

Release notes

HW4 Software Version 3.8.0 Beta (Build 16151)

Change control

HW4 version 3.8.0 includes all the functions and features of HW4 version 3.7.0 with the following modifications and additions:

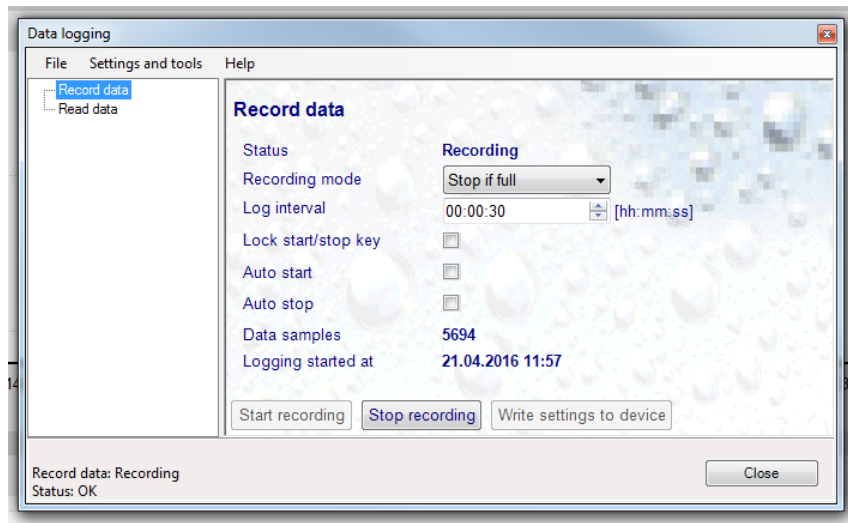
Enhancements:

- **AwTherm**
 - Change of temperature set point
 - Temperature control on / off
 - Change of display contrast
 - Change of date & time
 - Pad sensitivity

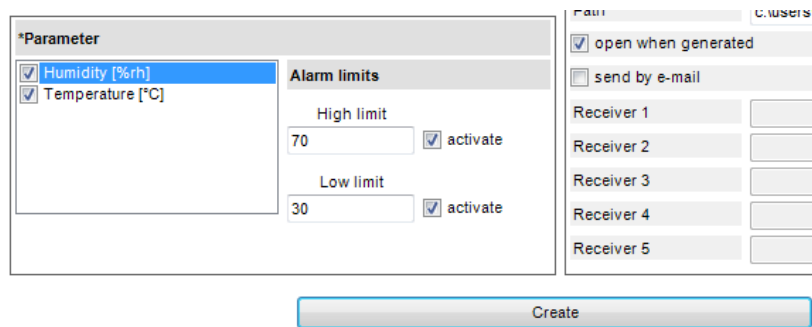


New features

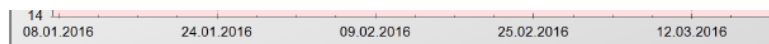
- HL-1D: improved device manager overview for better user convenience



- Individual parameter can be enabled or disabled for PDF report

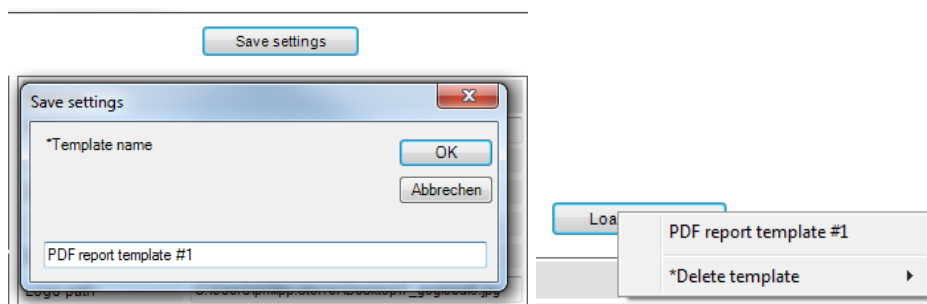


- Additional information in PDF report footer: SW version, user, unique report ID

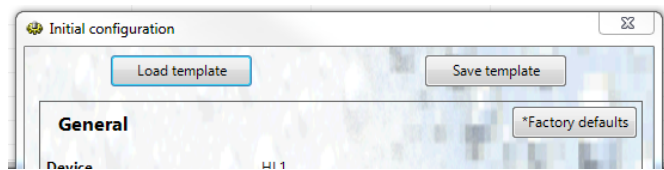


HW4, Version V3.8.0 Beta (Build 16112), (Admin), (ID: 20160422-152601)

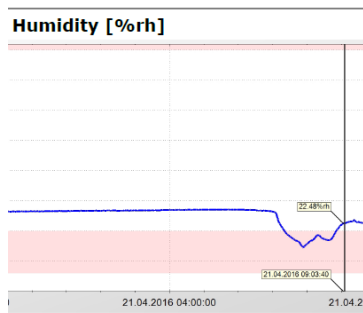
- Multiple templates for PDF report



- Reset to factory settings for HL-1D, TL-1D



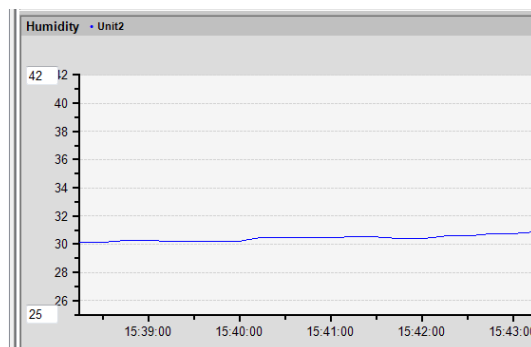
- Ruler is integrated in PDF report



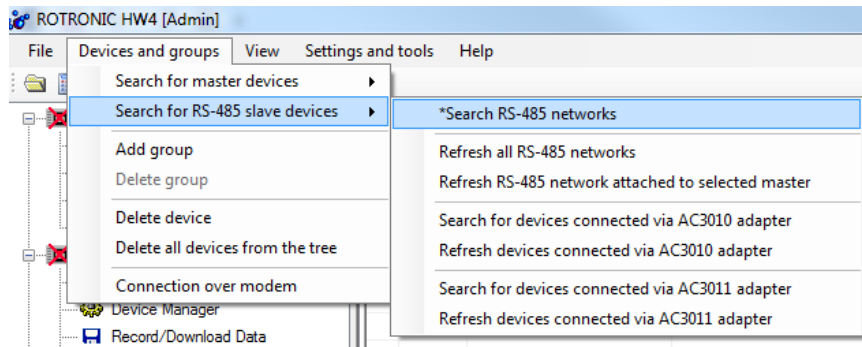
- Numbers in PDF report are equipped with units

Statistics	
Count	2471
Interval	00:00:30
Begin	20.04.2016 15:21:40
End	21.04.2016 11:56:40
Min	14.50%rh 21.04.2016 07:54:10
Max	27.94%rh 20.04.2016 17:08:40
Average	24.865%rh
STDEV	2.799%rh

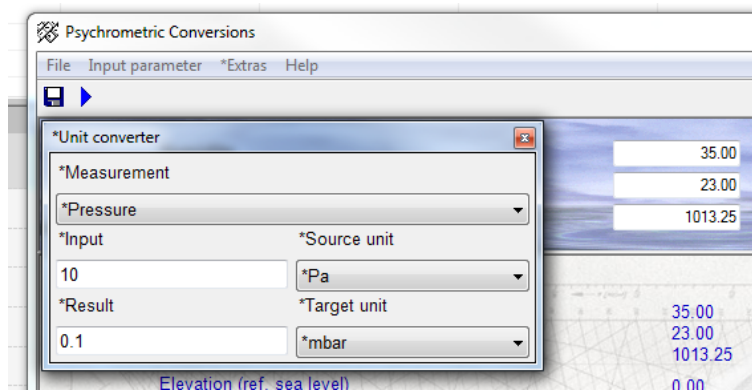
- Scaling of y-axis manually



- New device search for RS-485 networks (menu *add device* is removed)



- Psychrometric calculator is enlarged with unit conversion



- More stable data download for wireless logger.
- Combined chart view available
- USB drivers are automatically installed during HW4 installation
- Additional software alarm condition for ended alarms

Bugs (V3.7.0) fixed:

- Deactivated users can immediately be reactivated.
- PDF report: text in report footer includes "serial number" as text instead of HW4 version.
- Data download from wireless data loggers brakes down, if administrator right on PC are missing
- When US time format (AM/PM) is set on the PC, HW4 caused software exceptions.

Known bugs:

- None

Windows compliance (always 32 & 64 bit):

- Windows Vista, Windows 7, Windows 8, Windows 10, Windows Server 2012

Release notes

HW4 Software Version 3.7.0

Change control

HW4 version 3.7.0 includes all the functions and features of HW4 version 3.6.0 with the following modifications and additions:

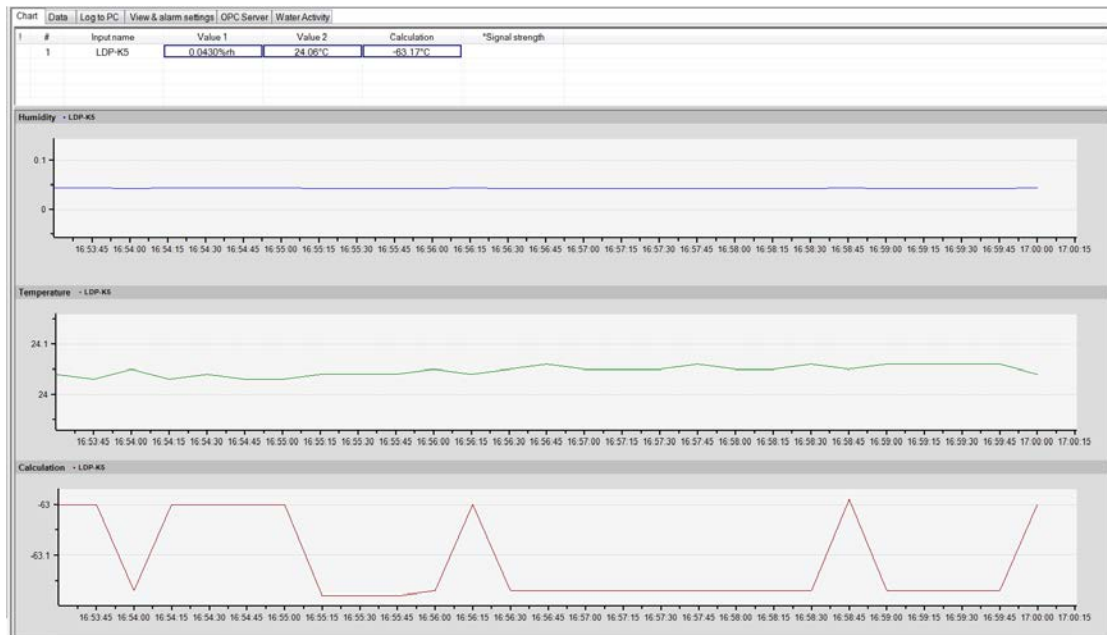
Enhancements:

- **CRP1: clean room panel**
 - Device information
 - Device settings
 - Display settings
 - Units
 - Analog outputs
 - Relays
- **HS5: thermo- / hygrostat**
 - Device information
 - Device settings
 - Display settings
 - Units
 - Analog outputs
 - Relays
 - HC2 settings



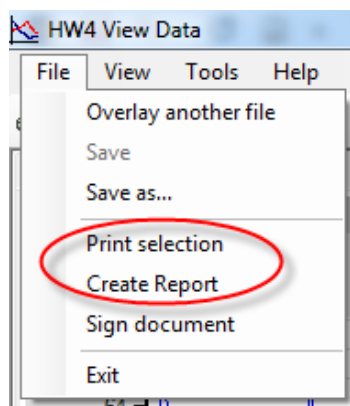
New features

- Standardization of live chart and data chart (zoom functions, diagrams, etc.).



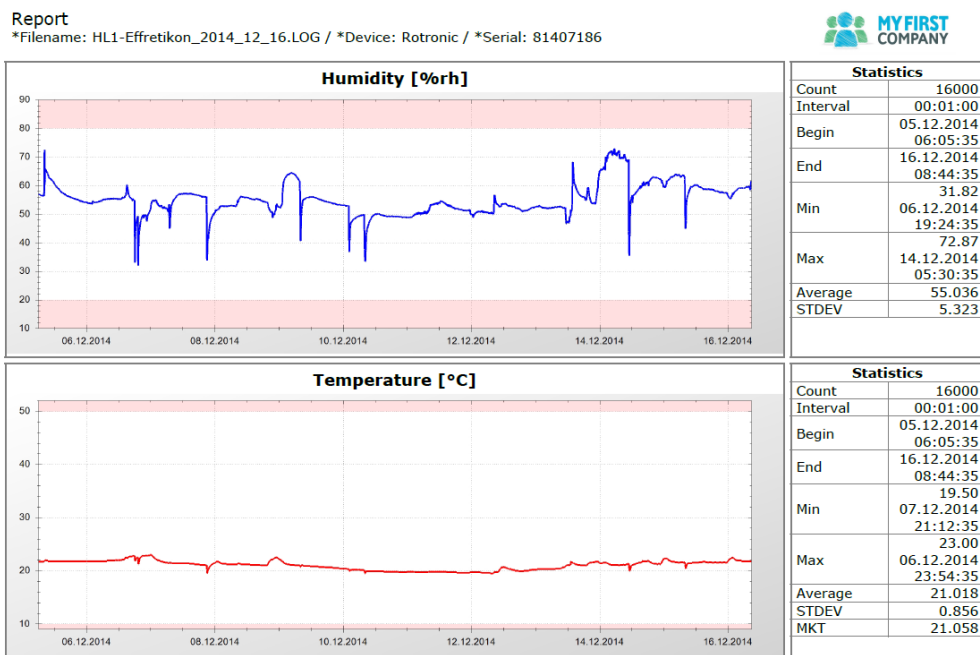
- MP102H / MP402H can be manually added
- Entries in event table can be signed
- New entries in alarm table
 - Min / max values
 - Alarm duration

- Following functions are removed and its functions are provided by the PDF report:
 - Print selection
 - Create statistical data



- PDF report enhancements
 - Direct download of data files from data loggers and creation of PDF report
 - Alarm statistics available (min, max, duration, etc.)
 - Creation of PDF via button in main menu header
 - Report settings can be saved and used as master file for further reports
 - Customized PDF report by using individual logo in report header
 - Notes from chart view are included in PDF report
 - PDF report can be sent as e-mail directly via HW4

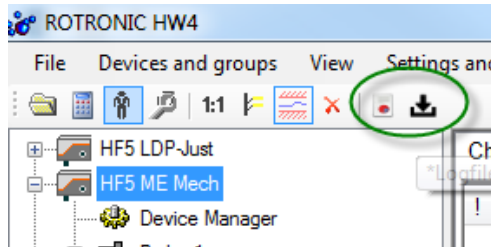
GUI for generation of PDF report, including e-mail functionality





HW4, *Version V3.7.0 Beta (Build 15285)



- Bulk data download for HL-1D / TL-1D / HL-20 / wireless loggers
 - Bulk data download for all connected data loggers
 - Direct creation of PDF report
 - PDF report can be sent as e-mail



Buttons for bulk download of files and direct generation of PDF report  or direct creation of PDF report based on existing log files on the PC .

- Configuration WIZARD
 - Accessible via device tree
 - All settings in one pop-up window
 - Logger settings can be saved as master file and loaded for further programming

Initial configuration

*Load template *Save template

General

Device: HL-RC-T
 Serial: 12779522
 Battery: 86.1 %
 Description: PM office
 Time: 01.10.2015 17:32:32 ☒ Update

Limits

	Low Limit	Hi Limit	Hysteresis
<input checked="" type="checkbox"/> Temperature	0	50	0

Logging

Interval: 00:01:00
 Start logging immediately: ☐

Finish

- Calibration / AW reports
 - New header and footer for both reports
- New alarm for ended AW measurement
- User management
 - Change of password can be forced by the administrator
 - User can be duplicated
 - Active directory can be used
- HW4 LITE version is limited to functions for offline data loggers (HL-1D / TL-1D / HL-20)
 - User management is removed
 - Configuration of software alarms is removed
 - Log to PC is removed
- Auto download for HF8 and HP23 with optional direct PDF report generation
- AW settings: Tab in general settings “AwE Mode” is removed. General AW settings can be accessed via “AwE Mode” tab in live view:
 Old: “global settings – AwE Mode”



New: device tab “AwE Mode”

Current values		Online buffer	Log to PC	View & alarm settings	OPC Server	AwE Mode
• Humidity simulator		• Temperature simulator				
!	#	Input name	Value 1	Value 2	Calculation	
	1	Probe 1	0.3500Aw			
	2	Probe 2	0.5000Aw	18.00°C		

HW4 global settings form

View General Language/Unit system File locations Graph settings Alarm Settings Events AwE Mode

☐ AwQuick Mode

Dwell Time [min] 2

Temperature stability [°C/min] 0.04

☒ AwE Mode

Humidity stability [Aw/min] 0.0001

Temperature stability [°C/min] 0.02

- Online buffer can be set in days, hours and minutes instead of measurement points
- LOG to XLS file converter (or vice versa)
- Battery level and signal strength of HL-RC loggers is displayed in live chart

Chart	Data	Log to PC	View & alarm settings	OPC Server	Water Activity			
!	#	Input name	Value 1	Value 2	Calculation	*Battery	*Signal strength	
	1	HL-RC-T	---	24.63°C		86.1%	83.9%	

- Expected battery live time can be calculated and displayed in device manager

Device protection	Off	Change
Time	01.10.2015 18:08:58	Set date/Time
Signal strength	84%	
Battery	86.1%	Battery replaced
*Battery empty at	20.04.2019	

- Start / stop function for HL-1D / TL-1D loggers

Bugs (V3.6.0) fixed:

- Multiple log files can be combined and saved as new log file (function was not available in v3.6.0)
- Log file of HL-1D / TL-1D is available in °F (in v3.6.0 always °C was displayed)

Known bugs:

- none

Notes:

- none

Windows compliance (always 32 & 64 bit):

- Windows Vista, Windows 7, Windows 8, Windows 10, Windows Server 2012

Release notes

HW4 Software Version 3.6.0

Change control

HW4 version 3.6.0 includes all the functions and features of HW4 version 3.5.0 with the following modifications and additions:

Enhancements:

- **Clean room panel**
 - Device Manager
 - Calibration / Adjustment
 - I/O Settings
 - Data logging
- **HL-RC-B / HL-RC-T wireless logger**
 - Wireless logger with battery monitoring (energy counter) included
- **AwTherm (Water Activity Station)**
 - Device Manager
 - Calibration / Adjustment

New features

- Log files are now displayed with separated graph for each parameter (same as in the live chart)
- Wizard for fast device configuration for standalone loggers (HL-1 / TL-1 / HL-20 / wireless loggers)

Bugs (V3.5.0) fixed:

- Multi session warning: is also displayed when “auto run” option is active
- HL-1 / TL-1: Calculation of °F was incorrect.
- HC2-AW-USB / HC2-AW-UART: was not added automatically
- USB auto detection: device was found twice.

Known bugs:

- Log file view: columns naming is in German

Notes:

- none

Windows compliance (always 32 & 64 bit):

- Windows Vista, Windows 7, Windows 8, Windows Server 2012

Release notes

HW4 Software Version 3.5.0

Change control

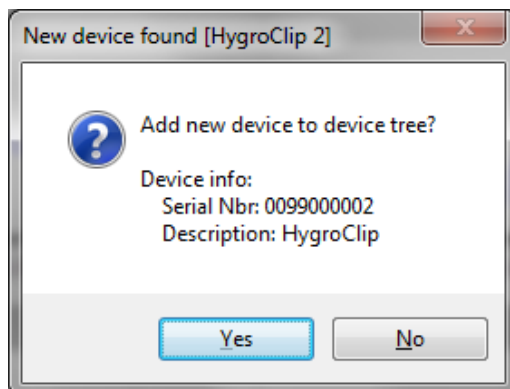
HW4 version 3.5.0 includes all the functions and features of HW4 version 3.4.2 with the following modifications and additions:

Enhancements:

- New language file included Japanese.

New features

- Calibration of HL-1 / TL-1 / PF4 devices.
- Automatic water activity report as PDF file.
- HW4 detects automatically new USB devices.



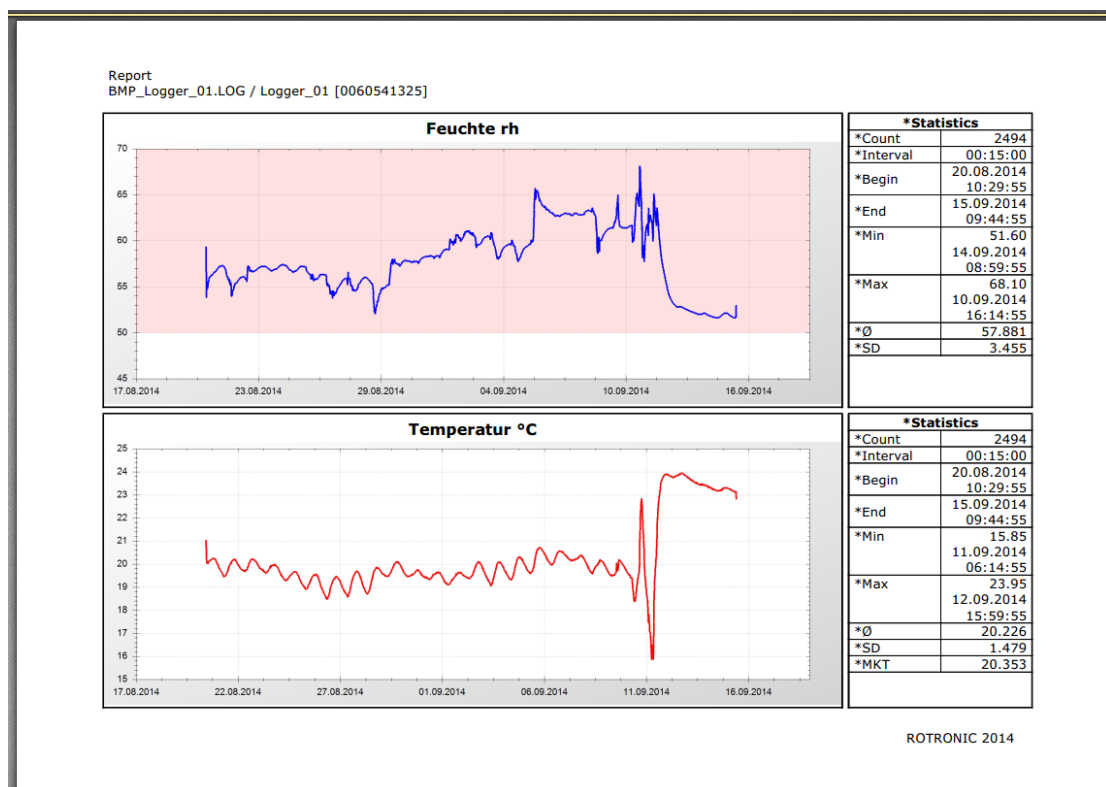
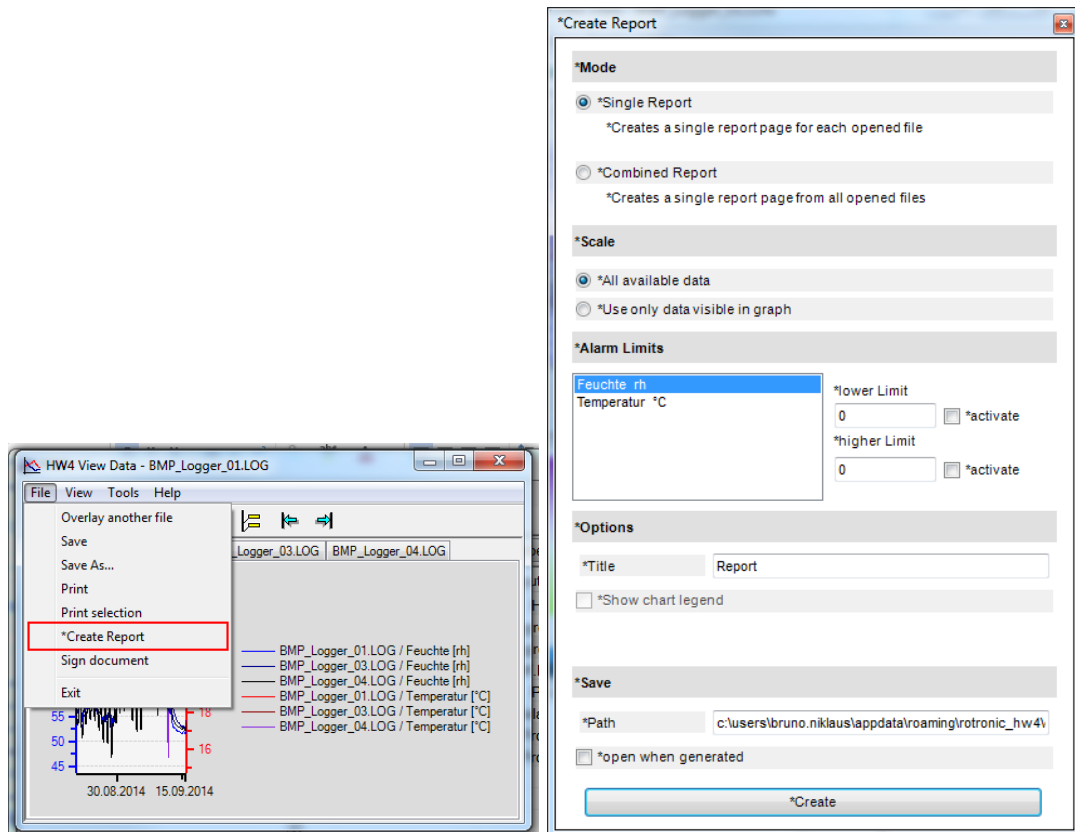
- HW4 works with USB 3.0 interfaces.

- Enabling / disabling of automatic HW4 closing after entering wrong password.

The screenshot displays the 'HW4 Global Settings Form' with a tabbed interface. The 'General' tab is selected. The 'Automatic Functions' section contains several settings, with the option 'Close HW4 after third wrong password attempt' highlighted by a green oval.

View	General	Language/Unit System	File Locations	Graph Settings	Alarm Settings	Events	AwE Mode
Communication							
<input checked="" type="checkbox"/>	Enable Device Polling						
00:00:05	Polling interval						
00:00:15	Online buffer time interval						
1000	Online buffer size						Clear both the online buffer and online graph
Bluetooth							
	Bluetooth serial ports						
Automatic Functions							
<input checked="" type="checkbox"/>	Enable system monitoring						
<input type="checkbox"/>	Force password change after 30 Days						
<input type="checkbox"/>	Enter password again after 30 minutes						
<input type="checkbox"/>	Require Password to exit HW4						
<input checked="" type="checkbox"/>	Close HW4 after third wrong password attempt						
<input checked="" type="checkbox"/>	HW4 updates notification						
<input type="checkbox"/>	Automatic synchronization with PC clock						
<input checked="" type="checkbox"/>	*Automatic Device Detection (USB)						
<input type="checkbox"/>	Auto-start mode						

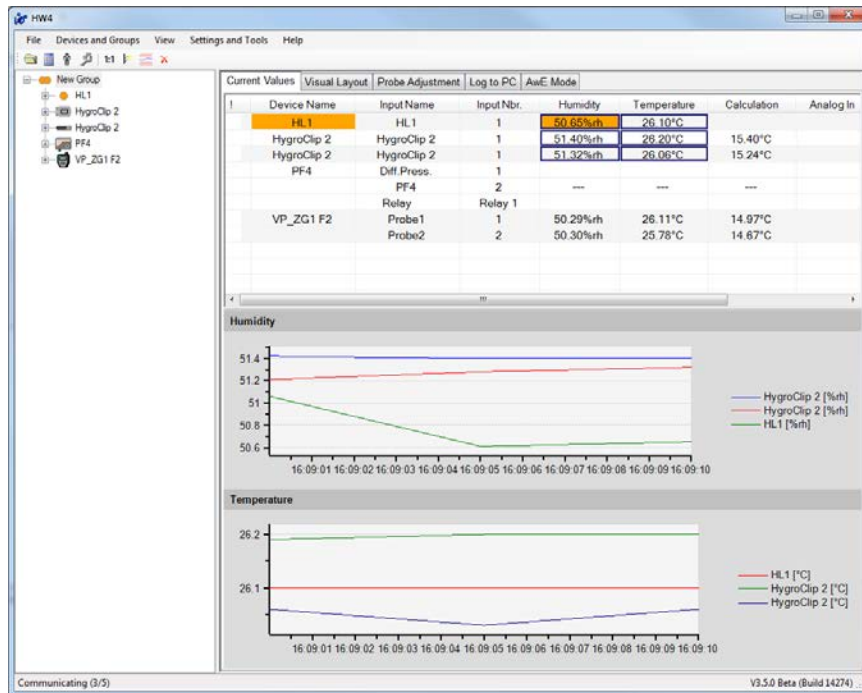
- PDF-report of log-files (single / multiple files, alarm zones, statistics)



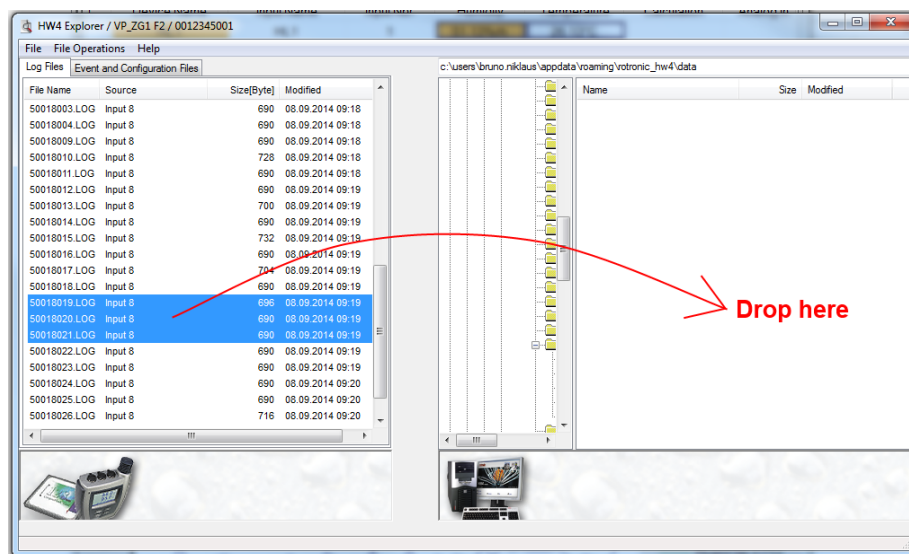
Note:

PDF is automatically saved as protected PDF file (read only).

- Every parameter can be displayed in individual chart.



- HL-NT data download: download of multiple files using drag & drop.



Bugs fixed:

- Water activity: decimal point is wrong when HW4 online logging is active. Bug affects only .log-files. (e.g.: 40%RH was saved as 0.004aw, instead of 0.4aw)
- Protocol generation of HF520 is not working.
- Wrong updated FDA information by temperature group adjustment.
- HL-20: writing of new log-settings changes start / stop time.
- Correct dialogs for low dew point probes connected to HF transmitters, HP indicators, etc.
- Firmware updates with .ROF files can be done when .ROF file or folder is write protected

Known bugs:

- None

Notes:

- none

Windows Compliance:

Windows XP (32 & 64-bit), Windows Vista (32 & 64-bit),

Windows 7 (32 & 64-bit), Windows 8 (32 & 64-bit), Windows Server

Release notes

HW4 Software Version 3.4.2

Change control

HW4 version 3.4.2 includes all the functions and features of HW4 version 3.4.1 with the following modifications and additions:

Enhancements:

- HL-1 / TL-1 devices work with USB3 on Windows 7.

New features

- None

Bugs (V3.4.1) fixed:

- HL-1 / TL1: Downloaded data from data logger is not displayed correctly.
Data below -17.7 °C (0 °F) is not displayed in the graph.
- HL-1 / TL1: Alarm configuration did not work properly in Windows region and language settings with “,” as separator.
- General: IP addresses starting 1...9 (e.g.: 5.xxx.xxx.xxx) have been declared as invalid. Therefore devices could not be found manually.

Known bugs:

- None

Notes:

- none

Windows Compliance:

Windows XP (32 & 64-bit), Windows Vista (32 & 64-bit),
Windows 7 (32 & 64-bit), Windows 8 (32 & 64-bit)

Release notes

HW4 Software Version 3.4.1

Change control

HW4 version 3.4.1 includes all the functions and features of HW4 version 3.4.0 with the following modifications and additions:

Enhancements:

- None

New features

- None

Bugs (V3.4.0) fixed:

- Downloaded data from HL-1 / TL-1 logger is not displayed correctly. Data below 22°C is not displayed in the graph. The bug is fixed in Version v3.4.1.

Known bugs:

- None

Notes:

- none

Windows Compliance:

Windows XP (32 & 64-bit), Windows Vista (32 & 64-bit),
Windows 7 (32 & 64-bit), Windows 8 (32 & 64-bit)

Release notes

HW4 Software Version 3.4.0

Change control

HW4 version 3.4.0 includes all the functions and features of HW4 version 3.3.0 with the following modifications and additions:

Enhancements:

Devices

- **PF4 with HC2 probe**

The PF4 provides an optional E2 connector. This allows to measure differential pressure, humidity and temperature.

PF4 supports the same probe functions as HF8:

- HC2 calibration, same function as HF5
- HC2 adjustment, same function as HF5
- Analog input can be selected instead of the HC2 digital probe, equal function as HF8.
- Psychrometric calculations, all psychrometric parameters can be calculated.

- **Data logger: HL-1 / TL1**


With the release of the HW4 v3.4.0 ROTRONIC will launch a new data logger, HL-1 / TL-1.

- Simple standalone data logger
- Can be used with HW4-LITE (free version)
- Humidity adjustment
- No group adjustment

New features

○ Automatic AW-report generation

AW-reports can be automatically generated by ticking the box.

		Input Name	Probe S/N	H	Humidity	T	Temperature	Elapsed Time
<input checked="" type="checkbox"/>		HL1	0000000000		30.78%rh		23.55°C	00:00:42

Batch Number

Product Name

Comments


Start

Stop

Generate report

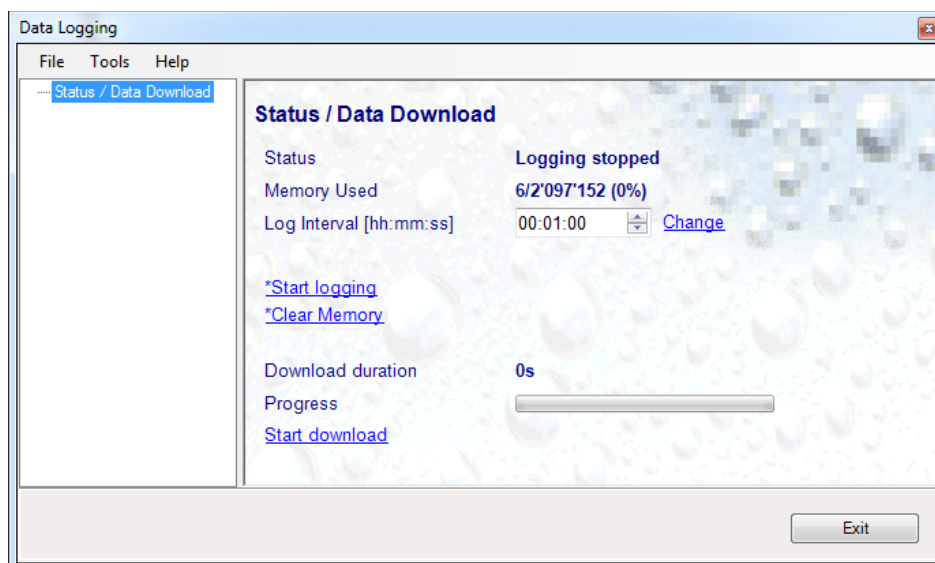
*Auto-Generate report

*Activate ☒

*Save path 

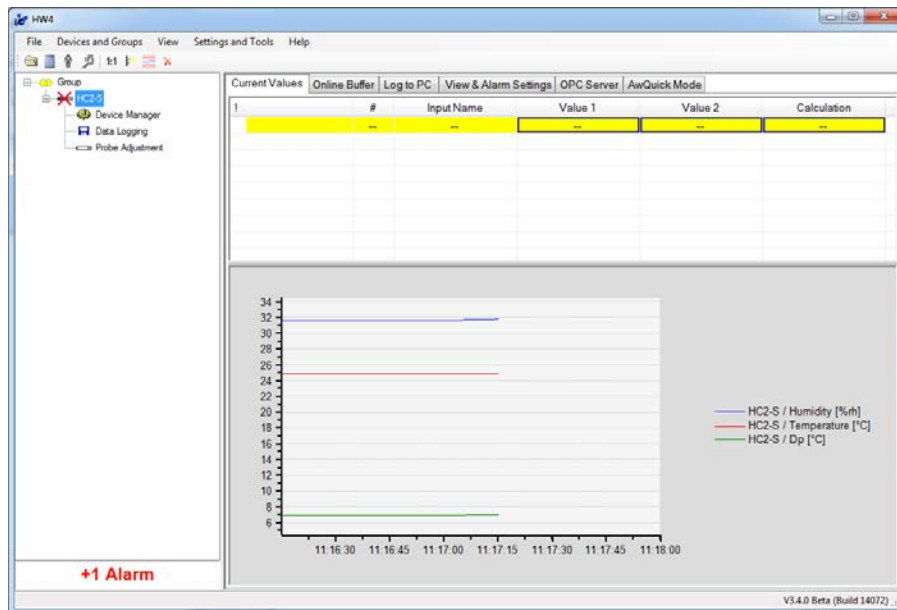
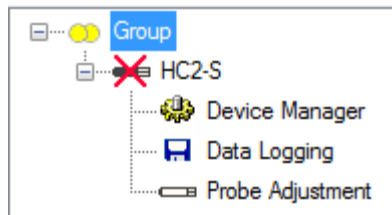
○ Start/ Stop of wireless loggers via HW4

Data logging can be started and stopped by the HW4 software.



- **Communication alarm visualization**

Communication alarms are visualized like all other alarms in the group logo and by changed background color.



- **Alarm notification on desktop can be enabled / disabled**

The alarms shown in the desktop can be enabled or disabled by type. The feature affects only the desktop visualization. All alarms are tracked in the alarm table.

Global Alarm Settings

Archive Alarm Records after [Months]	<input type="text" value="3"/>
Archive File Size Limit	<input type="text" value="10000"/>
Run Control Timeout [min]	<input type="text" value="15"/>
Test Alarm Interval [Hours]	<input type="text" value="24"/>

[Run a Test Alarm](#)

Color Settings

Low Priority Color	<input type="color" value="#FFFF00"/>
Mid Priority Color	<input type="color" value="#FFA500"/>
High Priority Color	<input type="color" value="#FF0000"/>

*Alarm Notifications

<input checked="" type="checkbox"/> Software Error	<input checked="" type="checkbox"/> Communications Error
<input checked="" type="checkbox"/> Log to PC Path Error	<input checked="" type="checkbox"/> Out-of-Limit Value
<input checked="" type="checkbox"/> Run Control	<input checked="" type="checkbox"/> Battery
<input checked="" type="checkbox"/> Test Alarm	<input checked="" type="checkbox"/> Power Supply
	<input checked="" type="checkbox"/> Sensor
	<input checked="" type="checkbox"/> Device set to generate fixed Values
	<input checked="" type="checkbox"/> Memory Card

Email Settings

☐ MAPI Requires MS Outlook

☒ SMTP

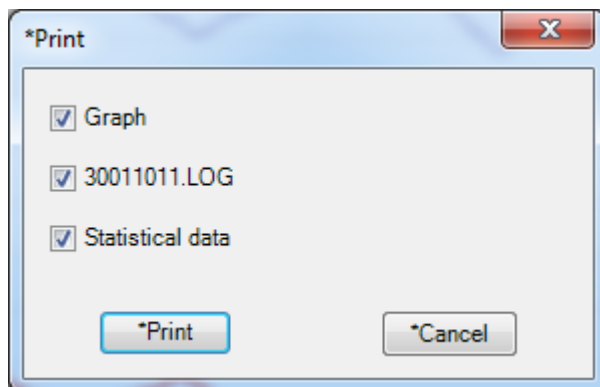
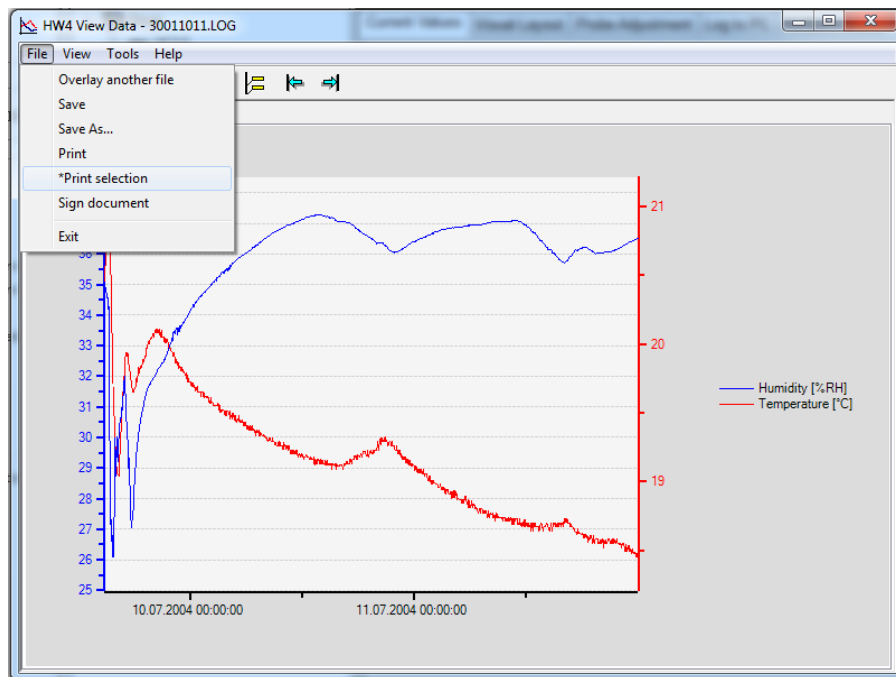
Server Name	<input type="text" value="example.smtp.com"/>
User Name	<input type="text" value="username"/>
Password	<input type="password" value="*****"/>
Sender Address	<input type="text" value="Alarm@HW4.com"/>
SSL enable	<input type="checkbox"/>

[Send a Test Email](#)

- **Layout view: device label position and background image are independent for every group and sub-group**

- **Graph view: graph, log-file, statistical data can be printed at the same time**

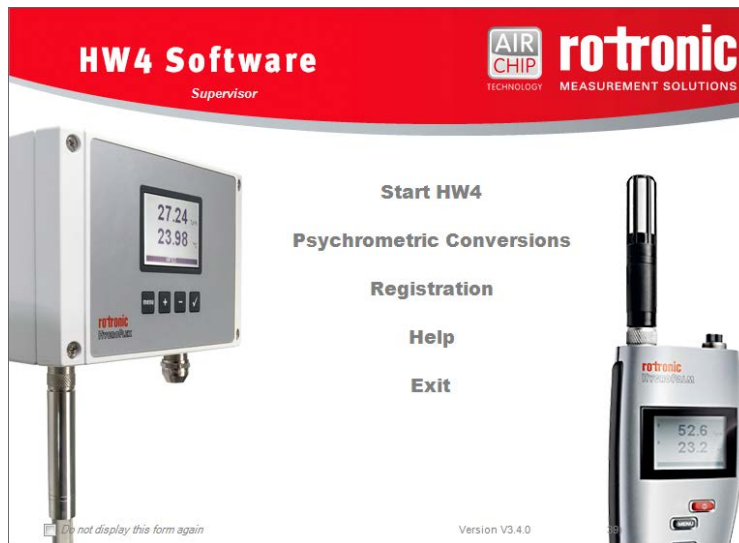
To simplify printing of log-files the HW4 software provides a new function "Print selection". This allows to print graph, log-file data and statistical data at the same time.



- **SW21: V1.1.1 is integrated**

ROTRONIC MEASUREMENT SOLUTIONS

- New ROTRONIC logo “Measurement solutions” is used.



Bugs (V3.3.0) fixed:

- **CO2-display: LOG-file is displayed correctly**
HW4 v3.3.0 generated wrong time line, starting with 1900 as first date.
- **Wireless data logger: device protection didn't work correctly**
Devices with access code >7FFF couldn't be locked or unlocked.
- **Wireless data logger – temperature low limit**
In HW4 v3.3.0 the temperature low limit could not be set. This bug is fixed with the v3.4.0.
- **Temperature adjustment – group adjustment**
If the temperature adjustment is started in a different temperature than the captured value, the calibration will be wrong.

Known bugs:

- None

Notes:

- none

Windows Compliance:

- Windows XP (32 & 64-bit), Windows Vista (32 & 64-bit),
Windows 7 (32 & 64-bit), Windows 8 (32 & 64-bit)

Release notes

HW4 Software Version 3.3.0

Change control

HW4 version 3.3.0 (validated & not validated version) includes all the functions and features of HW4 version 3.2.0 with the following modifications and additions:

Enhancements:

Devices

- Software version is ready for use with the new ROTRONIC low dew point probe.

New features

- **HW4-Lite**

HW4-Lite supports up to three connected HC2-WIN-USB devices or three HL-20 data loggers. Measurements are observed simultaneously on a PC.

- **Alarm visualization (for all versions of HW4)**

Alarms are indicated visually with different colors depending on their priority.

Default settings:

- Priority 1 – red
- Priority 2 – orange
- Priority 3 – yellow

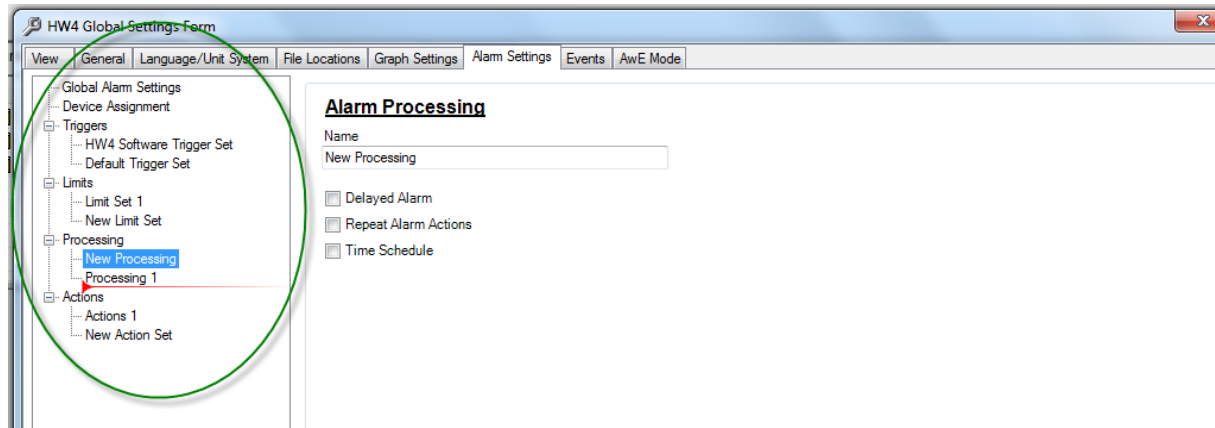
The user can change the default colors.

- **Search function for alarm table (for all versions of HW4)**

- Enables alarm search by text.
- Enables alarm search by date.

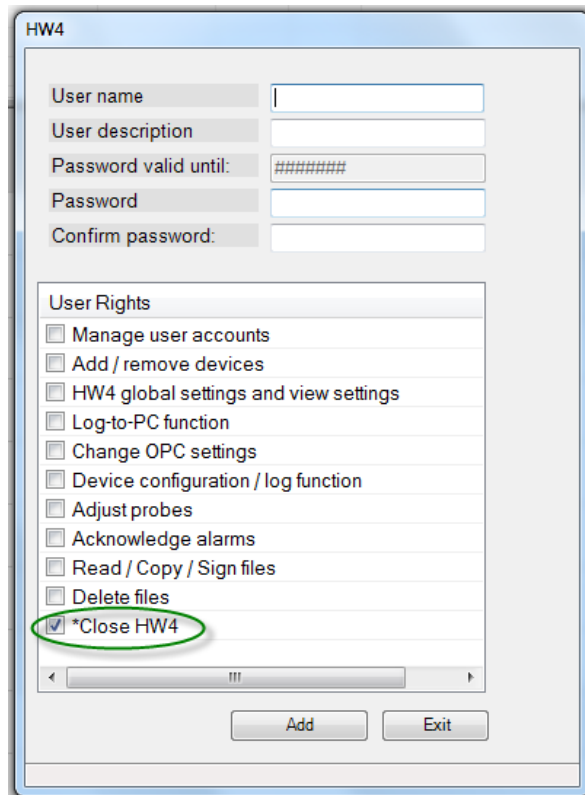
- **Alarm overview in Global Settings (for all versions of HW4)**

Alarms can be organized by “drag & drop” in global alarm settings.



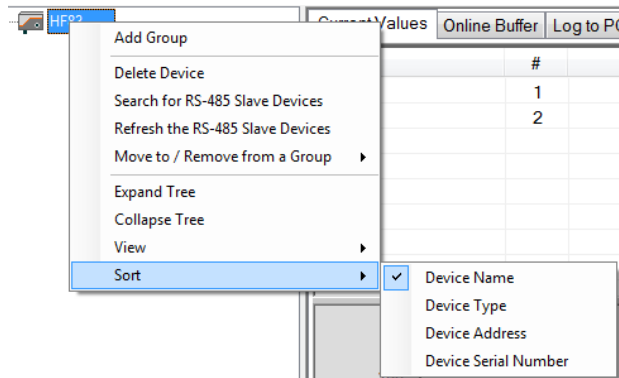
- **Shutdown protection (for all versions of HW4)**

User rights for HW4 shutdown can be set within User Management. If enabled, a password is required to close HW4 software.



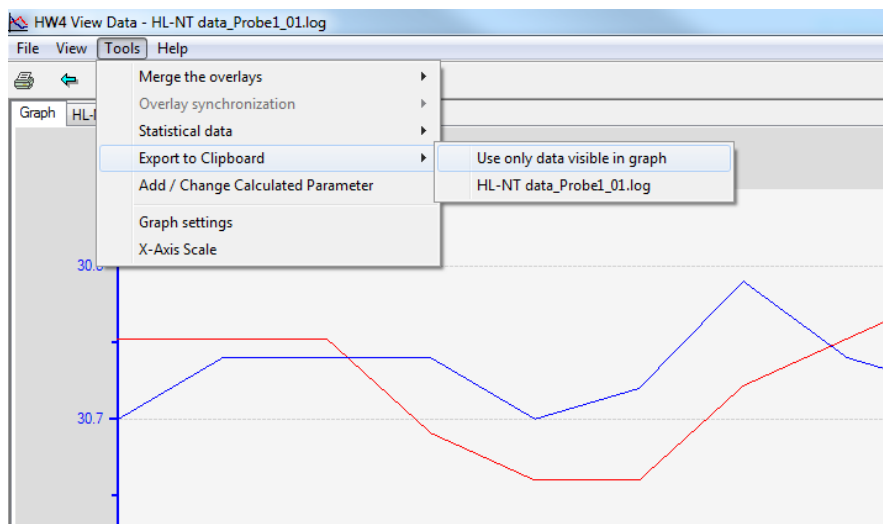
- **Sorting of devices in groups and subgroups (for all versions of HW4)**

Devices in subgroups can be created and organized by device name, address, type or description.



- **Export of PC screen visible data for .LOG files (for all versions of HW4)**

HW4 allows the direct export of currently visible data to the clipboard; the data can then be pasted into an .xls (Excel) file.



- **Temperature adjustment of wireless loggers (for all versions of HW4)**

(LOG-PT1000-RC / LOG-PT1000-RC-US / LOG-PT1000-ET030-RC / LOG-PT1000-30-RC-US)

The Pt100 temperature sensor can be adjusted using HW4 software.

Bugs fixed:

- **SMS alarm**
Device name is included in the text message.
- **E-mail alarm**
SSL server can be used for e-mail alarming.
- When Group Adjustment is used, the protocol will be saved in the correct directory.

Known bugs:

- **Wireless data loggers:** The device "low alarm" limit for temperature cannot be changed. Enabling / disabling is possible.

Affected devices: all types of LOG-HC2-xx-RC and LOG-PT1000-xx-RC

Workarounds:

- Use HW4 v3.2.1 or v3.2.0 in the application.
- Use HW4 v3.2.1 or v3.2.0 to change the "low alarm" limit and use v3.3.0 for monitoring.
- Instead of the device alarm use software alarms for monitoring (Online Monitoring is not recommended due to battery lifetime). Software alarm limits in local logger files will not be displayed.

Notes:

- none

Windows Compliance:

- Windows XP (32 & 64-bit), Windows Vista (32 & 64-bit),
Windows 7 (32 & 64-bit), Windows 8 (32 & 64-bit)

Release notes

HW4 Software Version 3.2.0

Change control

HW4 version 3.2.0 includes all the functions and features of HW4 version 3.1.0 with the following modifications and additions:

Windows 8

HW4 works with WIN8 but the driver signature enforcement must be disabled.

Enhancements:

Devices

- HF1
- CP11

New features

- **Device Configuration Tool for devices not based on the HygroClip technology**

In the main menu bar of HW4, the menu item Settings and Tools gives access to a new item named Device Configuration Tool.

The Device Configuration Tool is used to configure a number of devices that are not based on the HygroClip technology and do not appear in the HW4 Device Tree. Such devices include but are not limited to the HF1 transmitter, the CP11 indicator, etc. Depending on the device, the tool also gives access to functions such as adjustment, data recording, etc.

- **Custom calculations with the HF8 transmitter**

Device Manager for the HF8 transmitter now allows the user to define up to two custom calculations based on measured values such as relative humidity or on calculated parameters such as the dew point. Custom calculations are constantly updated by the HF8 and can be shown on the local display and / or displayed on the monitor of a PC running the HW4 software.

A custom calculation can be associated with any of the HF8 inputs. When associated with an input, the custom calculation can be associated with any of the HF8 analog outputs. The user can also define low and high limits for a custom calculation and use these limits to generate an alarm and to energize a relay.

- **Water activity measurement**

Water activity probes such as the HC2-AW-USB can now be put within a group to the purpose of making simultaneous measurements with several probes without having to switch from one probe to the other.

The AwQuick Mode / AwE Mode tab located in the right pane of the HW4 main screen has been entirely reworked. The form displayed by this tab allows the user to enter a batch number, a product name and comments. This information will appear in the measurement report.

The water activity measurement report can now be signed by the user. A signed report cannot be modified.

- **Acknowledgement of Alarms**

When acknowledging an alarm, the user has the option of entering an "acknowledgement text" or comment. As a means of facilitating the entry of repetitious comments, the different texts entered by the user are retained by HW4 and are presented as a list from which the user can choose.

- **Time Change Event**

HW4 now makes an entry in the User Events file whenever the PC time clock is changed by more than 5 minutes while HW4 is running.

- **Adding or Removing a Device from a Group:**

As with previous versions of HW4 professional devices can be dragged with the mouse into a group or dragged out of a group (assuming that at least one group has been created prior to this). HW4 v. 3.2.0 offers the additional option of using the device menu to do the same. To open this menu, select the device with the mouse and right click.

- **Automatic download to the HW4 PC of logger data files**

The automatic download to the HW4 PC of logger data files was previously only available with the HL-NT data logger series. This function is now also available with the LOG RC wireless data logger series.

- **HW4 View Data**

Can be used to open a file consisting of recorded data and can also be used to print a graph. Additional information such as Process Name, Device Name, etc. can now be printed on the same page as the graph. This information can be selected in HW4 Global Settings > Graph Settings Tab.

- **OPC Tags (HW4 Professional with OPC Server)**

The OPC Tags are now compatible with 64-bit systems

Bugs fixed:

- Correct indication of the HTS3 transmitter in the product tree
- HL20: **"Display always on" button** exists now in the device manager
- HL20 log files are no longer editable
- Context windows under win7 are sometimes cut, this will no longer happen
- Alarm email: Sender now changeable

Known bugs:

- none

Notes:

Windows Compliance:

- Windows XP, Windows Vista, Windows 7 64 bit, Windows 8