

# IC Driver for Agilent OpenLab CDS

A perfect combination: Metrohm Ion Chromatography and OpenLab CDS Software

PEOPLE YOU CAN TRUST





OpenLab CDS is the newest generation of Agilent's chromatography data systems, combining chromatography and mass spectrometry in a single software platform.

The release of the Metrohm IC Driver 1.0 for Open-Lab enables the full integration of Metrohm IC instruments in Open-Lab CDS, i.e. the full control of IC instruments with its broad range of detection techniques (suppressed and nonsuppressed conductivity detection, amperometric detection and UV/VIS), specific ion exchange columns, and liquid handling and inline sample preparation options.

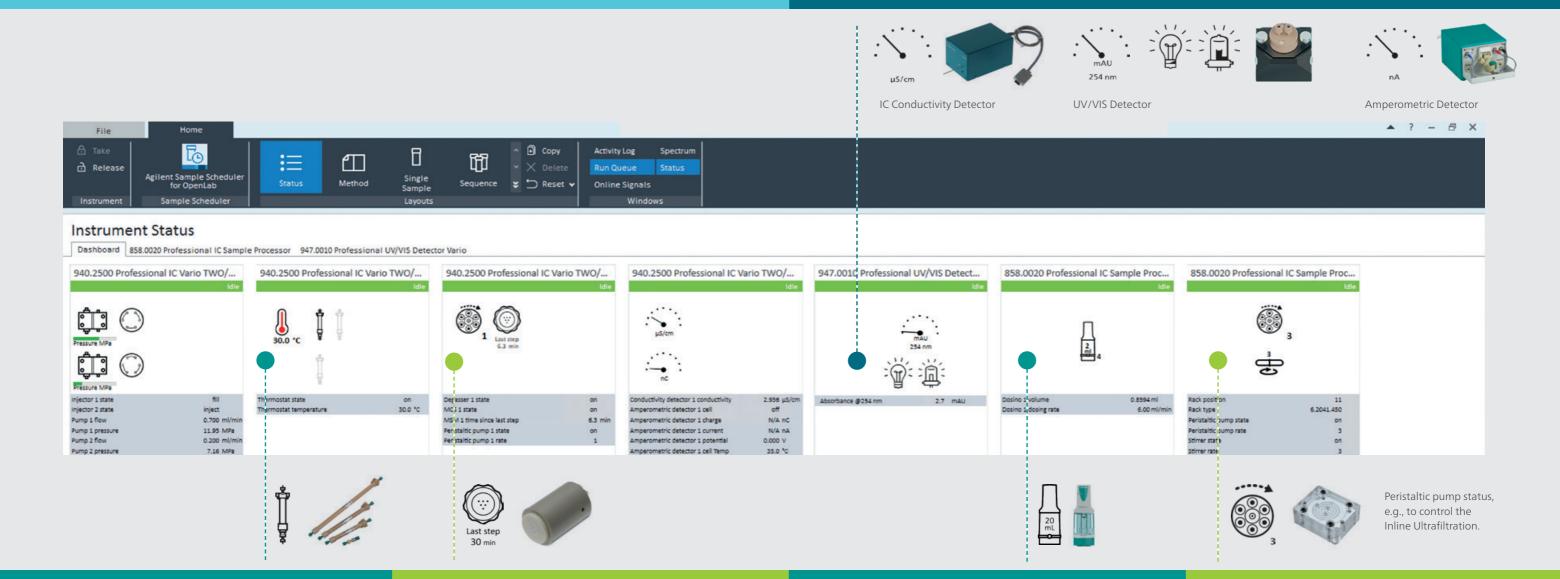
The integration provides also a single software solution for IC hyphenation with single quadrupole mass spectrometers (IC-MS) from Agilent.

OpenLab-based laboratories profit by saving time and costs for user training, validation, and software without sacrificing the robustness and flexibility for which Metrohm is well-known.

## IC control panel

#### **DETECTORS FOR IONIC ANALYTES**

Metrohms unsurpassed IC Conductivity Detector delivers highly accurate results for cations and anions in almost any sample matrix. UV/VIS detection enables the reliable and accurate quantification of analytes that absorb light. With pre- and post-column reaction many additional substances become detectable. Amperometric detection is optimal for determining electroactive components such as carbohydrates, antibiotics, or biogenic amines. The IC Amperometric Detector excels by its high selectivity and measurement sensitivity.



#### METROHM COLUMNS AND SUPPRESSOR ROTORS FOR ION CHROMATOGRAPHY

Metrohm provides a wide range of IC, guard, trap and preconcentration columns, and suppressor rotors for your most precise analysis.

#### SUPPRESSOR FOR OPTIMIZED SIGNAL-TO-NOISE RATIO

The patented Metrohm Suppressor Module is a smart and reliable solution to minimize baseline noise and decrease the background conductivity of the eluent. The robust design makes it 100% pressure stable and resistant to organic solvents. Its outstanding performance enables anions, cations and organic acids to be analyzed down to ultratrace concentrations.

### PATENTED DOSINO TECHNOLOGY FOR PROFESSIONAL LIQUID HANDLING

This multi-functional tool adds flexibility to any system. Usable for Inline Sample Dilution, for Partial Loop Injection Technique, or an automatic calibration from one standard solution. The Dosino opens various options for time- and cost-saving routine applications and method development.

# METROHM INLINE SAMPLE PREPARATION FOR PRECISE AND ACCURATE ANALYSIS

Fully automated sample analysis like Inline Ultrafiltration, Inline Dialysis, Inline Dilution, or Inline Matrix Elimination allows the handling of samples with complex matrices. This reduces manual steps and guarantees traceability for each sample preparation step.

## Benefits of Metrohm Ion Chromatography at a glance

Easy to use, very robust, highest measuring sensitivity, and outstanding service and support – that's Metrohm Ion Chromatography.

You will also benefit from these advantages:

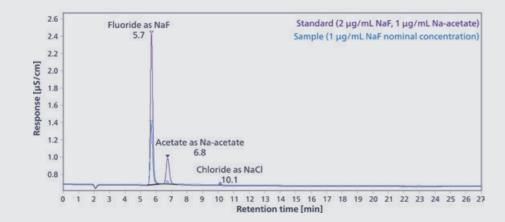
- Metal-free flow path no risk of contamination when detecting ultra-traces and transition metals
- Robust and reliable hardware guarantees maximum instrument availability, in particular during routine operation
- Excellent performance, minimal noise, and low running costs supported by the Metrohm Suppressor Technology and flexible sample preparation techniques
- Swiss quality 3 year instrument warranty and 10 year warranty on the anion suppressor for carbonate-based eluents.

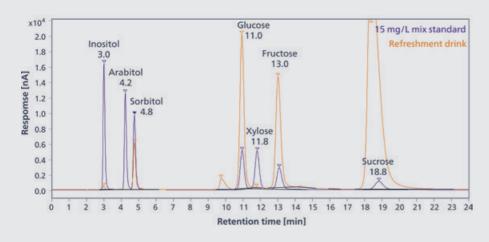


# Benefits of Agilent OpenLab CDS at a glance

Agilent's newest generation CDS combines chromatography and mass spectrometry into one single data system. OpenLab CDS provides time-saving steps in the analysis, interpretation, and reporting workflows, so you can identify key information and improve turnaround time. Optional built-in technical controls provide peace of mind for analytical labs that need the highest level of data integrity.

- One software for all chromatographic applications
- One software for hyphenated techniques (IC-MS)
- Reduced training and software revalidation effort
- All data in one database

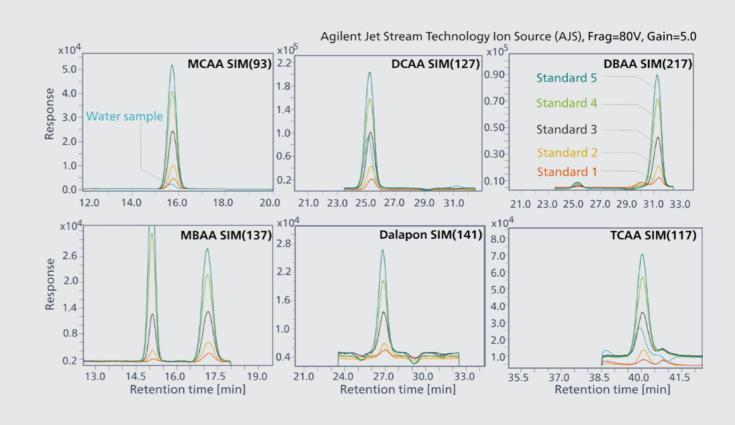




Analysis of fluoride and impurities of acetate and chloride in toothpaste according to the U.S. Pharmacopeia.

A Metrosep A Supp 19 column and a hydroxide eluent was used for separation. The instruments (930 Compact IC Flex, IC Conductivity Detector, 858 Professional Sample Processor) were operated in OpenLab CDS.

Analyses of carbohydrates in a mixed standard and a refreshment drink using a Metrosep Carb 2 column. The instruments (940 Professional IC Vario, IC Amperometric Detector, 858 Professional Sample Processor) were controlled in OpenLab as also the data analysis.



Haloacetic acid analysis: Overlay of a water sample and calibration standards for MCAA, MBAA, and DCAA (0.9–30  $\mu$ g/L), Dalapon (0.3–3  $\mu$ g/L), and DBAA, TCAA (3–30  $\mu$ g/L). Separation was accomplished with a Metrohm IC using a Metrosep A Supp 19 column with carbonate eluent. The selected ion monitoring (SIM) was performed with an Agilent Single Quadrupole MSD. Both devices were controlled in OpenLab as the data evaluation.

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#### **ORDERING INFORMATION**

Instrument	
6.6080.100	Metrohm IC Driver 1.0 for OpenLab CDS
Further information	
8.940.5002	Brochure: Metrohm Inline Sample Preparation – IC analyses as simple as possible
8.940.5003	Brochure: 940 Professional IC Vario / 942 Extension Module Vario – Modular complete system for ion chromatography
8.930.5001	Brochure: 930 Compact IC Flex – Compact ion chromatography for routine analysis
8.945.5001	Brochure: 945 Professional Detector Vario IC Amperometric Detector – Amperometric detection for the determination of electroactive substances
8.941.5000	Brochure: 941 Eluent Production Module – Inline eluent production for ion chromatography
8.0102.8004	Tutorial – Metrohm IC Driver 1.0 for OpenLab