

1 Minimum system requirements

Please refer to the OpenLab software documentation for information regarding the technical requirements for your computer (PC).

Application software

- OpenLab 2.3 software
- OpenLab 2.4 software
- OpenLab 2.5 software
- OpenLab 2.6 software
- OpenLab 2.7 software
- OpenLab 2.8 software

License for OpenLab CDS non-Agilent Instrument Connection

For OpenLab 2.4 or higher software versions, a license for **OpenLab CDS non-Agilent Instrument Connection** is required to operate Metrohm instruments with OpenLab CDS.

Antivirus software

Refer to the OpenLab software documentation (Agilent OpenLab CDS – Requirements and Supported Instruments and Agilent OpenLab CDS – Workstation) for information regarding antivirus softwares.

Operating system

Refer to the OpenLab software documentation (Agilent OpenLab CDS – Requirements and Supported Instruments) for information regarding the operating system.

Instruments supported

The Metrohm IC Driver 1.0 for OpenLab supports the following 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)
- **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, 2.930.2200, 2.930.2260, 2.930.2300, 2.930.2360, 2.930.2400, 2.930.2460, 2.930.2500, 2.930.2560)
- **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, 2.940.2100, 2.940.2400, 2.940.2500)
- **941 Eluent Production Module**
(version: 2.941.0010)
- **942 Extension Module Vario**
(version: 2.942.1060, 2.942.0500)
- **944 Professional UV/VIS Detector Vario**
(version: 2.944.0010)
- **945 Professional Detector Vario**
(version: 2.945.0010, 2.945.0020, 2.945.0030)
- **947 Professional UV/VIS Detector Vario**
(version: 2.947.0010, 2.947.0020)
- **IC Amperometric Detector**
(version: 2.850.9110)
- **IC Conductivity Detector**
(version: 2.850.9010)
- **IC Conductivity Detector MB**
(version: 2.850.9020)
- **Remote Box MSB**
(version: 6.2148.010)

Limitations

An instrument may maximally include the following modules.

- 2 x 930 Compact IC Flex, 940 Professional IC Vario or 945 Professional Detector Vario
Any combination of 940 Professional IC Vario, 930 Compact IC Flex and 945 Professional Detector is possible.
- 1 x 858 Professional Sample Processor
- 1 x 889 IC Sample Center
- 1 x 944 Professional UV/VIS Detector Vario or 947 Professional UV/VIS Detector Vario
- 1 x 941 Eluent Production Module
- 1 x Amperometric Detector per 930/940 IC
- The number of 942 Extension Modules Vario depends on the number of 940/945 ICs.
- The number of MSB devices (for example dosing units) depends on the number of available ports (according to the system configuration).
- 1 single quadrupole mass spectrometer from Agilent for IC-MS applications
- 1 LC or HPLC from Agilent with 1 Metrohm module 945 / 930 / 940. See tutorial 8.0102.8004EN for installation instructions.



NOTE

1 License for the Metrohm IC Driver 1.0 for OpenLab per computer is required.

Firmware requirements

- 930/940/942 instruments: version 5.940.0101 or higher
- 945 instruments: version 5.940.0100 or higher
- 858 instruments: version 5.858.0010 or higher
- 889 instruments: version 0840.100-1.31 or higher
- 944 instruments: version 5.887.0013 or higher
- 947 instruments: version 5.947.0007 or higher
- 941 instruments: version 5.846.0022 or higher



NOTE

Firmware updates have to be executed by a service technician.

2 Preconditions

OpenLab

OpenLab must be installed. Refer to the OpenLab software documentation for information regarding the installation of OpenLab.

Administrator rights

The user must have administrator rights to be able to install the software.

Energy settings



CAUTION

Data loss may occur if the PC switches to sleep mode during a determination. Therefore, **disable** the **sleep mode** in the energy settings of the operating system and for USB.

3 Installation

3.1 Installing the Metrohm IC Driver for OpenLab



NOTE

For Windows OS, the driver must be installed on the computers with OpenLab Client and AIC (Agilent Instrument Controller). Driver installation is not necessary on the OpenLab Server.

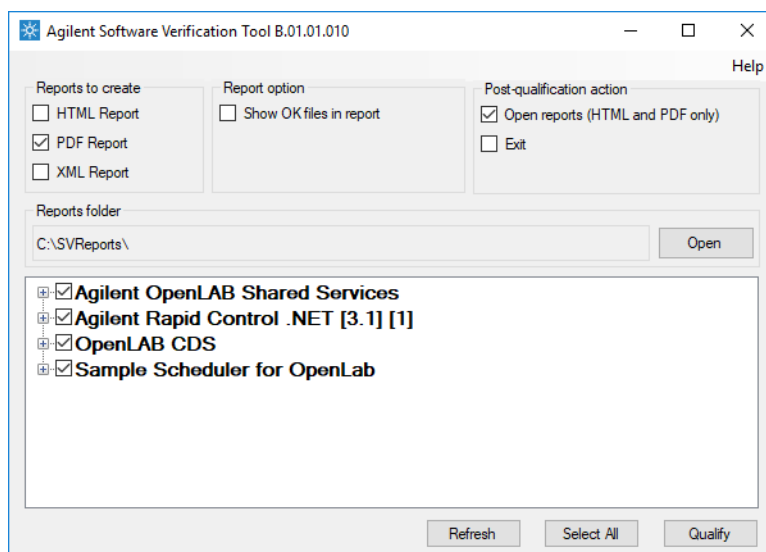
During the installation procedure, you need to enter the license number. The license number has the following format:

OL10-xxxx-xxxx-xxxx-xxxx

- 1** Prior to the installation, switch off all modules.
- 2** The installation process starts automatically when you connect the USB flash drive to the PC. If this option is disabled on your computer, double-click on the .exe file **setup**.
The installation wizard opens.
- 3** Follow the instructions of the installation wizard.
Metrohm IC Driver for OpenLab is installed on your PC.
- 4** If you are asked to restart your PC, shut down your PC and restart it again.
- 5** In regulated operation, start the program **Software Verification Tool** in the start menu.

Start ► Programs ► Agilent Technologies ► Software Verification Tool

- 6 Select a file format for the report. Click on **[Select All]**. Click on **[Qualify]**.



The **Software Verification Report** is generated.

The report shows whether all necessary files are installed. Usually the Metrohm IC driver software does not cause any changes in OpenLab.

If the software verification fails, then missing and invalid files are listed in the result list.

- 7 Print out the list with the record of changes and add to the IQ documents.

3.2 Upgrading the OpenLab software



NOTE

Follow this instruction **before** upgrading the OpenLab Software.

- 1 Switch off all Metrohm instruments and disconnect all USB Metrohm instruments if an AIC (Agilent Instrument Controller, refer to the OpenLab CDS manual) is updated.
- 2 Uninstall the Metrohm IC Driver 1.0 for OpenLab CDS.
- 3 Upgrade OpenLab to the new version. The computer will reboot during this process.
- 4 Install the Metrohm IC Driver 1.0 for OpenLab CDS (*see chapter 3.1, page 4*). The computer will reboot during this process.

- 5 If necessary, register the computer on the CDS system again (*see chapter 4, page 6*).

4 Registration of the computer (AIC or client) on the server



NOTE

Register the computer only on CDS systems. Do not register for file based systems.

After installing of the Metrohm IC Driver 1.0 for OpenLab, you need to register the driver on CDS systems.

- 1 Navigate to **C ► Program Files (x86) ► Agilent Technologies ► OpenLAB Acquisition ► RegisterCDS**.

- 2 Run **RegisterCDS.exe** as administrator.

The **OpenLAB Configuration** window appears.

The screenshot shows the 'OpenLAB Configuration' window with three steps: Step 1 - Server, Step 2 - Authentication, and Step 3 - Additional Options. Step 1 has a 'Hostname' field and a 'Connect' button. Step 2 has 'Username', 'Password', and 'Domain' fields. Step 3 has a checked checkbox for 'Register as Instrument Controller'. On the right, there are instructions for each step and a 'Register' button at the bottom right.

- 3 **Step 1 - Server**

Fill in the name of the server. Click on **[Connect]**.

The input fields **[Username]**, **[Password]** and **[Domain]** get active.

- 4 **Step 2 - Authentication**

Fill in the input fields **[Username]**, **[Password]** and **[Domain]**.

5 Step 3 - Additional Options

Ensure that the checkbox **Register as Instrument Controller** is checked.

6 Click on **[Register]**.

A warning that the PC will reboot appears. It may take some time before the warning appears.

7 Reboot your PC by clicking on **[OK]**.



NOTE

Register the AIC is necessary when the driver is re-installed.

5 Installation of drivers

In normal cases, the installation routine of Metrohm IC Driver 1.0 for OpenLab automatically installs all the drivers necessary for controlling the supported devices. If you use Windows 10, it is necessary to manually install the driver for the 889 IC Sample Center.



NOTE

The following description applies for Windows 10.

1 Open the Windows Device Manager. The corresponding device can be found under **Other devices**.

2 Right-click on the device. The context menu opens.

3 In the context menu, select **Update driver**. A dialog window opens.

4 Select **Browse my computer for driver software**. The file selection dialog opens.

5 Navigate to the installation medium.

6 On the installation medium, open the folder **Metrohm IC Driver 1.0 for OpenLab**. Choose the subfolder **889Driver**. It contains the driver for the 889 IC Sample Center.

Do not select a subfolder of the **889Driver** folder.

7 Apply the selection with **[OK]**. A Windows safety prompt is displayed. In order to install the driver, click on **[Install]**.

8 After successful installation, close the Device Manager.

The 889 IC Sample center is shown in the Device Manager as **ALIAS USB**.