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Metrohm IC Driver 1.0, ICP-MS MassHunter

Release Notes

1 Purpose

This document describes the following topics for the new software version **Metrohm IC Driver 1.0, ICP-MS MassHunter**:

- Supported instruments
- Known issues

2 Supported instruments

Metrohm IC Driver, ICP-MS MassHunter is a software driver for integrating Metrohm IC instruments in ICP-MS MassHunter 5.3 or higher.

Metrohm instruments

- **800 Dosino**
  version: 2.800.0010
- **858 Professional Sample Processor**
  version: 2.858.0010, 2.858.0020
  with Liquid Handling Station (6.5330.130)
  with Magnetic Stirrer (2.741.0010)
- **889 IC Sample Center**
  version: 2.889.0010, 2.889.0020, 2.889.0030, 2.889.0040
- **930 Compact IC Flex**
  version: 2.930.1100, 2.930.1160, 2.930.1200, 2.930.1260, 2.930.1300, 2.930.1360, 2.930.1400, 2.930.1460, 2.930.1500, 2.930.1560, 2.930.2100, 2.930.2160, 2.930.2180, 2.930.2200, 2.930.2260, 2.930.2300, 2.930.2360, 2.930.2400, 2.930.2460, 2.930.2500, 2.930.2560, 2.930.2580
- **940 Professional IC Vario**
  version: 2.940.1100, 2.940.1110, 2.940.1200, 2.940.1300, 2.940.1400, 2.940.1410, 2.940.1440, 2.940.1500, 2.940.1510, 2.940.1540, 2.940.1580, 2.940.2100, 2.940.2400, 2.940.2500, 2.940.2580
- **919 IC Autosampler plus**
  version: 2.919.0020
- **942 Extension Module Vario**
  version: 2.942.0040, 2.942.1060, 2.942.0500

- **Remote Box MSB**
  version: 6.2148.010
  The Remote Box MSB is mandatory. Additionally, the IC equipment, connection Agilent ICP-MS (6.05330.400) is required to enable remote connection between a Metrohm IC and an Agilent ICP-MS.

Agilent ICP-MS instruments

Metrohm IC Driver, ICP-MS MassHunter can be used in combination with the following Agilent ICP-MS instruments:

- Agilent 7700 ICP-MS
- Agilent 7800 ICP-MS
- Agilent 7850 ICP-MS
- Agilent 7900 ICP-MS
- Agilent 8800 ICP-QQQ
- Agilent 8900 ICP-QQQ

3 Known issues

Configuration

- Metrohm IC Driver, ICP-MS MassHunter cannot detect whether an 858 Professional Sample Processor contains a stirrer. The stirrer can be activated or deactivated in the configuration.
  It is possible to configure a stirrer even though the instrument does not contain a stirrer. It is possible to define parameters in the method or in manual control for the configured but inexistent stirrer. It is possible to run a method with these parameters or to switch on the stirrer in manual control.

Method

- If you open the method in a floating window, windows that open afterwards are positioned behind the floating window. This can result in a deadlock, in which a window requests an action. All other windows are inactive until this action has been performed. However, the window that requires an action is inaccessible because it is located behind the floating window. All windows automatically open in the middle of the primary screen. To avoid the described problem, Metrohm recommends to open the floating window on a second monitor or in the right quarter of the primary screen.
- If the configured instrument contains **different modules** than the instrument from the loaded method, all modules and time program commands are removed from the method.
- If the configured instrument contains **fewer modules** than the instrument from the loaded method, all modules and time program commands are removed from the method.

Status display

- The status panels display the live parameters of the configured units. For the 889 IC Sample Center, the status of the parameter **Position type** is not updated correctly. If you change the position type in manual control, the status is not updated. The status panel still displays the previous position type.

Connection IC - Agilent ICP-MS

- In case of a software crash, the Agilent ICP-MS and the IC instrument do not stop. If the Agilent ICP-MS runs out of gas, it stops. Because the software is no longer running, the IC instrument does not receive a stop signal from the Agilent ICP-MS and continues to run. The IC instrument transfers eluent to the spray chamber. As the peristaltic pump of the Agilent ICP-MS is switched off, the eluent accumulates in the spray chamber. To avoid this problem, transfer the waste with the peristaltic pump of the IC instrument.

- Pressing **[Restart]** in the lower window will reset data acquisition. As only data acquisition is reset and not the IC method, there is no trigger that starts a new data acquisition sequence.

- If the IC instruments is switched on while MassHunter and plasma are already running, the IC instrument cannot be controlled. To control the IC instrument, MassHunter needs to be closed and opened again.

- In the following scenario, the IC instrument stops:
  1. If an error occurs during equilibration, the IC instrument turns off.
  2. If a leak causes an error during equilibration, both the IC instrument and the Agilent ICP-MS turn off.
  3. If a sequence is stopped manually with **[Abort run]**, plasma continues to run while the IC instrument stops. The IC instrument does not continue with start parameters.
  4. If the PC shuts down while the IC instrument and the Agilent ICP-MS are running, the IC instrument stops while plasma continures to run.
  5. If MassHunter is closed while the IC instrument and the Agilent ICP-MS are running without a batch, the IC instrument stops while plasma continues to run.
  6. If MassHunter freezes, the IC instrument may stop working while plasma continues to run.

Leak

- If the system is turned off and a leak exists in the IC instrument, the high-pressure pumps of the IC instrument do not stop when the system is turned on. The leak is not detected correctly if it already existed before turning on the system.