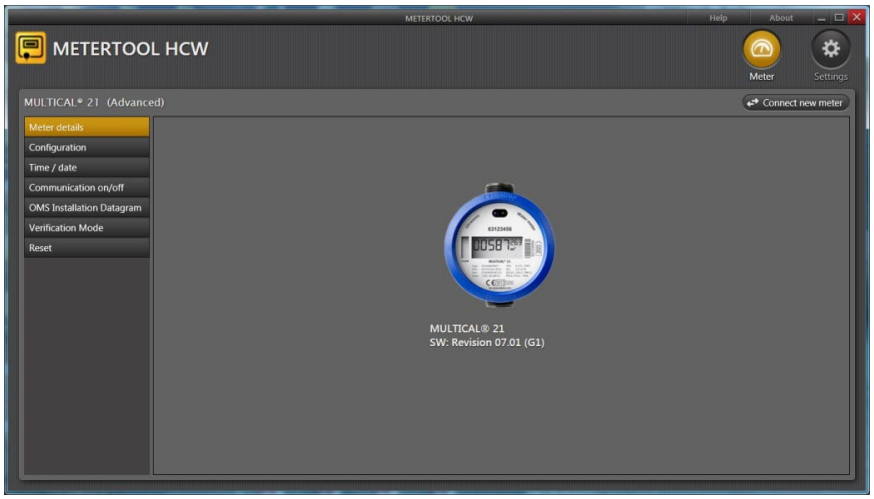
Start up ‘METERTOOL HCW’ or LogView HCW and click ’Connect’



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

4.1 General information

'METEROOL 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

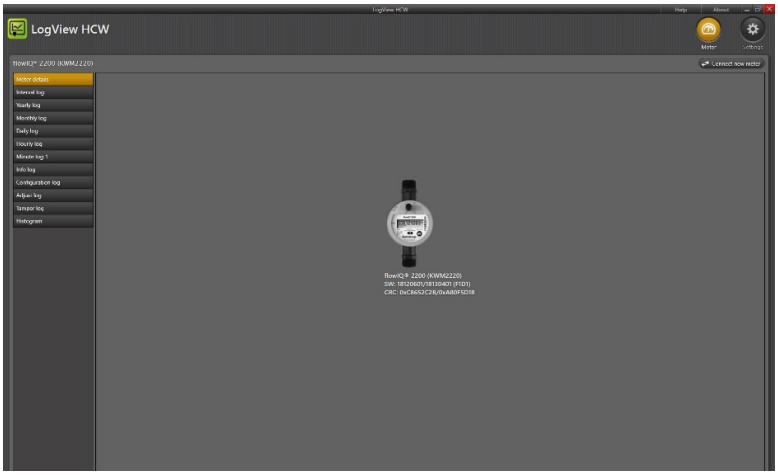
This feature is a function that is necessary to clear tamper alarms in relation to flowIQ® 4200 battery replacement exercises.

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

5. LogView HCW

5.1 General information

'LogView HCW' is used for readouts of logged data from Kamstrup water meters, as well as for carrying out interval logging. The read data can be used for analysis and diagnostic test of the installation. Data can be presented as table or graphics. Tables can be exported direct to 'Microsoft Office Excel'. Depending on the water meter variant different features will be available.



5.1.1 Interval log

This feature enables interval readout of current counter values from at optional intervals from 1 to 1440 minutes, as well as an optional number of repetitions of the reading from 1 to 9999 times.

For read-out of 'current' counts, select interval 1 and repetition 1. You hereby obtain one instantaneous reading.

5.1.2 Daily, monthly, yearly, hourly and minute log

This feature enables reading of logged data at optional data periods and values.

Note: Hourly and minute logs are only available for flowIQ® x2xx

5.1.3 Info Log

This feature makes it possible to read out the latest 50 info events. The readout includes date and info code of the info event.

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

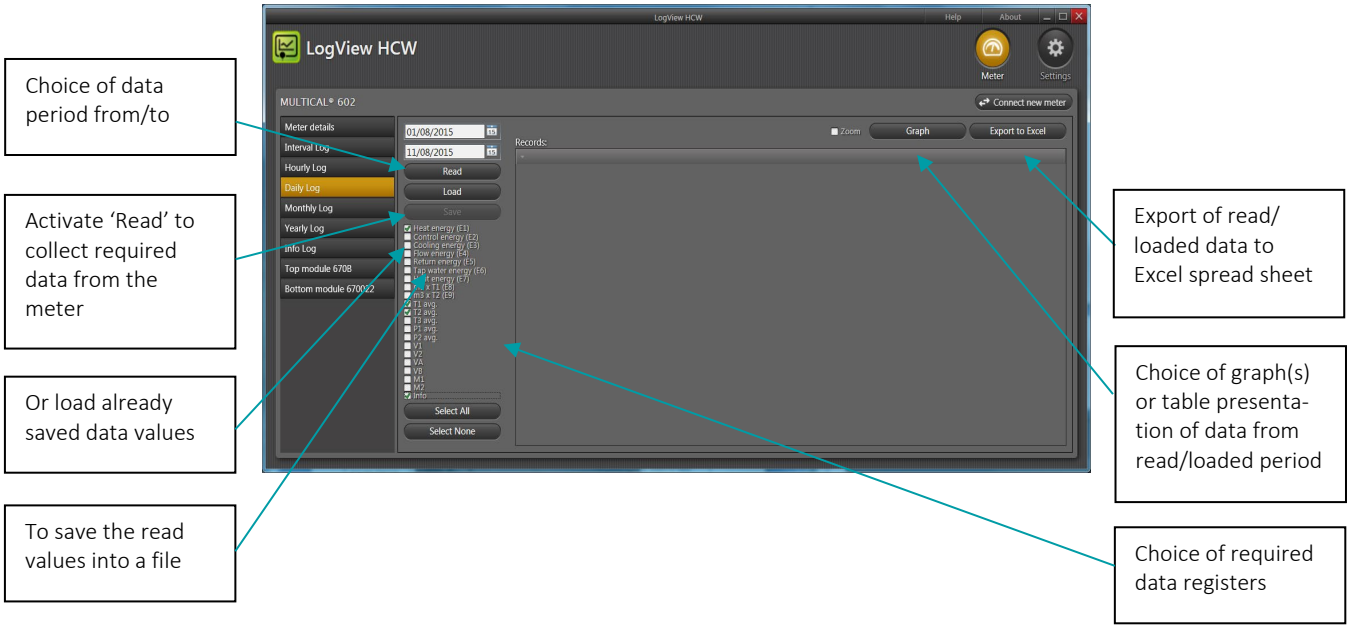
This feature logs if the meter has experienced a tamper alert.

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:



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.