

User Manual

ClearPeak™

CONTENTS

| | |
|-------------------------------------|----|
| 1. Glossary | 6 |
| 2. Introduction | 7 |
| 3. Installation | 8 |
| 1. Software setup | 8 |
| 2. License | 9 |
| 3. Configuration | 9 |
| 4. Directory structure..... | 11 |
| ➤ Method folder | 11 |
| ➤ Data Folder..... | 11 |
| ➤ Sample queue folder | 11 |
| ➤ Log folder | 11 |
| 5. Interface..... | 12 |
| 1. Navigation bar..... | 12 |
| 2. Status bar | 12 |
| a. Action panel | 13 |
| b. Status panel..... | 16 |
| ➤ Processes..... | 16 |
| ➤ Elution | 16 |
| ➤ Detection..... | 16 |
| ➤ Collection | 16 |
| ➤ ELSD | 16 |
| ➤ Mass | 17 |
| ➤ Auto sampler..... | 17 |
| 3. Root panel..... | 17 |
| a. Log panel..... | 17 |
| i. Password Reset | 18 |
| ➤ Standard Users | 18 |
| ➤ Administrators | 18 |
| ➤ Manage user reset requests..... | 19 |
| b. Settings panel..... | 19 |
| ii. Configuration..... | 20 |
| ➤ System and options selection..... | 20 |
| ➤ Modules selection | 20 |
| ➤ Connection | 21 |
| ➤ Pump..... | 21 |
| ➤ Valves..... | 22 |
| ➤ Collector..... | 22 |
| ➤ UV | 23 |
| ➤ ELSD | 23 |

| | | |
|-------|---|----|
| ➤ | Mass | 24 |
| ➤ | Injection Pump | 25 |
| ➤ | Autosampler | 25 |
| ➤ | RFID | 26 |
| ➤ | Level sensors | 26 |
| ➤ | Miscellaneous | 27 |
| iii. | Rackset test | 27 |
| iv. | Autosampler rackset test | 28 |
| v. | RFID test | 28 |
| vi. | puriFlash® MS | 29 |
| vii. | Maintenance | 30 |
| ➤ | Factory Sheet | 30 |
| ➤ | Export logs | 31 |
| ➤ | UV Detector | 31 |
| ➤ | Firmware | 32 |
| viii. | Databases | 33 |
| ➤ | All databases | 33 |
| ➤ | Creation of custom items from existing articles | 34 |
| ➤ | Creation of custom items from scratch | 35 |
| ➤ | Rack auto sampler | 36 |
| ix. | Appearance | 37 |
| x. | Accessibility | 37 |
| xi. | Product info | 37 |
| c. | User panel | 38 |
| i. | Profile | 38 |
| ii. | Preferences | 39 |
| ➤ | Backup templates | 39 |
| ➤ | Method detection | 39 |
| ➤ | Method collection | 40 |
| ➤ | Method elution | 41 |
| ➤ | Method stop mode | 41 |
| ➤ | Method needle rinsing | 42 |
| ➤ | Reprocess | 42 |
| ➤ | Solvent filter | 43 |
| ➤ | Column filter | 44 |
| ➤ | Rack filter | 45 |
| ➤ | Loop filter | 45 |
| ➤ | Dry load filter | 45 |
| ➤ | Autosampler rack filter | 46 |
| ➤ | Language | 46 |

| | | |
|-------|---|----|
| ➤ | Dashboard..... | 46 |
| d. | Purge panel..... | 46 |
| i. | Elution purge..... | 47 |
| ➤ | Elution..... | 47 |
| ➤ | Air purge..... | 47 |
| ➤ | Switch NP to RP or RP to NP purge..... | 47 |
| ii. | Column holder and injection valve..... | 48 |
| iii. | Injection modules..... | 48 |
| iv. | Detector purge..... | 48 |
| ➤ | ELSD prime..... | 49 |
| ➤ | ELSD..... | 49 |
| ➤ | Mass..... | 49 |
| v. | Purge live panel..... | 49 |
| e. | Method panel..... | 49 |
| i. | New..... | 50 |
| ii. | Open..... | 50 |
| iii. | Save..... | 50 |
| iv. | +SQ..... | 51 |
| v. | Method name / Sample name / Project name..... | 51 |
| f. | Method tiles..... | 51 |
| i. | Solvent tile..... | 51 |
| ii. | Column tile..... | 52 |
| iii. | Injection tile..... | 53 |
| ➤ | Direct injection / injection valve..... | 53 |
| ➤ | Autosampler..... | 53 |
| ➤ | Injection pump..... | 53 |
| iv. | Stop mode tile..... | 54 |
| v. | Elution tile..... | 54 |
| vi. | Detection tile..... | 55 |
| ➤ | Baseline correction..... | 56 |
| vii. | MS detection tile..... | 58 |
| viii. | Collection tile..... | 58 |
| ➤ | Single mode..... | 58 |
| ➤ | Table mode..... | 60 |
| ix. | TLC (Genius mode)..... | 60 |
| ➤ | TLC to Flash & Prep Chromatography..... | 60 |
| ➤ | Manual method..... | 61 |
| 4. | Sample queue panel..... | 63 |
| 5. | Live panel..... | 64 |
| a. | Graph section..... | 65 |

| | | |
|-----|------------------------------------|----|
| i. | Header graph section | 65 |
| ii. | Footer graph section | 67 |
| b. | UV spectrum | 67 |
| c. | MS spectrum | 68 |
| d. | Fraction collection | 69 |
| 6. | FIA (Flow Injection Analysis)..... | 70 |
| a. | General..... | 70 |
| b. | Analysis and method | 70 |
| 7. | Reprocess..... | 71 |
| a. | Data selection | 72 |
| b. | Open a PDF..... | 74 |

1. GLOSSARY

| Term | Definition |
|-------|--|
| μL | Microliter |
| AI | Artificial intelligence |
| APCI | Atmospheric pressure chemical ionization |
| AS | Auto sampler |
| CMS | Compact mass spectrometry |
| CPC | Centrifugal partition chromatography |
| CV | Column volume |
| ESI | Electro spray ionization |
| FIA | Flow injection analysis |
| g | Gram |
| h | hour |
| iELSD | Integrated evaporative light scattering detector |
| IIM | Intelligent Isocratic Mode |
| IRE | Intelligent Run Extension |
| min | Minute |
| mL | Milliliter |
| mm | Millimeter |
| MS | Mass spectrometer |
| ms | millisecond |
| Nb | Number |
| nm | Nanometer |
| NP | Normal phase |
| ORM | Optimum recovery mode |
| RFID | Radio frequency identification |
| RP | Reverse phase |
| s | Second |
| SQ | Sample queue |
| TIC | Total ion chromatogram |
| TLC | Thin layer chromatography |
| UI | User interface |
| UV | Ultraviolet |
| XIC | Extracted ion chromatogram |

2. INTRODUCTION

This manual is meant to provide instructions on getting started with and using the “puriFlash® ClearPeak™” software installed on the PC and how to control Interchim® puriFlash® systems.

PuriFlash® systems are basically composed of 3 elements, a pump (possibly with an injection valve), a UV detector and a fraction collector. A second detector (e.g. iELSD) can be installed on certain systems.

The software can either be used on a desktop/laptop computer (with a keyboard and a mouse - “stand-alone” mode) or in a complete puriFlash® system (puriFlash® generation 5 and XS product line, including 535-XL) with a touch screen.

To simplify the explanations, the example of a puriFlash® 5.250 system will be detailed. However, this manual also applies for the complete puriFlash® generation 5 product line, as well as the XS line.

The application was developed with the aim of being user-friendly and intuitive. Thus, the screen of supervision makes it possible to see, in real time, the state of the elements composing the system and the evolution of the operating parameters.

All screens are simplified to the maximum so that each new user can quickly learn how to use the system. Moreover, the user interface and the software configuration are modifiable according to user requirements.

This manual covers the following topics:

- How to install the software in case of reinstallation or upgrade (setup and license activation).
- File management (application folder structure, where are stored data, method, profiles, and settings files, etc.).
- The User Interface and software messages.
- How to control the system.

Important remarks

- The systems are delivered with the software already installed and activated.
- On a day-to-day basis, no Internet connection is needed to operate the system. However, a connection is necessary to activate the license and for remote maintenance.

3. INSTALLATION

Noteworthy, the puriFlash® systems are delivered with ClearPeak™ already installed and activated. The following procedure explains how to install the software in case of upgrade or reinstallation, but also to install on a desktop computer and for the off-line mode. In this document, ClearPeak™ version 2025.X will be used for explanations and screenshots.

1. SOFTWARE SETUP

System requirements:

- Available disk space: 236.2 MB.
- Operating System: Windows.

Installation procedure:

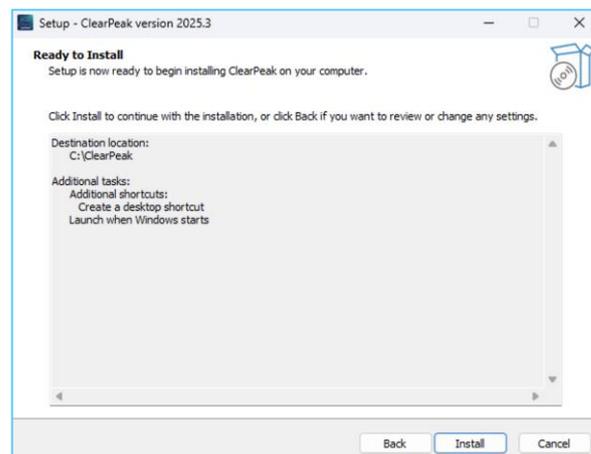
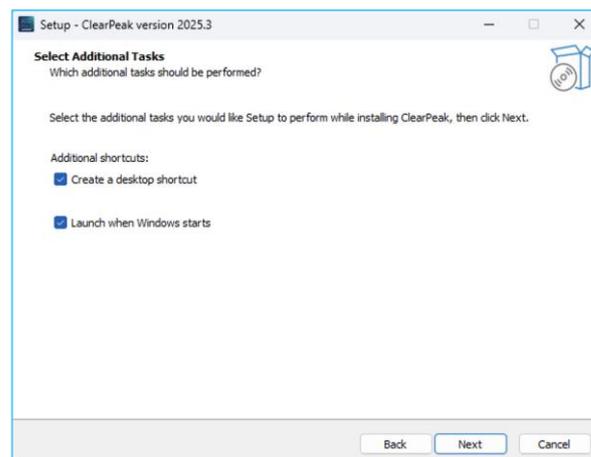
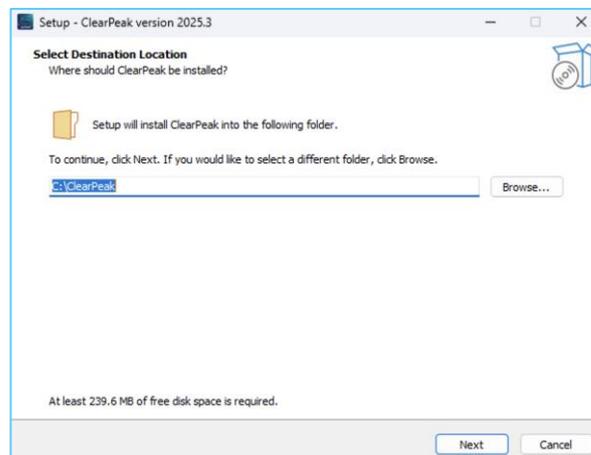
1. Launch Setup
 - Download the latest version (available in the ClearPeakNews).
 - If a previous version is already installed, close the ClearPeak™ application.
 - Run “ClearPeak-XXXX.X-setup.exe” installer executable.

Note: Sometimes a "Blue pop-up message" from Windows 10 can be displayed, select "Run anyway".

2. Configure installation location
 - Select destination folder (C:\ClearPeak).
 - Click Next.

Note: The ClearPeak installer will place the software in C:\ClearPeak by default. We recommend keeping this path unchanged. Choosing a system-protected folder (e.g., C:\Program Files) may cause file access errors unless the software is run with administrator privileges. In case of doubt, leave the installation path as suggested by the installer.

3. Additional configuration
 - Select “Create a desktop shortcut” and “Launch when Windows starts”.
 - Click Next.
4. Complete Installation
 - Review configuration settings.
 - Click Install to begin.
 - Click Finish once completed.



2. LICENSE

ClearPeak™ software requires a registered license to be used. If not registered, a dialog box will be displayed when the software launches:

1. Fill the five fields with the license key provided and press ok. This key type is XXXXX-XXXXX-XXXXX-XXXXX-XXXXX.

For quick entry, copy the full license key and click the "Paste" button to automatically populate all fields.

2. The license status is now **VALID – NOT ACTIVATED**. Simply click on the “Activate” button to register.

A dialog box for entering a license key. It features five empty text input fields separated by hyphens. Below the fields are three buttons: "Paste" (with a clipboard icon), "Clear", and "Ok".

A registration form with the following fields: Name, E-mail, and Company. Below these is a section for license information: License Expiration Date (displaying "Days Left for Activation: 20") and License Status (displaying "VALID - NOT ACTIVATED"). At the bottom are three buttons: "Close", "Activate", and "Change Product Key".

3. The license information is now shown, and the license status has changed to **VALID – ACTIVATED**. The dialog box can now be closed, and the software is ready to use.

A dialog box showing the updated license status. It displays "License Expiration Date" as "2025-01-30 10:31:26" and "License Status" as "VALID - ACTIVATED".

Important remarks

- Internet access is necessary to activate the license. Thus, the system must be connected to a local network.
- To get an activation key, contact AIS or distributor by specifying the serial number of the machine, a contact name, and a contact email address.

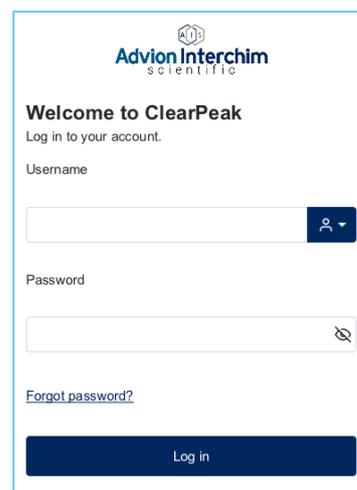
3. CONFIGURATION

- 1- First launch setup
 - Upon first launch, create an administrator account.
 - Create a secure password (minimum 8 characters).
 - Confirm password by entering it again.
 - Click “Sign up” to create the account.

The "Welcome to ClearPeak" screen for creating an administrator account. It includes the Advion Interchim Scientific logo and the text "Create your Admin account". The form contains fields for Username, Password (with a note "Must be at least 8 characters"), and Confirm Password (with a note "Repeat password"). A "Sign Up" button is at the bottom, and a link "Already have an account? Log in" is at the very bottom.

2- Login

- Use the created admin credentials to log in.
- Click “Log in”.



Advion Interchim
SCIENTIFIC

Welcome to ClearPeak
Log in to your account.

Username

Password

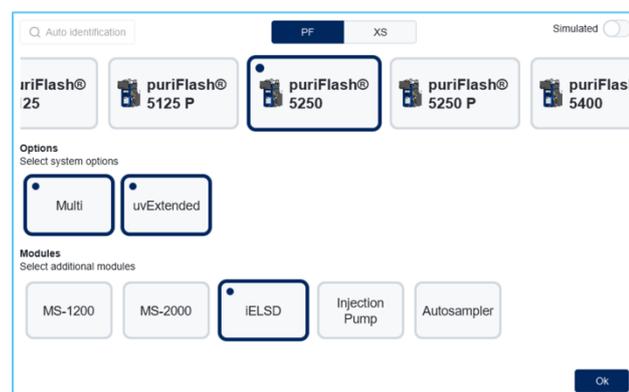
[Forgot password?](#)

Log in

3- First system configuration

- Select the system series from available options on the top menu.
- Choose the system model and select additional modules to match the hardware configuration.
- Review the selections to ensure they match the physical setup.
- Click “OK” to apply system settings.

Note: Before validating the configuration for offline use, activate “Simulated” mode by toggling the switch in the top-right corner.



Auto Identification PF XS Simulated

puriFlash® 25 puriFlash® 5125 P puriFlash® 5250 puriFlash® 5250 P puriFlash® 5400

Options
Select system options

Multi uvExtended

Modules
Select additional modules

MS-1200 MS-2000 IELSD Injection Pump Autosampler

OK

4. DIRECTORY STRUCTURE

The software is installed by default in “C:\ClearPeak”.

This directory contains the following folders to organize user files:

➤ [Method folder](#)

The method folder archives all manual and automatically saved methods. If a method is not saved before, it is saved at the beginning of the run. The methods are saved in “*method\username\filename.mtd*”. They can be also stored in a subfolder if a project name is specified. In this case, the methods will be saved in “*method\username\project\filename.mtd*”.

➤ [Data Folder](#)

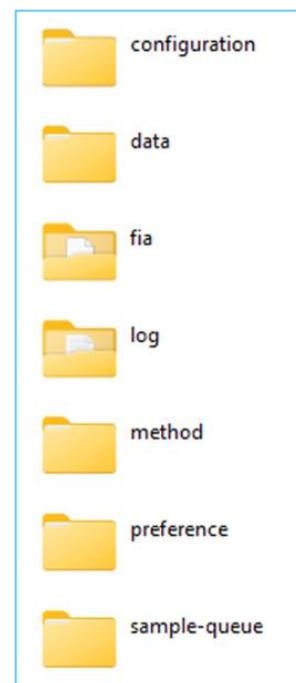
The data folder archives the data of all the run methods. At the end of a run, a data archive is created. The location follows the same logic. The zip archives are located at “*data\username\filename.data*” or “*data\username\project\filename.data*”.

➤ [Sample queue folder](#)

The sample queue folder archives all the saved sample queues. The unique location is “*sample-queue\username\filename.sq*”.

➤ [Log folder](#)

The log folder archives all traces files of the current instance of the software (since software launch) at “*log\current-logs*”. At the end of a run a log archive is created under “*log\logs-YYYY-MM-DD-at-hh-mm-ss.zip*”.



5. INTERFACE

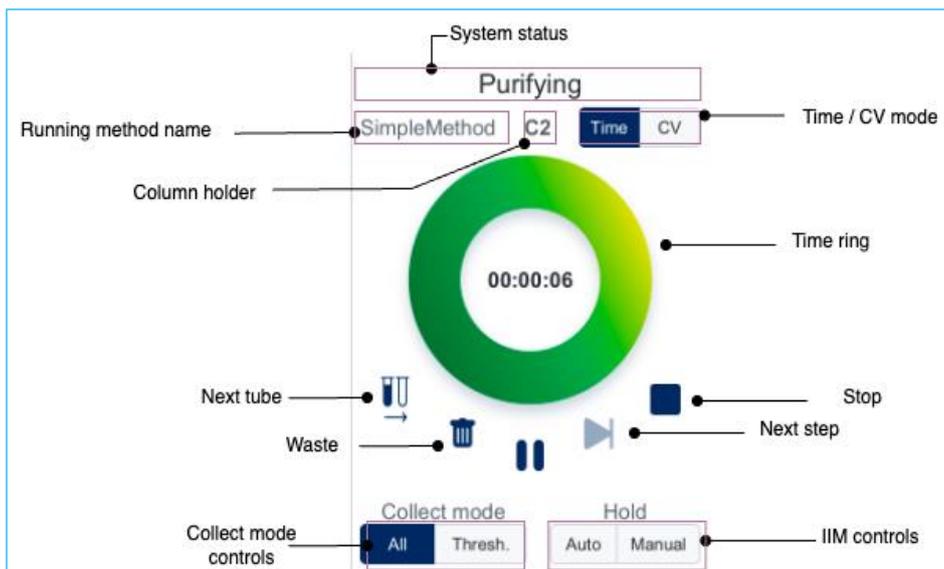
1. NAVIGATION BAR

The blue ribbon on the left side of the screen, called “navigation bar”, provides shortcuts to the menus. The corresponding screens are detailed later in this manual.

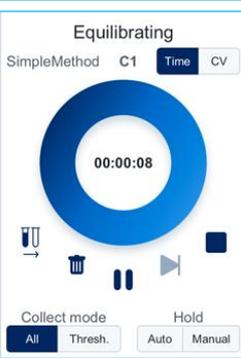
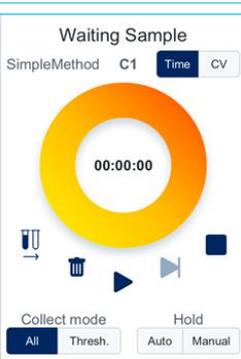
| | |
|---|---|
|  Purge | To access the “Purge” screen. The Purge button is automatically disabled when a method is running. |
|  Method | To access the “Method” editor panel. |
|  Sample queue | To access the “Sample Queue” screen where multiple methods can be scheduled and run sequentially. |
|  Live run | The “Live Run” button displays the data from the currently running method. |
|  FIA | The “FIA” function is only accessible on systems equipped with a mass detector. |
|  Reprocess | The “Reprocess” button allows to open and reprocess data from previously executed methods. |
|  User | The “User” button allows the user to access the profile and preferences. These settings remain specific to the profile and do not affect other users. |
|  Settings | The “Settings” button provides access to all system configuration panels. |
|  Log out | The “Log Out” button ends the current session and returns to the login screen. |
|  Close | The “Close” button exits the application. Caution: it is recommended to close the software with the “Close” button before switching off the system. |

2. STATUS BAR

The status bar shows the real-time status of the main system while a method is running. The upper part, called the “Action panel”, allows quick interactions with the system. The lower part, called the “Status panel”, displays real-time values and is read-only, except for the Bottles, Operate, and Auto-zero controls.

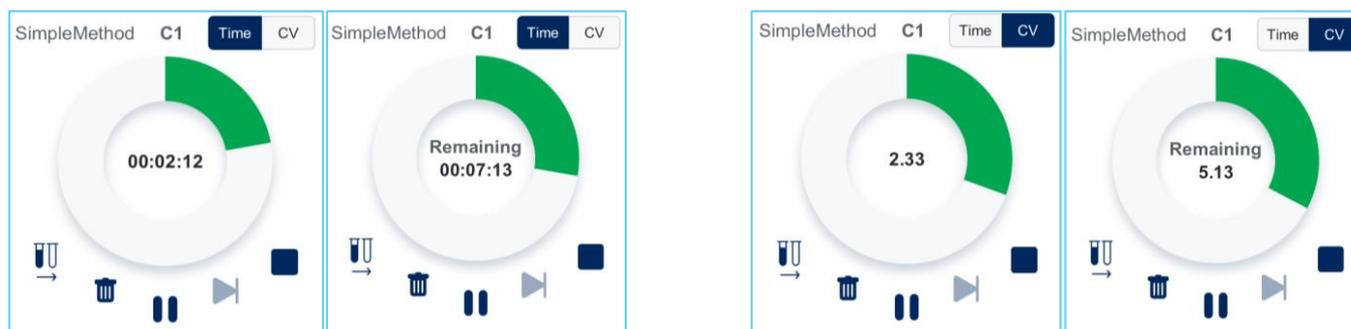
a. Action panel

| Section | Details |
|---|---|
| System status | <p>The status of the system can be:</p> <ul style="list-style-type: none"> • Disconnected • Connecting • Initializing • Pause Alarm • Ready • Purging • Sample Loading • Waiting Sample • Equilibrating • Refilling • Stabilizing • Purifying • Rinsing • Mass vacuum management • Mass FIA • Waiting For Column Installation • Waiting For Column Removal • Drift Acquisition • Pump To Injection • Injection To UV • Pump To UV • UV To Collector |
| Name of the method currently running | The name of the method currently running is displayed. |
| Column holder | Displays the column holder number used in the current method (from 1 to 5 depending on the system configuration). |
| Time/CV mode | The user can choose to work in time or column volume. |
| Time ring | Represents the current method progression, based on the following color code. |

| Color | Visualization | Status |
|-------------------|---|---|
| Orange |  | The system is initializing. |
| Blue/green |  | The system is ready to use. |
| Red |  | The system is paused due to an alarm. |
| Blue |  | Equilibration is in progress. |
| Yellow |  | The system is waiting for the sample injection to be completed. |

At the center of this ring, time is displayed. During a run, this text will be replaced by the elapsed time from beginning or the elapsed column volume, according to the mode selected (time or CV). Clicking on this text switches from elapsed to remaining time or CV mode.

Note: this feature is unable while running a purge.



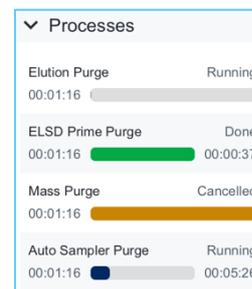
| Icon | Function | Details |
|---|-----------------------------|--|
| | Next tube | Click to force the system to continue collecting in the next tube. |
| | Waste | Changes the current collect mode to “Waste” (read section 5.3.f.viii. Single mode for explanation on “Waste” collect mode). |
| | Run | Click to start a method. |
| | Next step | Forces skip the running action and start the next phase of the purification workflow (Equilibration → Injection → Method). |
| | Stop | Stops the process in progress (method or purge). |
| Collect mode <input type="button" value="All"/> <input type="button" value="Thresh."/> | Collect mode control | A two-button menu bar to change the collection mode (All or Threshold) without going back to method panel. |
| Hold <input type="button" value="Auto"/> <input type="button" value="Manual"/> | Hold control | Two options are available: <ul style="list-style-type: none"> - Automatic: triggers the “Hold” function when a peak is detected. - Manual: to manually switch to isocratic mode. |

b. Status panel

This panel is a summary of the current system status.

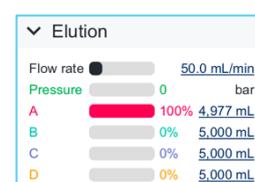
➤ Processes

This section displays all active processes in a clear, visual format. Each process appears as a progress bar with its name, status and timing information. This makes it easy to keep track of several simultaneous processes and their progress.



➤ Elution

In this section, 6 progress bars represent the current flowrate, the current pressure, and the current percentage of each solvent.



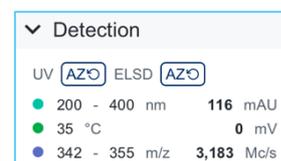
By clicking on the volume on the right of the bar, a pop-up will open to edit bottles levels. When the solvent volume is less than 10% of the bottle volume, the system will automatically pause.

During purification, clicking on the flow rate value opens a pop-up to modify the flow rate of the current elution step. This control is available only when the system is not running in gradient mode and not performing a baseline correction method.



➤ Detection

This section summarizes the current values of the detection channels (UV, ELSD, Mass). Only configured detectors are displayed. Next to the detector labels, the "AZ" buttons perform an auto zero if the detector supports it. Just below, up to 6 channels can be displayed simultaneously. The color of each line corresponds to the colors of the detection tile theme.



➤ Collection

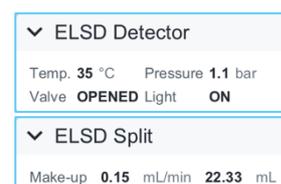
This section shows the position of the collector arm when running, the collected volume in the current tube and the volume of the waste bottle. The waste bottle volume can be adjusted by clicking on its volume.



The Status Panel dynamically adapts its display to show monitoring sections for all active modules configured in the system.

➤ ELSD

This section provides continuous monitoring of essential detector parameters, displaying the current temperature, pressure, valve position status, and light source state. Additionally, the ELSD Split section shows the current make-up pump flow rate and volume information.



➤ Mass

This section provides real-time monitoring of essential detector parameters, including the current capillary temperature and voltage, source gas temperature, and either APCI corona discharge or ESI voltage. The detector's state can be controlled only when system status is "Ready" via the "Standby" button. To switch back to operate mode use the "Operate" button when the detector is in standby. When activating operation mode, a configuration dialog is displayed to set and adjust source stabilization parameters.

Mass split section displays active dilution and make-up flow parameters with their corresponding pressures, as well as the current split rotation timing.

| ▼ Mass Detector | |
|------------------------|--------|
| Standby ⏻ | |
| Capillary temperature | 200 °C |
| Capillary voltage | 127 V |
| Source gas temperature | 350 °C |
| APCI corona discharge | 5 µA |

| ▼ Mass Split | |
|----------------|-------------------|
| Dilution | 0.5 mL/min 60 bar |
| Make-up | 0.1 mL/min 60 bar |
| Split rotation | 1.5 sec |

➤ Auto sampler

This section displays the current operational status and provides real-time monitoring of solvent levels. Current activities are shown with their progress and timing information. Each solvent bottle (Carrier, DMSO, Cleaner) and the waste container display its current volume. Clicking on a volume on the right will open a pop-up to edit the bottles levels. When the solvent volume is less than 10% of the bottle volume, the system will pause.

| ▼ Auto Sampler | | |
|----------------|----------------------------------|----------|
| Status | Moving | Loading |
| 00:00:00 | <div style="width: 50%;"></div> | 00:02:32 |
| Carrier | <div style="width: 250%;"></div> | 250 mL |
| DMSO | <div style="width: 250%;"></div> | 250 mL |
| Cleaner | <div style="width: 168%;"></div> | 168 mL |
| AS Waste | <div style="width: 36%;"></div> | 36 mL |

3. ROOT PANEL

a. Log panel

| ▼ Elution | |
|-----------|---------------|
| Flow Rate | 0.0 mL/min |
| Pressure | 0 bar |
| A | 100% 4,999 mL |
| B | 0% 4,999 mL |
| C | 0% 4,999 mL |
| D | 0% 4,999 mL |

In ClearPeak™, each user can customize their personal settings (read section [5.3.c.ii. Preferences](#) for details). To access these settings, users must first log in when launching the software.

In the center of the login dialog, a username field allows the user to select from all available profiles using a dropdown menu. Below this, enter the password in the designated text field. Click "Log in" to access the selected profile. Upon successful login, the user will be directed to the method pane.

Once logged in, clicking the "User" button in the navigation bar takes the user to the profile page. Users with administrator privileges can manage all other user profiles from this section.

Clicking "Log out" will end the current session and return to the login panel.

i. Password Reset

If a user cannot remember their password, they can start the recovery process directly from the login panel by clicking "Forgot Password?". The reset workflow depends on the account type (standard user vs. administrator).

➤ Standard Users

1. Request a password reset

- On the login screen, click "Forgot Password?"
- Enter your username and click Submit
- A confirmation message appears



A form titled "Reset Your Password" with the instruction "Enter your username to begin the password reset process." It features a text input field for "Username" and a dark blue "Submit" button at the bottom.

Note: A user can only have one pending reset request at a time. If a request has already been submitted, the user must wait for an administrator to process it.

After the administrator processes the request:

- **Approved:** the administrator provides the user with a temporary password.
- **Denied:** the user must contact an administrator for assistance.

2. Set a new password after receiving a temporary password

- Return to the login panel and log in using the temporary password.
- ClearPeak™ immediately prompts the user to change their password.
- Enter a new password (minimum 8 characters) and confirm it.
- Click Change Password to save.

A form titled "Change Your Password" with the instruction "Your password has been reset by an administrator. You must set a new password before continuing." It features two text input fields for "New Password" and "Confirm Password", each with a visibility toggle icon. A dark blue "Change Password" button is at the bottom.

Note: This password change is mandatory and cannot be skipped.

➤ Administrators

The first time an administrator logs in, ClearPeak™ generates and displays a recovery key. The administrator must store this key securely and then click "Ok" to close the dialog.

Note: The recovery key is shown only once.

A dialog box titled "Recovery key for user: admin3" with the instruction "IMPORTANT: Save this recovery key securely. It will not be shown again. You will need it to reset your password if you forget it." It displays a recovery key "CPYC-XPND-CNBA-5RLJ-8R6P-AKNQ-SA9S-2794" next to a copy icon. An "Ok" button is at the bottom right.

1. Reset password using a recovery key

- On the login panel, click Forgot Password?
- Enter your username, then click Submit.
- Enter the recovery key.
- Enter and confirm the new password.
- Click Reset Password.

If the recovery key is valid, the password is updated immediately. ClearPeak™ then generates a new recovery key, which replaces the previous one. The administrator must store the new key securely.

Note: Each recovery key can be used only once. After a reset, the old key becomes invalid.

➤ [Manage user reset requests](#)

When a user submits a reset request, administrators are notified after logging in. Open the reset request list via the notification or the user management section (see [5.3.c.i. Profile](#)).

For each request:

- **Approve:** ClearPeak™ generates a temporary password and displays it.
- The administrator must share it with the user.

- **Deny:** the request is dismissed.

Note: Reset requests that are not processed within 7 days expire automatically.

b. [Settings panel](#)

The settings panel provides access to all main sections of the software. From here, users can manage several system parameters, access maintenance features, manage the database, customize the interface appearance, and view product information. Each section can be accessed by clicking on its corresponding entry in the menu.

ii. Configuration

The configuration screen allows the user to manage all system settings. Any modifications made here will apply to the current user's system configuration. The interface presents various modules organized in an expandable menu structure for easy navigation through different instrument components and parameters.

To help locate specific settings quickly, a search bar at the top of the screen lets the user search through both panel titles and their contents. This search functionality helps find relevant parameters without manually expanding each section.

To apply the changes, click the "Reload" button in the top-right corner of the screen. Use the "Reset" button located next to it to revert to the last saved configuration.

➤ [System and options selection](#)

In the General section, the user can view the system model and enabled options. These settings can only be modified by Interchim® personnel or authorized Service representatives.

▼ General

Model
Select your desired system model. PF_5_250 ▼

Option
Select your desired system option. MULTI ▼

➤ [Modules selection](#)

The Modules section displays all available hardware components of the system. Admin users only can use the toggle switch on the right of each module to enable or disable it.

Each module can be set to different operating modes:

- Normal mode (default): uses the actual instrument hardware for real operations.
- Simulation mode: allows testing and training in offline mode without physical hardware.

▼ Modules

| | | | | |
|-----------------------------|--|--------|-----------|-------------------------------------|
| Pump PF 5250 | | Normal | Simulated | |
| Collector PF5 | | Normal | Simulated | |
| UV Detector UV 800 | | Normal | Simulated | |
| ELSD Detector iELSD | | Normal | Simulated | <input checked="" type="checkbox"/> |
| ELSD Split iELSD split | | Normal | Simulated | <input checked="" type="checkbox"/> |
| Mass Detector MS-2000 | | Normal | Simulated | <input type="checkbox"/> |
| Mass Split MS-2000 split | | Normal | Simulated | <input checked="" type="checkbox"/> |
| Auto Sampler ASX 7100 | | Normal | Simulated | <input checked="" type="checkbox"/> |
| Injection Pump PF 5125 | | Normal | Simulated | <input checked="" type="checkbox"/> |
| Level Sensor ILS5 | | Normal | Simulated | <input checked="" type="checkbox"/> |
| LED ILS5 | | Normal | Simulated | <input type="checkbox"/> |
| RFID RFID8 | | Normal | Simulated | <input checked="" type="checkbox"/> |

➤ [Connection](#)

The Connection section manages how the software communicates with modules. This section is accessible and editable by Admin users only. By default, "Auto Port Detection" is enabled to automatically identify available communication ports. If needed, specific ports can be added to the "Undetectable Ports" list to exclude them from detection, or to "Ignorable Ports" to be skipped by the system.

Note: It is recommended to keep these default settings unchanged, as the software is designed to automatically detect and connect modules when launching.

▼ Connection

Auto Port Detection
Enable automatically detects ports that are connected to the system.

Auto Connection
Enable to automatically connect the system.

Heart Beat Check
Enable to continuously verifies the connection to ensure it remains active.

Undetectable Ports
Add ports that are not detectable by the system. + 0 ▼

Ignorable Ports
Add ports that should be ignored by the system. + 0 ▼

➤ [Pump](#)

The Pump section displays the system configuration limits and volumes, including maximum pressure (bar), maximum flow rate (mL/min), pump to column volume (mL), and injection valve to column volume (mL). These values are preconfigured

with factory settings. Only Admin users can edit these fields. Although they can be adjusted (for example, to set lower operating limits).

Note: Changing these factory-set values is not recommended.

▼ Pump

| | |
|--|------------------------------------|
| Maximum pressure (bar) Set system maximum pressure value. | <input type="text" value="15"/> |
| Maximum flow rate (mL/min) Set system maximum flow rate value. | <input type="text" value="250"/> |
| Pump to column volume (mL) Set your system pump to column volume | <input type="text" value="13.29"/> |
| Injection valve to column volume (mL) Set the tubing volume between injection valve outlet and column inlet | <input type="text" value="0.72"/> |

➤ [Valves](#)

The Valves section displays the system's valve configuration. It shows all installed valves and their functions, as well as whether a leak sensor is present. These settings are configured during manufacturing and cannot be modified.

▼ Valves

| | |
|--|-------------------------------------|
| Leak sensor Indicates whether the valve leak sensor is present in the system. | <input checked="" type="checkbox"/> |
| Valve 1 Loop valve | <input checked="" type="checkbox"/> |
| Valve 2 C1/C2 column switch valve | <input checked="" type="checkbox"/> |
| Valve 3 C2/C3 column switch valve | <input checked="" type="checkbox"/> |

➤ [Collector](#)

The Collector section shows the fraction collector's settings. It displays rack capacity and leak sensor status. X and Y home offset positions (in mm) can be adjusted, as well as setting the needle volume and dead volume (in mL). Only Admin users can edit these values.

▼ Collector

Capacity
Indicates collector rack capacity.

Collector Leak Sensor
Indicates whether the Collector leak sensor is present in the system.

X Home Offset (mm)
Set your desired collector X home offset value.

Y Home Offset (mm)
Set your desired collector Y home offset value.

Needle Volume (mL)
Set your desired collector needle volume.

Dead Volume (mL)
Set your desired collector dead volume.

➤ [UV](#)

The UV section shows the UV detector settings. It allows the user to select the UV detector type, indicates whether a UV leak sensor is present, and displays the minimum and maximum wavelength limits (nm). It also shows the column to UV volume (mL). Only Admin users can edit this value.

▼ UV

UV Detector
Select UV Detector type.

UV Leak Sensor
Indicates whether the UV leak sensor is present in the system.

Minimum Wavelength (nm)

Maximum Wavelength (nm)

Column to UV volume
Set your system column to UV volume

➤ [ELSD](#)

The ELSD section is divided into two parts: Detector and Split. Only Admin users can edit these values. In the Detector part, the user can set the nebulization time (ms) as well as the stabilization temperature delta (°C) and stabilization pressure delta (bar).

In the Split part, the user can set the make-up pump flow rate (mL/min), the split ratio (ms), and the dead volume (mL).

▼ ELSD

Detector

Nebulization Time (ms)
Set nebulization time.

Stabilization Temperature Delta (°C)
Set stabilization temperature delta.

Stabilization Pressure Delta (bar)
Set stabilization pressure delta.

Split

Make-up Pump Flow Rate (mL/min)
Set make-up pump flow rate value.

Split Ratio (ms)
Set split rotation period.

Dead Volume (mL)
Set split to the UV dead volume.

➤ Mass

The Mass section is divided into two parts: Detector and Split. Only Admin users can edit these settings.

In the Detector part, the user can select the mass detector type and view the source type (automatically managed by the system). It also provides settings for nebulization time (ms), capillary stabilization temperature delta percentage (%), capillary stabilization voltage delta percentage (%), source gas stabilization temperature delta (°C), ESI voltage delta, APCI stabilization corona discharge delta, and the mass dead volume (mL).

In the Split part, the user can set the make-up pump flow rate (mL/min), dilution pump flow rate (mL/min), split rotation period (ms), system to mass split dead volume (mL), and mass split to system dead volume (mL).

▼ Mass

Detector

Type
Select Mass detector type.

Source Type
CMS Source type configuration - Automatically managed by system

Nebulization Time (ms)
Set nebulization time.

Capillary Stabilization Temperature Delta Percentage (%)
Set capillary stabilization temperature delta percentage.

Capillary Stabilization Voltage Delta Percentage (%)
Set capillary stabilization voltage delta percentage.

Source Gas Stabilization Temperature Delta (°C)
Set source gas stabilization temperature delta.

ESI Voltage Delta
Set ESI voltage delta.

APCI Stabilization Corona Discharge Delta
Set APCI stabilization corona discharge delta.

Mass dead volume (mL)
Set the volume between mass split and mass source.

| Split | |
|--|------------------------------------|
| Make-up Pump Flow Rate (mL/min) Set make-up pump flow rate value. | <input type="text" value="0.5"/> |
| Dilution Pump Flow Rate (mL/min) Set dilution pump flow rate value. | <input type="text" value="0.1"/> |
| Split rotation period (ms) Set split rotation period. | <input type="text" value="1,500"/> |
| System to Mass split dead volume (mL) Set the volume between system outlet and mass split inlet. | <input type="text" value="0"/> |
| Mass split to system dead volume (mL) Set the volume between mass split outlet and system inlet. | <input type="text" value="0"/> |

➤ [Injection Pump](#)

The Injection Pump section displays the maximum flow rate (mL/min) and maximum pressure (bar), as well as the system-to-injection pump volume (mL) and injection pump-to-system volume (mL). These values are preconfigured with factory settings. Only Admin users can edit them. Although they can be adjusted (for example, to set lower operating limits).

Note: Changing these factory-set values is not recommended.

| Injection Pump | |
|--|----------------------------------|
| Maximum Flow Rate (mL/min) Set maximum flow rate. | <input type="text" value="250"/> |
| Maximum Pressure (bar) Set maximum pressure. | <input type="text" value="125"/> |
| System to Injection pump volume (mL) Set the volume between system outlet and injection pump inlet | <input type="text" value="0"/> |
| Injection pump to system volume (mL) Set the volume between injection pump outlet to system inlet | <input type="text" value="0"/> |

➤ [Autosampler](#)

The Auto-Sampler section displays various parameters. Admin users can adjust volumes (dead volume, needle volume, syringe volume), flow rates (purge, injection), peristaltic pump speed (100 corresponds to 40 mL/min), rinsing ratio, and select the rack type. The fine positioning mode indicator shows if this option is enabled.

▼ Auto-Sampler

Auto-sampler dead volume (mL)
Set the volume between auto sampler needle and Puriflash loop.

Needle Volume (mL)
Set needle volume.

Purge Flow Rate (mL/min)
Set purge flow rate.

Injection Flow Rate (mL/min)
Set injection flow rate.

Peristaltic Pump Speed
Set peristaltic pump speed value.

Syringe Volume (mL)
Set syringe volume.

Rinsing Ratio
Set rinsing cycles for working volume of method. (needle + tubing + loop volumes)

Rack
Select rack configuration reference.

Fine Positioning Mode
Turn on or off fine positioning mode.

➤ [RFID](#)

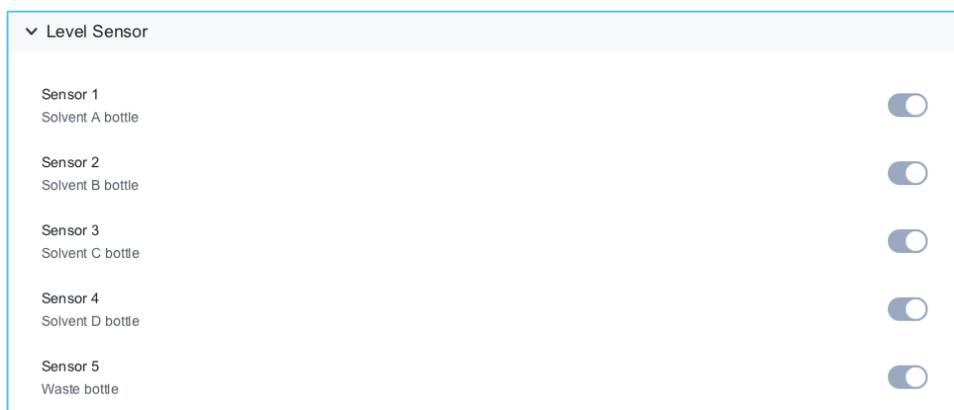
The RFID section shows all installed RFID sensors in the system. Each sensor corresponds to a specific location (rack, dry load, column positions).

▼ RFID

| | |
|-------------------|-------------------------------------|
| Sensor 3 RACK1 | <input checked="" type="checkbox"/> |
| Sensor 2 RACK2 | <input checked="" type="checkbox"/> |
| Sensor 1 RACK3 | <input checked="" type="checkbox"/> |
| Sensor 4 C1 | <input checked="" type="checkbox"/> |
| Sensor 5 D1 | <input checked="" type="checkbox"/> |
| Sensor 6 D2 | <input checked="" type="checkbox"/> |
| Sensor 7 C2 | <input checked="" type="checkbox"/> |
| Sensor 8 C3 | <input checked="" type="checkbox"/> |

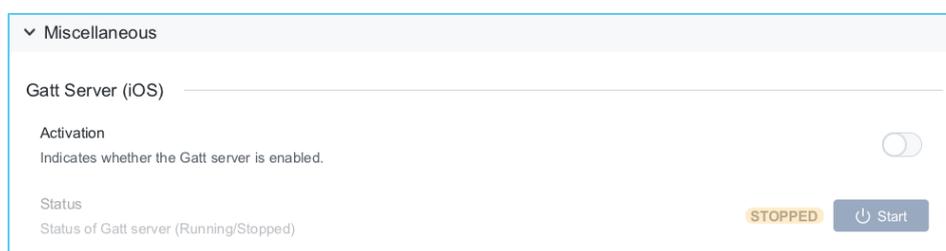
➤ [Level sensors](#)

The Level Sensor section shows all installed level sensors in the system. Each sensor corresponds to a specific bottle location (solvents A to D and waste).



➤ Miscellaneous

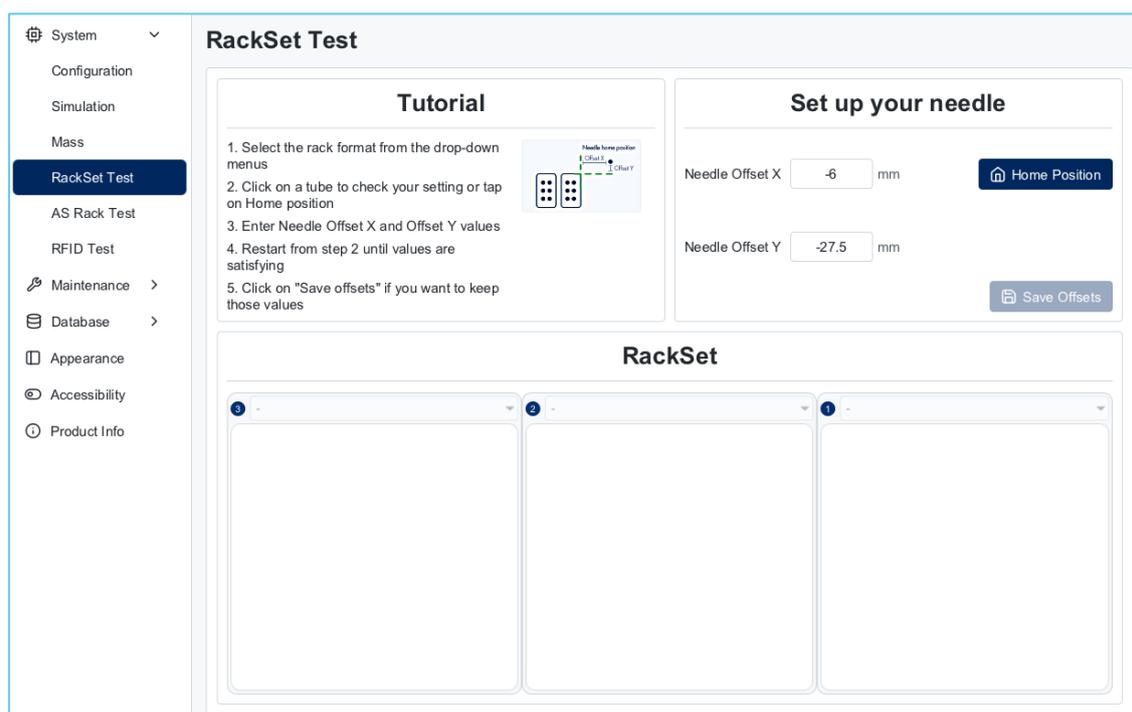
The Gatt server must be activated for iOS users (iPhone and iPad) wishing to use the “TLC to-Flash & Prep” mobile application and communicate with the puriFlash® system.



iii. Rackset test

On this screen the X and Y offsets of the needle can be modified if not properly set. Hereafter is the procedure to follow:

1. Select the rack references present in the collector.
2. Click on a tube to move the needle to that tube.
3. If the setting is not fine, the needle position can be adjusted. On the top left corner of the screen, a diagram explains how to modify X and Y offsets. On the top right corner, the field(s) where the offsets can be modified.



iv. Autosampler rackset test

On this screen, the tube depth of the autosampler racks can be modified, if not properly set. First, select the reference of the rack present with the dropdown menu. Click on a tube to move the needle to that tube. The “Down” function is used to check the correct value of needle descent in the tube as function of the tube depth.

v. RFID test

This section allows the user to check (or write) an RFID tag on an item. RFID must be enabled for this page to appear. Refer to [5.3.b.i.Modules selection](#) to enable/disable RFID.

Read a tag

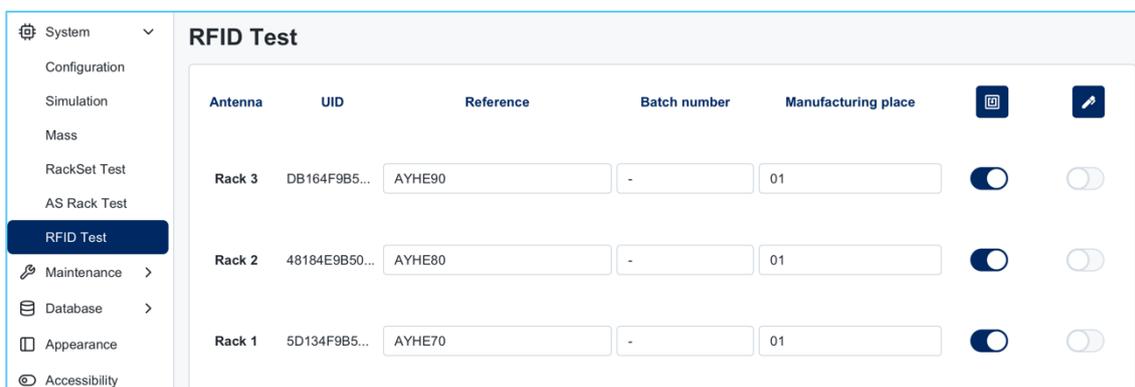
Write a tag

| Antenna | UID | Reference | Batch number | Manufacturing place | Read tag | Write tag |
|---------|-----|-----------|--------------|---------------------|--------------------------|--------------------------|
| Rack 3 | - | Reference | Batch number | Manufacturing place | <input type="checkbox"/> | <input type="checkbox"/> |
| Rack 2 | - | Reference | Batch number | Manufacturing place | <input type="checkbox"/> | <input type="checkbox"/> |
| Rack 1 | - | Reference | Batch number | Manufacturing place | <input type="checkbox"/> | <input type="checkbox"/> |
| C1 | - | Reference | Batch number | Manufacturing place | <input type="checkbox"/> | <input type="checkbox"/> |

To read tags, activate the corresponding toggle switches. Then, click on the read tag icon.

When the reading is successful this type of message is displayed.

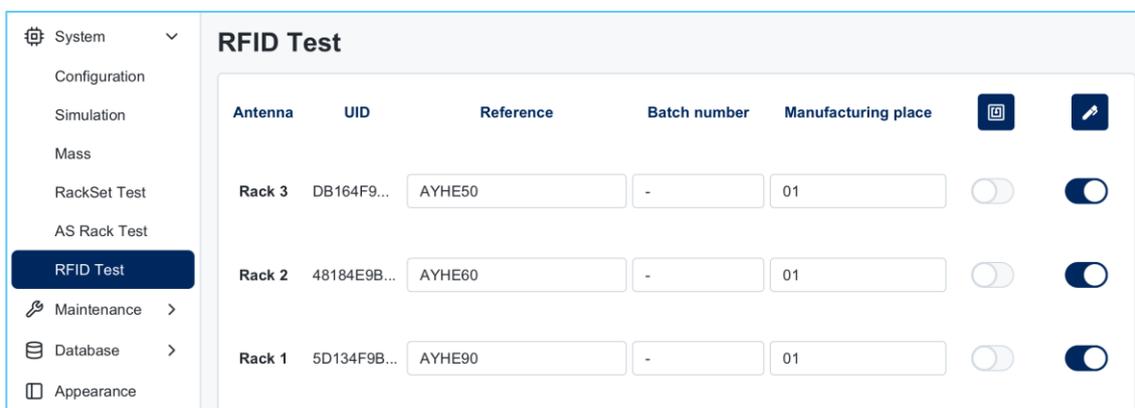
Then, the fields are automatically populated with the read data.



In case of reading malfunction (at least one antenna could not be read properly), an error message will be displayed.



To write tags, activate the corresponding toggle switches. Fill in the fields UID, Reference, Batch Number. Then, to save the new parameters, press on the write tag icon.



Similarly to the reading, a message will be displayed to inform if the writing has succeeded or not.



vi. *puriFlash® MS*

To start or stop the *puriFlash® MS* turbopump, click on “Pump down” or “Vent”. When the turbo pump starts, it takes about 30 min to reach the right vacuum to operate the CMS.

The tune of the system must be done with the Mass Express software from Advion®. Click “Open” to load and overwrite the current file.

vii. Maintenance

The Maintenance section provides access to system service features. Several actions can be performed from there: view the Factory Sheet for compliance reports, export system logs for diagnostics, monitor UV detector lamp usage time and control lamps (on/off), and view firmware version information.

➤ Factory Sheet

The Factory Sheet section displays the system compliance report, containing factory test results and calibration data for quality assurance verification. Display settings can be modified (show all/whole page, zoom in/out, page rotation) In addition, search bar is available in the top right corner.

| Temp. set # Number: | PF-5.250-0204-01 |
|---|------------------------------|
| plump flow rate: | 1 ml/min (typ: 2000 ml/min) |
| plump flow, operational flow rate: | 250 ml/min |
| Control flow rate - original parameter specification: | 20 ml/min (typ: 2000 ml/min) |
| Control flow rate - original parameter specification: | 250 bar |

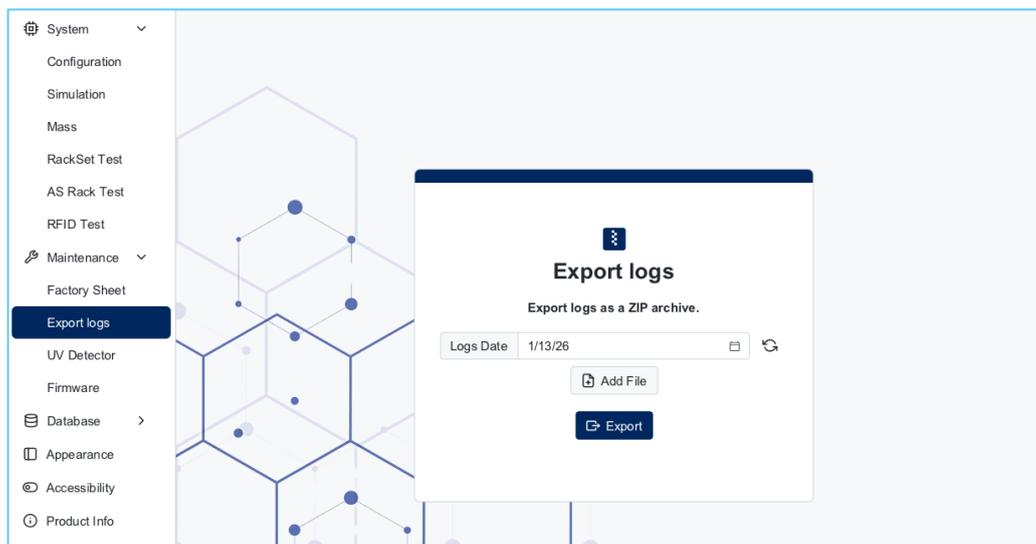
| Linearity & Accuracy | Flow rate | Duration | Total Volume | Weighted Mass | Calculated Volume | Result | Specification |
|----------------------|------------|----------|--------------|---------------|-------------------|--------|---------------|
| Pressure: 400.0 bar | 20 ml/min | 2 min | 40 ml | 40.0 g | 39.9 g | 99.7% | < 99.9% |
| | 100 ml/min | 2 min | 200 ml | 200.0 g | 199.7 g | 99.8% | < 99.9% |
| | 200 ml/min | 2 min | 400 ml | 400.0 g | 399.7 g | 99.9% | < 99.9% |
| | 250 ml/min | 2 min | 500 ml | 500.0 g | 499.7 g | 99.9% | < 99.9% |

| Measured Flow Rate - ml | 10.0 | 116.7 | 633.0 | 700.0 |
|-------------------------|-----------|--------|--------|--------|
| Flow rate - ml | 100.0 | 1167.0 | 6330.0 | 7000.0 |
| Flow rate linearity | 0.9999224 | | | |

| Flow rate | Pressure | Flow rate linearity |
|--------------|-----------|---------------------|
| 10.0 ml/min | 10.0 bar | 99.9% |
| 116.7 ml/min | 116.7 bar | 99.9% |

➤ [Export logs](#)

System logs record all activity and events within ClearPeak and are essential for diagnosing any issue or malfunction. This section allows the user to select and export those logs as a compressed ZIP archive to an external storage device.

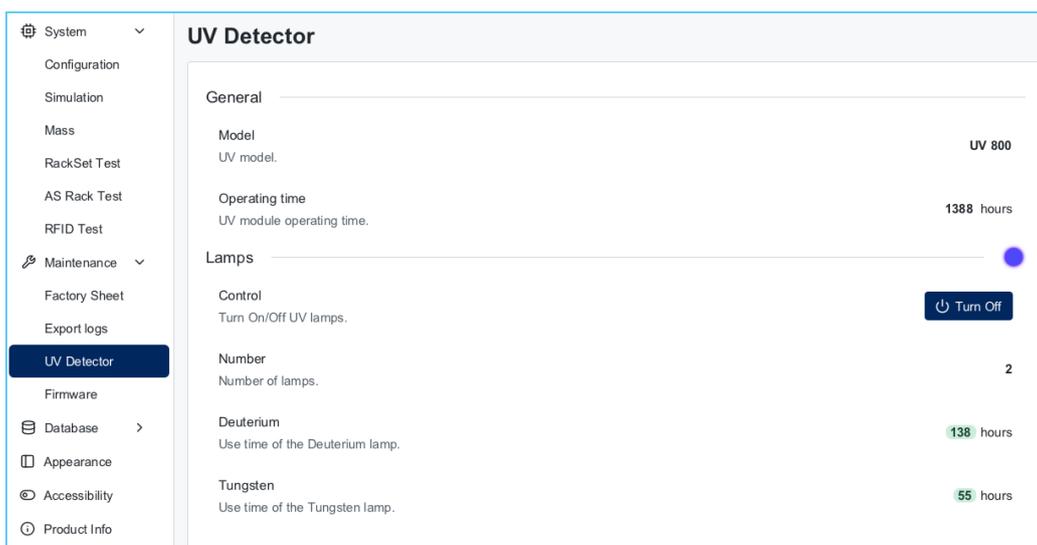


By default, the date picker is set to the current day. Adjust it to select the time period to be exported. If the issue is related to a specific method or run, add the relevant files (e.g., method files, data) using "Add File" button. Each entry will appear in the list, allowing the user to review what will be exported before proceeding.

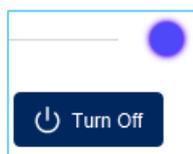
Once satisfied with the selection, connect a USB drive or any other external storage device and click "Export". ClearPeak will transfer all listed files to the connected device and save them as a compressed ZIP archive named "ClearPeak". A notification will confirm when the export is complete.

➤ [UV Detector](#)

The UV Detector section shows all statuses and control options for the UV lamps. The detector model and total usage time, control lamp power (on/off), and monitor usage time for each lamp type (Deuterium and Tungsten) can be consulted.



The lamps can be turned on/off from this section by clicking on the corresponding button. The blue spot on the right indicates that the lamp is on.



Lamp on



Lamp off

The lamp usage time is displayed at the bottom-right corner. The color highlight indicates the status versus the recommendation of change. The following color code applies.

Green if usage

< 2 000 h

| | |
|--|-----------|
| Deuterium Use time of the Deuterium lamp. | 138 hours |
| Tungsten Use time of the Tungsten lamp. | 55 hours |

Orange if usage is

between 2 000 and

5 000 h

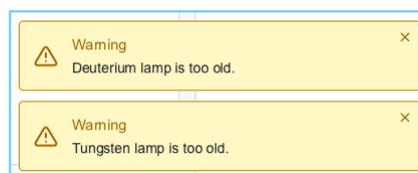
| | |
|--|------------|
| Deuterium Use time of the Deuterium lamp. | 2805 hours |
| Tungsten Use time of the Tungsten lamp. | 2783 hours |

Red if usage

> 5 000 h

| | |
|--|------------|
| Deuterium Use time of the Deuterium lamp. | 8361 hours |
| Tungsten Use time of the Tungsten lamp. | 8338 hours |

*A pop-up message
will also be
displayed.*



➤ [Firmware](#)

The Firmware section displays the current firmware versions of all connected modules.

| Firmware | |
|---|--------------------------|
| Pump Firmware version of Pump module. | v. 1.17 |
| UV Detector Firmware version of UV Detector module. | v. 1.30 |
| Collector Firmware version of Collector module. | v. pFT/FC/SpELSD_22_1.12 |
| ELSD Detector Firmware version of ELSD Detector module. | v. A.1.2 |
| ELSD Split Firmware version of ELSD Split module. | v. pFT/FC/SpELSD_22_1.12 |
| Mass Detector Firmware version of Mass Detector module. | v. VERSION191001A-V3 |
| Mass Split Firmware version of Mass Split module. | v. MASS1.09 |
| Auto Sampler Firmware version of Auto Sampler module. | v. 2.0.6 |
| Valve Firmware version of Valve module. | v. 5250///_23_1.17 |
| Level Sensor Firmware version of Level Sensor module. | v. pFT/LvlSensor_18_1.00 |
| LED Firmware version of LED module. | v. pFT/LvlSensor_18_1.00 |

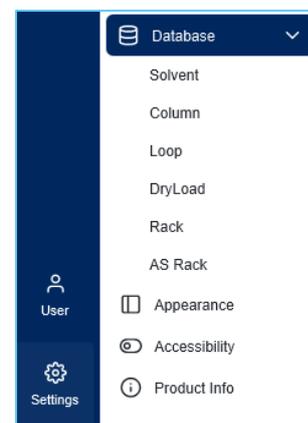
viii. Databases

➤ All databases

In the settings panel and with a standard system, five databases are available:

- Solvent.
- Column.
- Dry load.
- Rack.
- Loop.

For systems equipped with an autosampler, a sixth database named “AS Rack” is displayed.



This section contains all the databases of consumables and accessories that can be used with the system. These database screens are divided into 3 parts:

- The upper part is dedicated to searching for an item in the current database.
- In the top right-hand corner, default or custom databases can be selected.
- The main part shows the specifications of the items.

| Reference | Tube 1 offset X | Tube 1 offset Y | Tube offset X | Tube offset Y | Nb tube X | Nb tube Y | Tube volume |
|-----------------|-----------------|-----------------|---------------|---------------|-----------|-----------|-------------|
| RACK 25 x 150 | 20 | 29.25 | 40 | 28.57 | 2 | 8 | 60 |
| RACK 29.5 x 200 | 20 | 29.25 | 40 | 33.33 | 2 | 7 | 110 |
| RACK 28 x 150 | 20 | 29.25 | 40 | 33.33 | 2 | 7 | 75 |
| RACK 21 x 150 | 16 | 29.25 | 24 | 25 | 3 | 9 | 35 |
| RACK 18 x 150 | 10.73 | 29.25 | 19.35 | 20 | 4 | 11 | 25 |
| RACK 18 x 180 | 10.73 | 29.25 | 19.35 | 20 | 4 | 11 | 32 |
| RACK 16 x 150 | 10.73 | 29.25 | 19.35 | 20 | 4 | 11 | 22 |
| RACK 13 x 100 | 10.73 | 29.25 | 19.35 | 15.39 | 4 | 14 | 9 |
| RACK 13 x 73 | 10.73 | 29.25 | 19.35 | 15.39 | 4 | 14 | 6 |
| Bottle 250 ml | 40 | 57.25 | 0 | 72 | 1 | 3 | 250 |
| FUNNEL RACK | 39.75 | 31.25 | 0 | 49 | 1 | 5 | 100,000 |

Note: The items listed in the default databases cannot be edited. To edit properties, a custom item must be created. This operation is possible in the 5 databases.

➤ [Creation of custom items from existing articles](#)

In the following example, a custom column will be created from an existing article. However, this procedure can be applied to any database available:

- Select the item in the default database.

| P/N | Format | Hardware | Sorbent | Manufacturer | Brand | Type | Particle size (µm) | Intern. |
|----------------|----------------|----------|---------------|--------------|-----------|--------|--------------------|---------|
| IR-50C18-F0080 | F0080 - 112 g | Flash | Silica C18 | Interchim | puriFlash | C18-IR | 50 | |
| IR-50C18-F0120 | F0120 - 170 g | Flash | Silica C18 | Interchim | puriFlash | C18-IR | 50 | |
| IR-50C18-F0220 | F0220 - 270 g | Flash | Silica C18 | Interchim | puriFlash | C18-IR | 50 | |
| IR-50C18-F0330 | F0330 - 465 g | Flash | Silica C18 | Interchim | puriFlash | C18-IR | 50 | |
| IR-50C18-F0800 | F0800 - 1155 g | Flash | Silica C18 | Interchim | puriFlash | C18-IR | 50 | |
| IR-50C18-F1600 | F1600 - 2310 g | Flash | Silica C18 | Interchim | puriFlash | C18-IR | 50 | |
| IR-50SI-F0004 | F0004 - 4 g | Flash | Virgin Silica | Interchim | puriFlash | SI-IR | 50 | |
| IR-50SI-F0012 | F0012 - 13 g | Flash | Virgin Silica | Interchim | puriFlash | SI-IR | 50 | |
| IR-50SI-F0025 | F0025 - 25 g | Flash | Virgin Silica | Interchim | puriFlash | SI-IR | 50 | |
| IR-50SI-F0040 | F0040 - 41 g | Flash | Virgin Silica | Interchim | puriFlash | SI-IR | 50 | |
| IR-50SI-F0080 | F0080 - 81 g | Flash | Virgin Silica | Interchim | puriFlash | SI-IR | 50 | |
| IR-50SI-F0120 | F0120 - 120 g | Flash | Virgin Silica | Interchim | puriFlash | SI-IR | 50 | |

- Then click on “Custom” on the top-right corner. The properties will be automatically imported and can now be edited.

Columns Default Custom

Name: Format: Hardware:

Sorbent: Manufacturer: Brand:

Type: Particle Size: Internal Diameter:

Bed Length: Weight: Flow Rate:

Max Pressure: V0: Cutting:

| P/N | Format | Hardware | Sorbent | Manufacturer | Brand | Type | Particle size (µm) | Intern: |
|-----|--------|----------|---------|--------------|-------|------|--------------------|---------|
| | | | | | | | | |

- Click on "+ Add" to include it to the custom database.
- Click on "X Clear All" to erase all the fields.
- Click on "Delete" to remove the item from the custom database.

Columns Default Custom

Name: Format: Hardware:

Sorbent: Manufacturer: Brand:

Type: Particle Size: Internal Diameter:

Bed Length: Weight: Flow Rate:

Max Pressure: V0: Cutting:

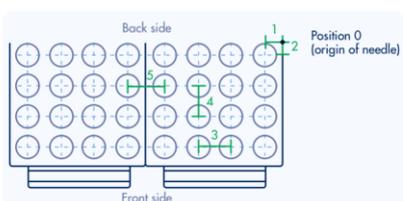
| P/N | Format | Hardware | Sorbent | Manufacturer | Brand | Type | Particle size (µm) | Intern: |
|--------|--------------|----------|---------------|--------------|-----------|-------|--------------------|---------|
| Custom | F0040 - 41 g | Flash | Virgin Silica | Interchim | puriFlash | SI-IR | 50 | |

➤ Creation of custom items from scratch

In the following example, a custom rack will be created. However, this procedure can be applied to any database available:

- Click on the database desired, but do not select an article. Directly click on the "Custom" button on the top-right corner.

Racks Default Custom



1. Tube 1 Offset X
2. Tube 1 Offset Y
3. Tube Offset X
4. Tube Offset Y
5. Offset

Name: Tube 1 Offset X: Tube 1 Offset Y:

Tube Offset X: Tube Offset Y: Tube Volume:

Nb Tube X: Nb Tube Y:

| Reference | Tube 1 offset X | Tube 1 offset Y | Tube offset X | Tube offset Y | Nb tube X | Nb tube Y | Tube volume |
|-----------|-----------------|-----------------|---------------|---------------|-----------|-----------|-------------|
| | | | | | | | |

- Populate all the fields and click “+ Add”.

| Reference | Tube 1 offset X | Tube 1 offset Y | Tube offset X | Tube offset Y | Nb tube X | Nb tube Y | Tube volume |
|-----------|-----------------|-----------------|---------------|---------------|-----------|-----------|-------------|
| Custom | 10 | 29 | 19 | 15 | 4 | 14 | 9 |

➤ [Rack auto sampler](#)

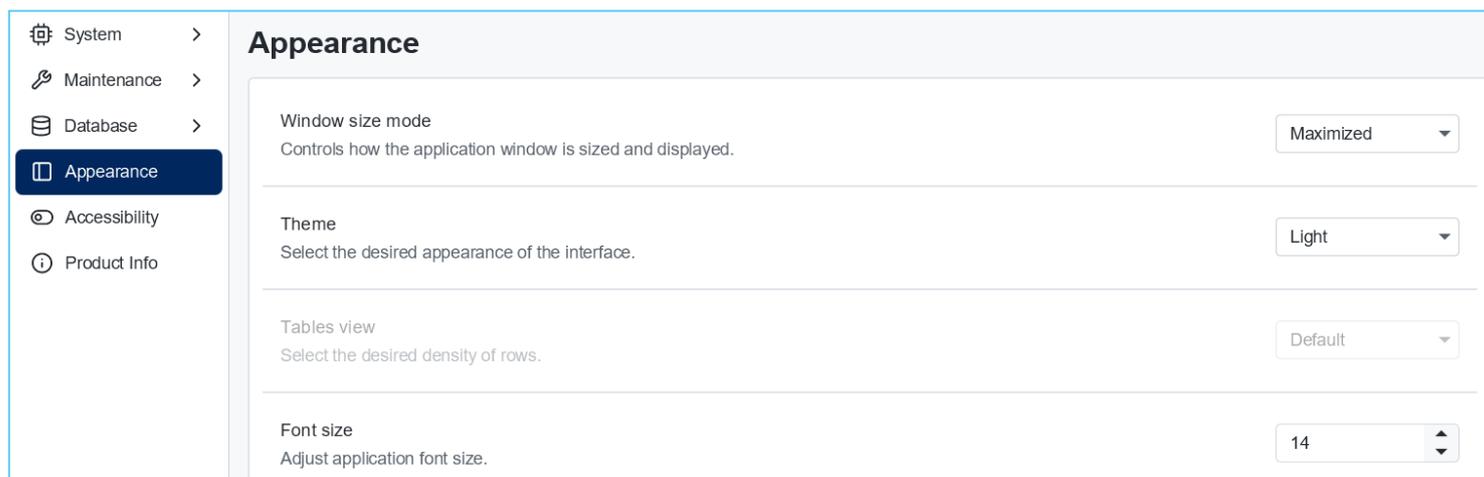
To visualize the autosampler racks available by default, go to the settings, click on “Databases”, and then on “AS Rack”. To create a new rack or modify an existing one, refer to the procedures described above. The table contains several columns which show the parameters of the racks:

- Name.
- Different offsets and spacing explained underneath (mm).
- Tube depth (mm).
- Number of racks in the rack set.
- Number of tubes in the width of the rack (Nb tubes X).
- Number of tubes in the length of the rack (Nb tubes Y).
- Maximum volume of each tube (mL).

| Reference | Tube 1 offset X | Tube 1 offset Y | Tube offset X | Tube offset Y | Tube Depth | Tube Depth Offset | Nb tube X | Nb tube Y | Tube volume |
|-----------|-----------------|-----------------|---------------|---------------|------------|-------------------|-----------|-----------|-------------|
| AS Rack | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

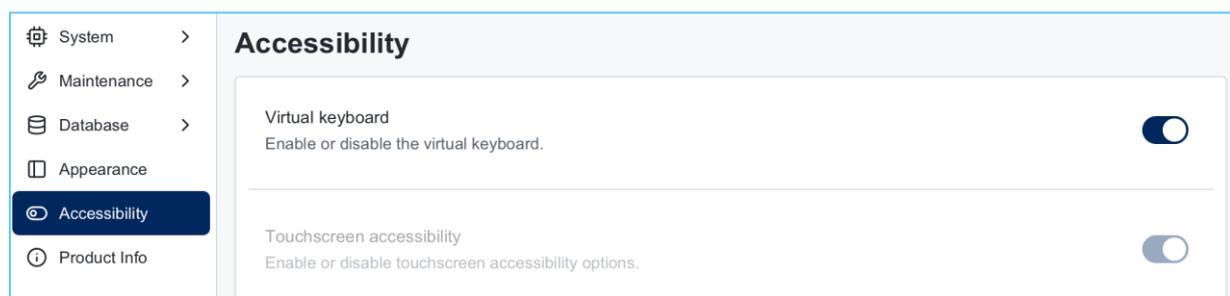
ix. Appearance

The Appearance section lets the user customize the interface display. Window size mode (full screen, maximized, custom), theme (Auto, Light, or Dark) and font size (from 9 to 18 points) can be selected or adjusted.



x. Accessibility

The Accessibility section allows the user to manage input options. The user can enable or disable the virtual keyboard, which is particularly useful when using a physical keyboard.



xi. Product info

The Product Information section displays the software version and license details including status, user information, and expiration date.

c. User panel

The Profile section shows user access levels and account management options.

i. Profile

From their profile page, any user can change their password or delete their account. Only Admin users can see the complete user list and manage other users' profiles.

Only Admin users can access the "Add User" button, which opens a dialog to create new accounts. In this dialog, enter a username, set a password (minimum 8 characters), confirm the password, and select a role (Basic user, User, or Admin). Click "Add" to create the new user account.

Add User ×

Username

Password

Confirm Password

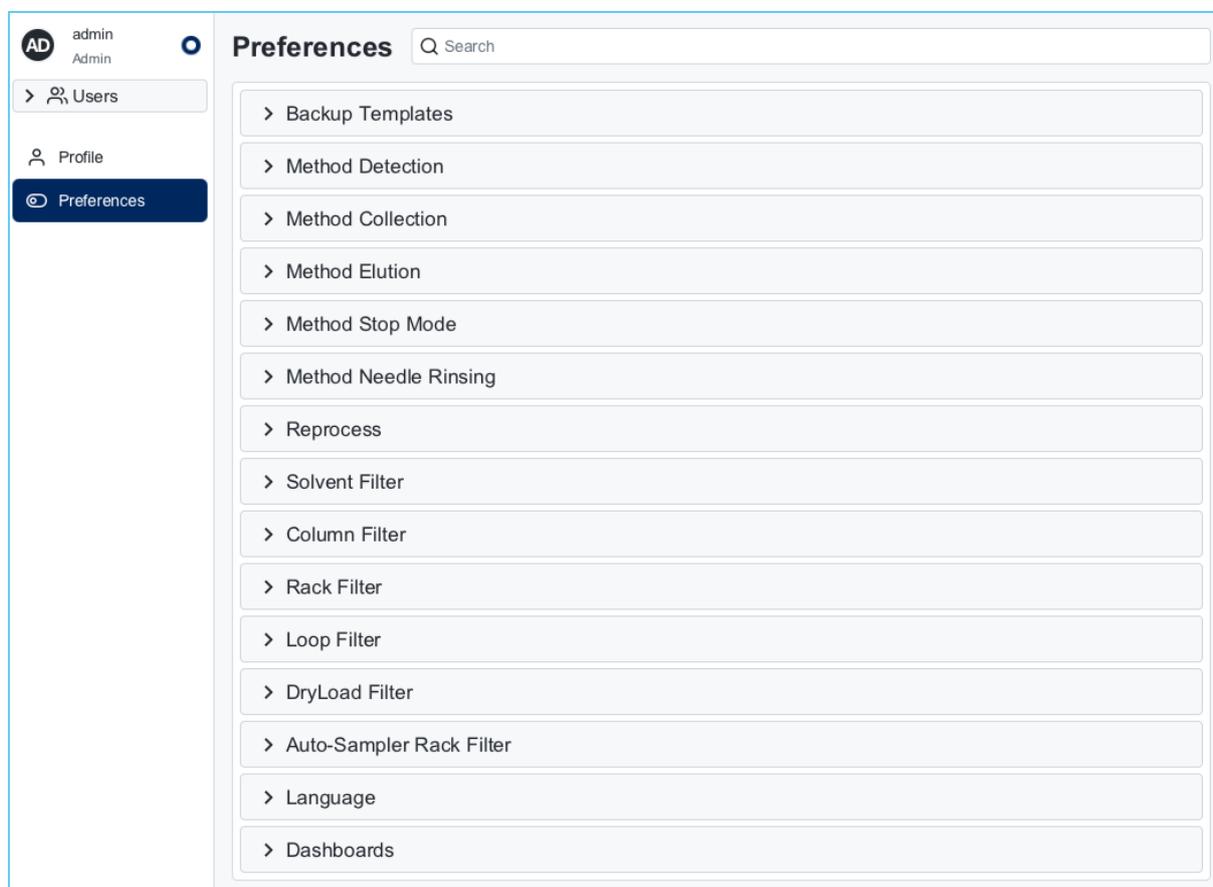
Role

Basic User
 User
 Admin

+ Add

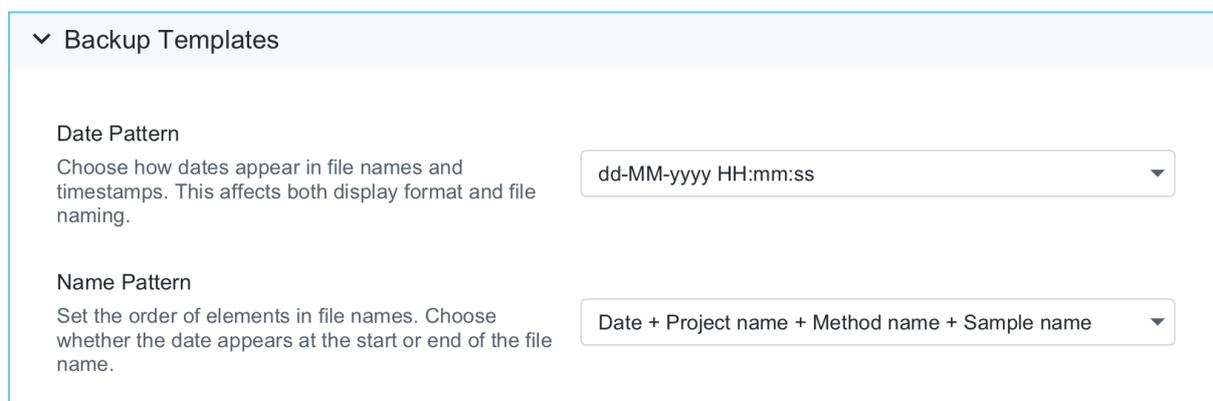
ii. Preferences

The Preferences section provides access to various methods and UI settings. Here the backup templates can be managed, configure method parameters (detection, collection, elution, stop mode, needle rinsing), set up reprocess options, and customize filters (solvent, column, rack, loop, dry load, auto-sampler racks). The interface language and dashboard preferences can be managed as well. Use the search bar at the top to quickly find specific settings.



➤ Backup templates

The Backup Templates section lets the user customize how files are named and displayed. Date format pattern for timestamps can be set, and the user can choose how file names are structured (combining date, project name, method name, and sample name).



➤ Method detection

The Method Detection section allows the user to customize signal processing parameters. Smoothing levels can be adjusted independently for UV, ELSD, and Mass signals. The filter represents the number of values considered to calculate an average

of the detector response. Additionally, the XIC mass range (\pm) for FIA spectrum analysis can be set and the ELSD purge duration for automatic cleaning after method completion can be configured. Local minimum sensitivity settings for UV and ELSD can also be adjusted to refine the detection of flat inflection points, which can improve peak detection for low-amplitude signals.

▼ Method Detection

| | |
|---|--|
| UV smoothing <small>Adjust smoothing level for UV signals.</small> | <input style="width: 60px;" type="text" value="1"/> |
| ELSD smoothing <small>Adjust smoothing level for ELSD signals.</small> | <input style="width: 60px;" type="text" value="10"/> |
| Mass smoothing <small>Adjust smoothing level for Mass signals.</small> | <input style="width: 60px;" type="text" value="10"/> |
| XIC delta +/- <small>Specify the mass range (\pm) for XIC creation when clicking FIA spectrum labels.</small> | <input style="width: 60px;" type="text" value="2"/> |
| ELSD purge <small>Enable/disable automatic ELSD purge after method completion. When enabled, set the purge duration in minutes.</small> | <input style="width: 60px;" type="text" value="0"/> |
| UV Local minimum sensitivity <small>A lower value improves the detection of flat inflection points. For low-amplitude peaks, try values below 1. (default between 1 or 2)</small> | <input style="width: 60px;" type="text" value="2"/> |
| ELSD Local minimum sensitivity <small>A lower value improves the detection of flat inflection points. For low-amplitude peaks, try values below 1. (default between 1 or 2)</small> | <input style="width: 60px;" type="text" value="2"/> |

➤ Method collection

This section allows the user to set the collection behavior, especially how the collection tubes will be filled when the signal is above or below the threshold. For each condition (above or below), two options are available: “Given volume” (max volume per tube set by method) or “Full tube” (default max volume of the tube).

▼ Method Collection

| | |
|--|--|
| Collection All Mode (Above Threshold) <small>Select your setting for 'All' collection mode when above threshold.</small> | <input style="width: 120px;" type="text" value="Peak volume"/> |
| Collection All Mode (Below Threshold) <small>Select your setting for 'All' collection mode when below threshold.</small> | <input style="width: 120px;" type="text" value="Full tube"/> |
| Collection Starting Tube Mode <small>Define how the system assigns the first collection tube for each run. Options include continuing from last position or starting fresh with each rack. Affects tube numbering and rack organization.</small> | <input style="width: 120px;" type="text" value="Next tube"/> |
| Silent mode <small>Enable continuous operation between methods when using 'Refresh All Racks' starting tube mode. When enabled, the system will proceed automatically without pausing between sample queue methods.</small> | <input type="checkbox"/> |

Several default values can be set for the “Collection Starting Tube Mode”. This parameter will dictate the behavior of the fraction collection between two methods:

- “Refresh all racks” will start every new method with new racks.

- “Next rack” will start a new method with the next empty rack.
- “Next row” will start a new method with the next empty row of the current rack.
- “Next tube” will start a new method skipping a tube.

The “Silent mode” can be enabled only if “Refresh all racks” is selected. This deactivates messages asking to refresh the rack set between methods (for the sample queue only). This feature is implemented to allow the use of funnel racks.

➤ [Method elution](#)

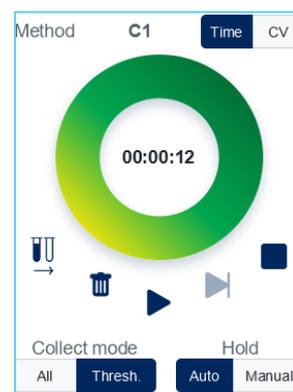
“IIM” is the acronym for Intelligent Isocratic Mode. When activated, it changes the current gradient into an isocratic mode when detecting a peak (signal above threshold). When the peak falls again below the threshold, or when the timeout is reached (see Timeout definition below) the isocratic mode will automatically stop, and the gradient mode will be resumed. The total run time will be automatically increased by the time used for the isocratic portions.

▼ Method Elution

IIM Timeout (min)
Define a timeout to suspend the triggered iim function and go back to gradient.

10

The IIM mode can also be manually triggered by pressing the “Manual” button (below “Hold”) on the bottom right of the time ring.



➤ [Method stop mode](#)

The Method Stop Mode section controls how method runtime can be extended. Two modes are available:

- Pause Mode: when enabled, the system will pause at method completion and prompt it to either continue (adding the specified time) or stop.
- Intelligent Run Extension (IRE): when enabled, the method will automatically be extended by the specified duration. If there is no peak detected within this time frame, the method stops. On the other hand, if a peak is detected within this time frame, the peak is collected, and the runtime is automatically extended again for the same duration. At the end, the method stops, and the data is saved.

▼ Method Stop Mode

Pause mode Time Extension (min)
Define how much time is added when pause mode is triggered.

5

IRE Time Extension (min)
Define how much time is added when IRE mode is triggered.

10

➤ [Method needle rinsing](#)

A fraction collector needle rinsing can be performed at several stages of a method: in parallel with the equilibration (the end of both processes is synchronized) or at the end of the method. It can be enabled or disabled. The rinsing volume for each use can be set as shown below.

▼ Method Needle Rinsing

Equilibration needle rinsing
Enable automatic collector needle rinsing after equilibration phase. Helps prevent cross-contamination between samples and maintain system cleanliness.

Equilibration needle rinsing volume (mL)
Specify the solvent volume used for needle rinsing after equilibration. Higher volumes provide better cleaning but increase solvent consumption.

Method needle rinsing activation
Enable automatic collector needle rinsing after method completion. Ensures system cleanliness between analysis methods.

Method needle rinsing volume
Specify the solvent volume used for needle rinsing after method completion.

➤ [Reprocess](#)

In this section, the user can customize what will be shown/hidden in the printed report. The report can be automatically printed at the end of a method by enabling the “Auto Print” option.

▼ Reprocess

| | |
|---|-------------------------------------|
| RackSets Show or hide rack set configurations in the printed report. | <input checked="" type="checkbox"/> |
| Equilibration Table Show or hide equilibration steps in the printed report. | <input checked="" type="checkbox"/> |
| Elution Table Show or hide elution gradient steps in the printed report. | <input checked="" type="checkbox"/> |
| Fraction Collection Table Show or hide fraction collection steps in the printed report. | <input checked="" type="checkbox"/> |
| Detection Table Show or hide detection steps in the printed report. | <input checked="" type="checkbox"/> |
| Collection Table Show or hide sample collection details in the printed report. | <input checked="" type="checkbox"/> |
| UV Spectrum Show or hide UV spectrum in the printed report. | <input checked="" type="checkbox"/> |
| Mass Spectrum Show or hide Mass spectrum in the printed report. | <input checked="" type="checkbox"/> |
| FIA Spectrum Show or hide FIA spectrum in the printed report. | <input checked="" type="checkbox"/> |
| TLC Show or hide thin-layer chromatography results in the printed report. | <input checked="" type="checkbox"/> |
| Auto Print Automatically print the report when the method completes. | <input type="checkbox"/> |
| Landscape Print Print the report in landscape orientation instead of portrait. | <input type="checkbox"/> |

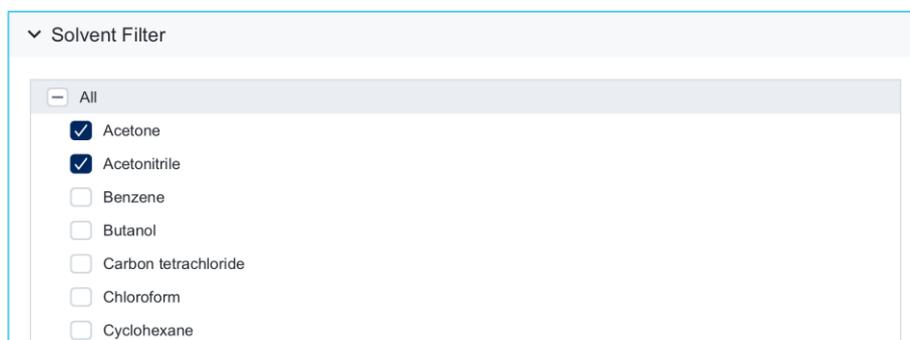
➤ [Solvent filter](#)

The purpose of this filter is to remove the unused solvents from the dropdown lists.

▼ Solvent Filter

- All
- Acetone
- Acetonitrile
- Benzene
- Butanol
- Carbon tetrachloride
- Chloroform
- Cyclohexane

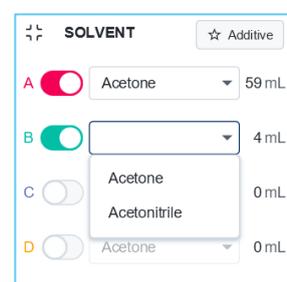
In the following example, only acetone and acetonitrile are selected.



When changes are made, an "EDITED" tag appears in the bottom part of the list. Click "Accept" to save the changes or "Reset" to revert to the previously saved preferences.

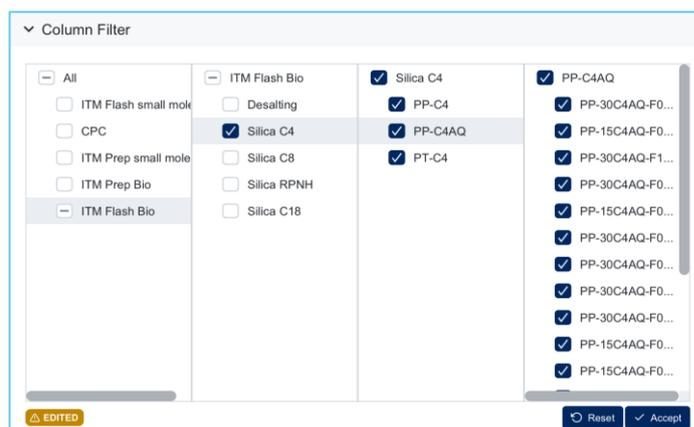
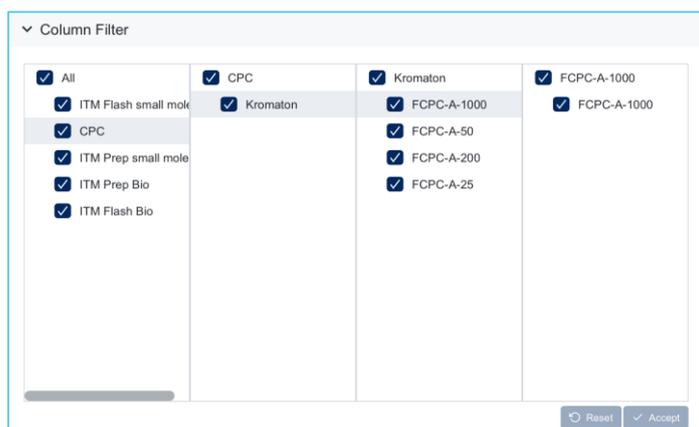


Then, only acetone and acetonitrile are still selectable from the dropdown list of the Elution tiles:

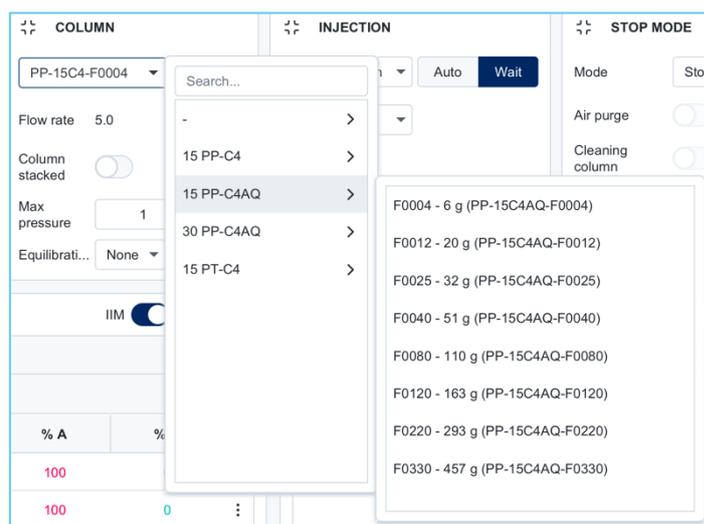


➤ Column filter

The default column database is large. Thus, for better comfort of use, it is highly recommended to tick only the commonly used references. The filter will remove the undesired references.

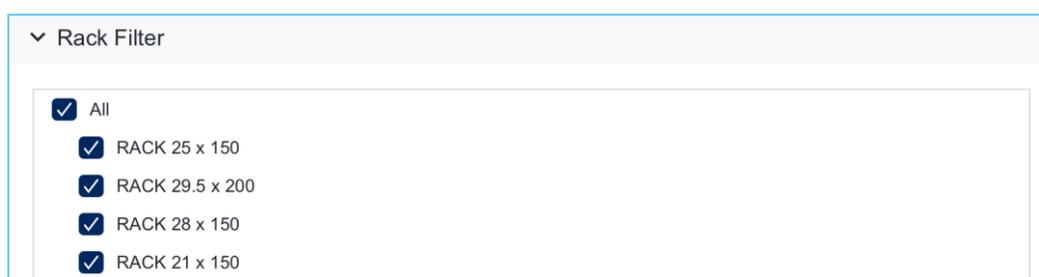


Once the filter applied, in the column tile, the column list will be simplified as shown.



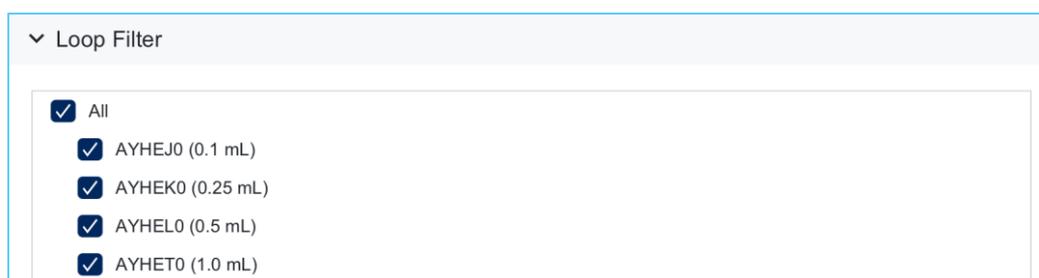
➤ [Rack filter](#)

Similarly to the previous filters, it is possible to filter the fraction collector racks references.



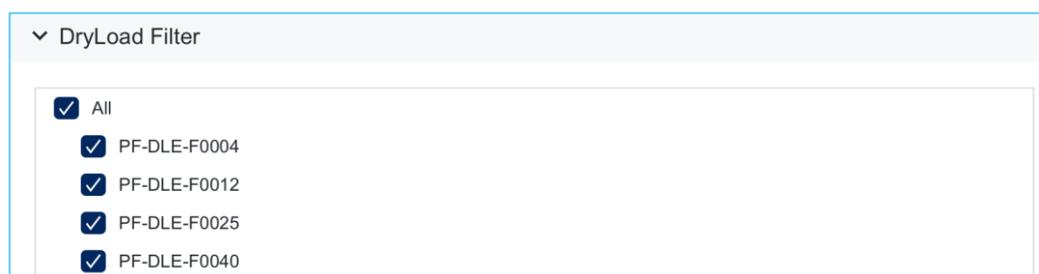
➤ [Loop filter](#)

Similarly to the previous filters, it is possible to filter the loop references.



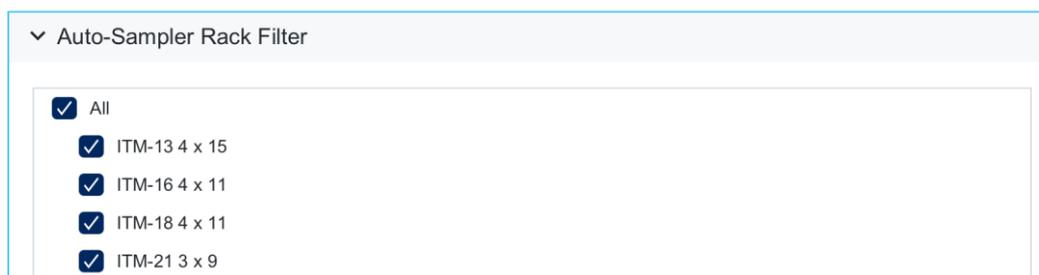
➤ [Dry load filter](#)

Similarly to the column filter, it is possible to filter the dry load references.



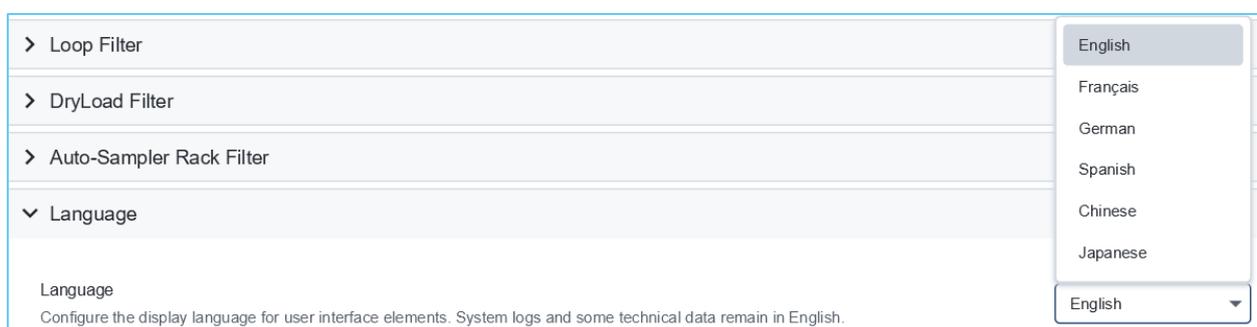
➤ Autosampler rack filter

Similarly to the previous filters, it is possible to filter the autosampler racks references.



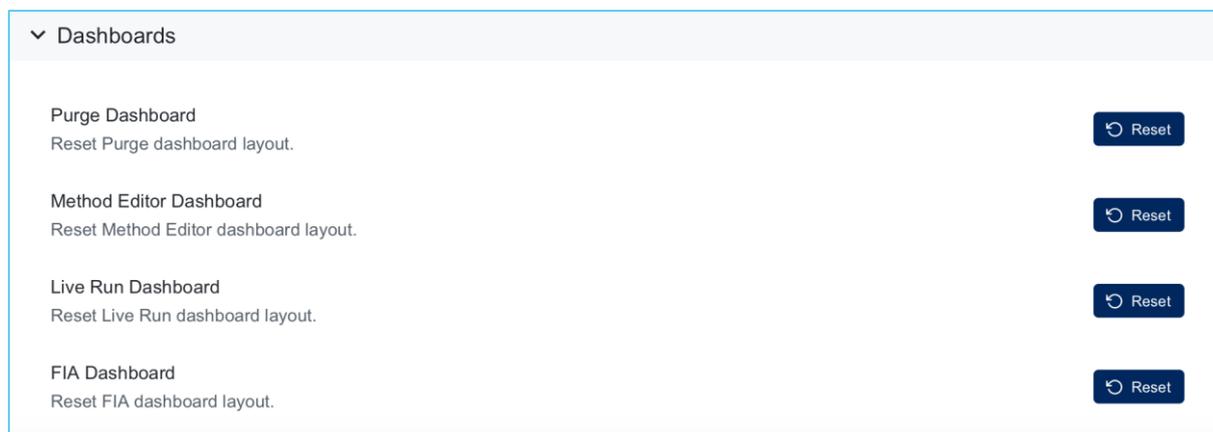
➤ Language

The language used for the interface can be selected in this section. Changes will be considered immediately.



➤ Dashboard

Dashboard layout can be reset to default in this section.



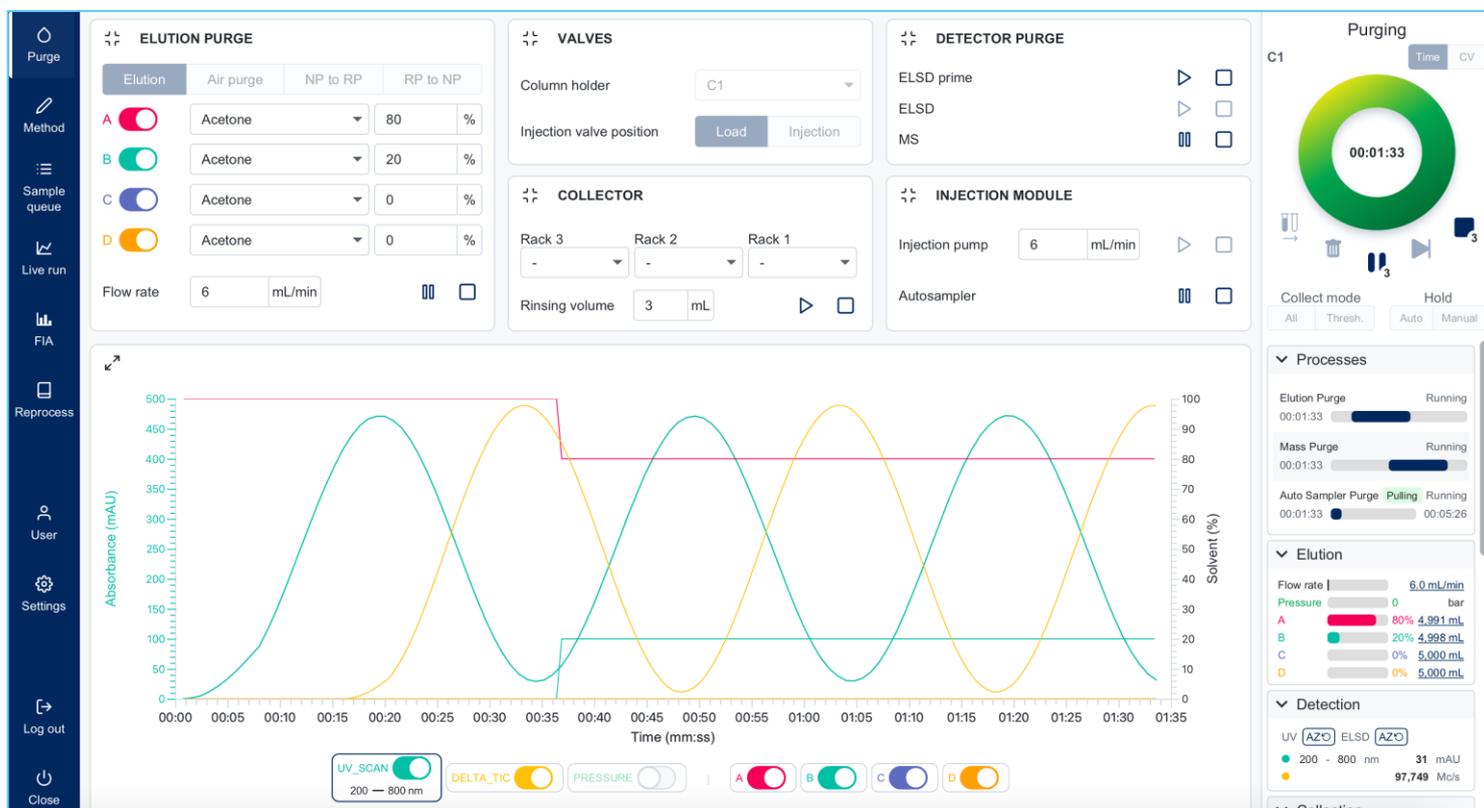
d. Purge panel

The purge panel is only available if there is no running method. Overall, according to the system configuration, there are several purges available: for the base system, elution, air, and for the optional modules, ELSD, ELSD prime, mass detector, autosampler and injection pump.

Each module has its own purge button. Its layout changes from “Run” to “Stop” when the purge is running. Purges can be parallelized. Purges in progress will be displayed in the list of current processes on the status panel. All the purges can be simultaneously stopped or paused by clicking on the corresponding status button on the top right corner of the screen.



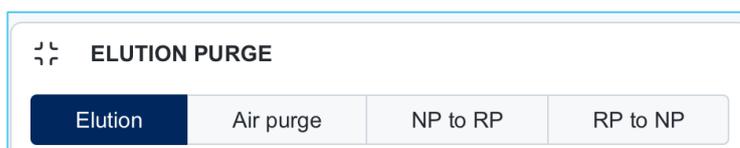
CAUTION: Before running an elution purge, the column must be removed from its holder prior flushing the corresponding line with solvent.



i. Elution purge

The different possibilities for the elution purge are detailed below.

➤ Elution



To run a purge of the elution pump channels (A, B, C, D), parameters like solvents percentages and flowrate can be set in the elution purge tile on the upper left.

➤ Air purge



If "Air purge" is selected, the system will be purged with air using the dedicated fifth valve and not with solvents. The flowrate management is equivalent to channels purging.

➤ Switch NP to RP or RP to NP purge



The switch "NP to RP" or "RP to NP" corresponds to the cleaning of the solvent line to switch from one type of eluent (Normal Phase or Reverse Phase) to another, in order to avoid any problems.

When switching between normal phase and reverse phase chromatography, the system must be thoroughly cleaned to prevent carryover and contamination. This cleaning process may involve flushing the system with solvents that effectively remove residues from the previous run.

For example, if switching from reverse phase (polar) to normal phase (nonpolar), a series of solvents will be necessary, starting with a polar solvent and gradually transitioning to nonpolar solvents.

By clicking on the “Play” button, the following parameter window will be displayed.

ii. Column holder and injection valve

Column holder lines, and the associated injection valve, can be purged as well thanks to a dropdown available in the upper middle tile.

The position of the injection valve can be switched between load and injection. If the system is running, it will pause the pump before switching to prevent sudden overpressure.

iii. Injection modules

The purpose of this tile is to purge the optional injection modules, namely the injection pump and the autosampler.

For the autosampler, the default value is 10 back-and-forth syringe movements. If needed, the process can be manually stopped at any time.

iv. Detector purge

A tile is dedicated to the purges of all available and configured detectors. “Run” and “Stop” buttons are available for each detector.

When a purge process is running, the advancement can be monitored thanks to a progress bar located in the tiles in the Status panel.

➤ ELSD_prime

ELSD is a destructive detection mode that requires deviating the flow at the minimum possible to reduce the amount of product consumed for detection. The split allows the user to adjust this quantity. To carry the sample to the ELSD, a make-up pump is necessary. Like any other pump, it must be primed.

➤ ELSD

Prior to using the ELSD, it is necessary to clean it by running a purge. During this step the ELSD signal is monitored (see below). By default, the flowrate is set to the maximum that the ELSD can accept (150 $\mu\text{L}/\text{min}$).

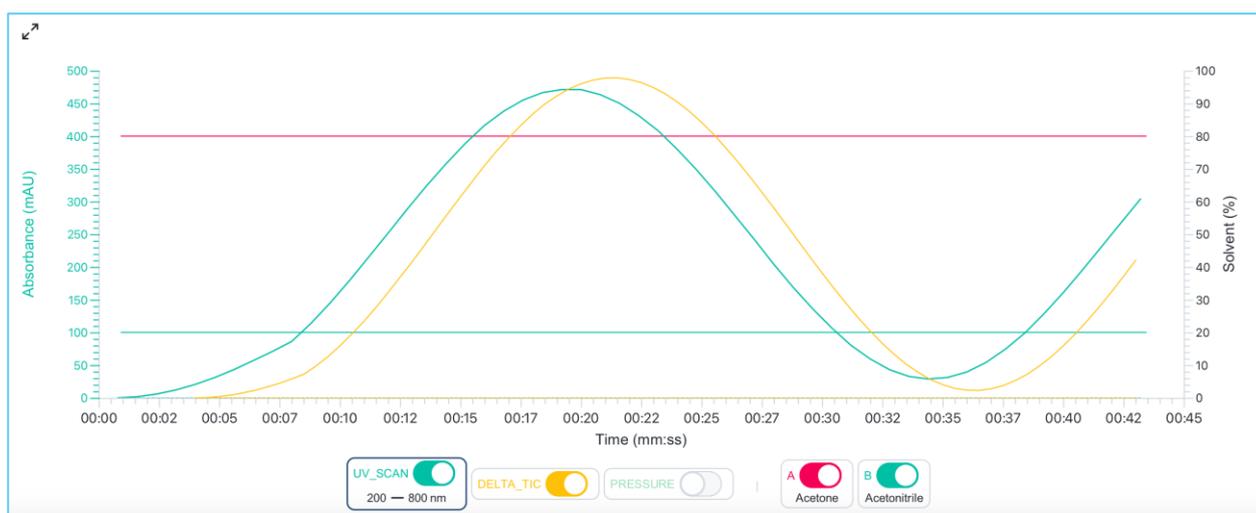
➤ Mass

With the use of the Interchim® MS splitter interface, the maximum purge flow rate of the mass detector is automatically set at the maximum possible according to the source type:

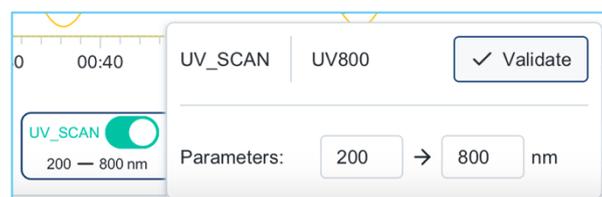
- 1 mL/min for ESI source (0.5 mL/min from the carrier pump and 0.5 mL/min from the dilution pump).
- 2 mL/min for APCI source (1 mL/min from the carrier pump and 1 mL/min from the dilution pump).

v. Purge live panel

The chart display lets the user monitor signals from all active detectors in real-time. Use the toggle switches to show or hide individual detector signals and solvent lines. Detection parameters can be adjusted for UV (scan range) and ELSD (temperature), while Mass detection uses Delta TIC and requires no parameters.



The range of the UV scan can be modified by clicking on the box.



e. Method panel

This screen is probably the most important one. This single page allows the user to create a complete purification method. On top of this screen is the upper menu bar on the right is the “TLC” button. TLC and Genius give access to automatic method developments and optimization based on TLC experiments. The other buttons are related to general method management (see following paragraphs and [5.3.f. Method tiles](#) for details).

i. New

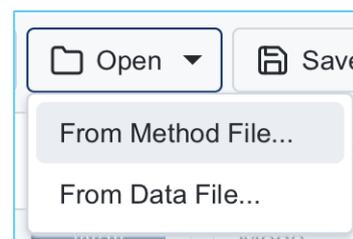
On software startup, after the user has logged in, the “Method” panel opens first. The default settings of the last saved “default” method are loaded.

Click on “New” to create a new method without pre-defined parameters. After entering the necessary parameters, this method can then be saved with its own identifiers or saved as a new default method (see section [5.3.e.iii. Save](#) for details).

ii. Open

Click the "Open" button and select whether to load a method from the Method folder (From Method File...) or from previously executed method (From Data File...).

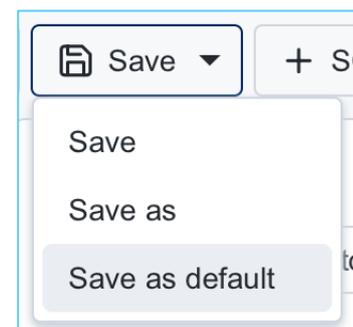
Note: the methods created in the former InterSoft X[®] software can be opened and will be automatically converted into ClearPeak™ methods.



iii. Save

Click the "Save" button to choose from three saving options:

- **Save:** saves the method using the pattern defined in preferences.
- **Save as:** saves the method to a custom location.
- **Save as default:** sets this method as the default template for new methods.



iv. +SQ

The “+SQ” button means “Add to Sample Queue”. Each method with its pane is unique, so a method can only be added once to a sample queue. On the other hand, in the sample queue screen, the user can modify the repeat cycles for this method (read section [3.5.4. Sample queue panel](#) for details).

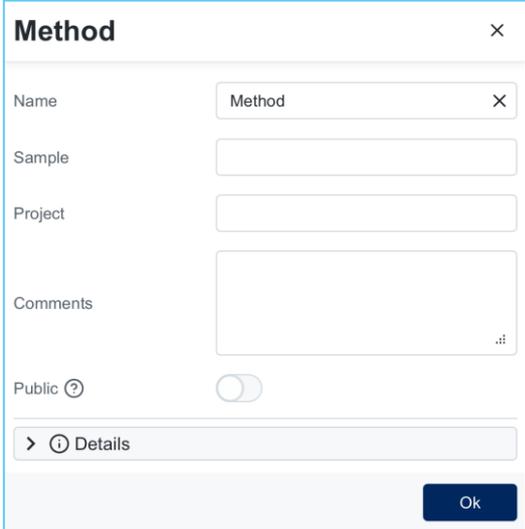
v. Method name / Sample name / Project name

Click on  to edit content.

The content of the “Method name” field and the “Sample name” field will be added to the filename. In the user’s settings screen the pattern of the file name can be modified.

If “Project Name” is specified, a subfolder will be created in each user method folder.

If none of those 3 fields are filled, the files are not saved in any subfolder but directly in the user folder. The file name will then only include the date and the time of the creation.



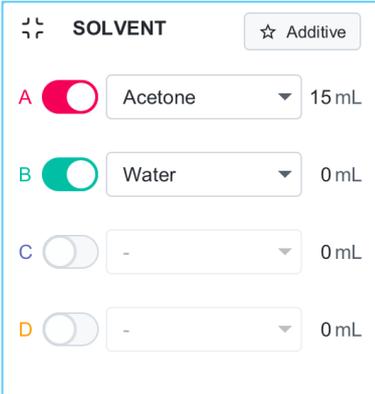
Note: the use of special characters in these fields (and in most software fields) must be minimized or avoided if possible (many of them are forbidden). But because of the number of special characters in different languages, the use of special characters can lead to an unknown issue. Never use “/” and “\”, prefer “_” to spaces, and try not to use characters with accents or mathematical symbols.

f. [Method tiles](#)

i. Solvent tile

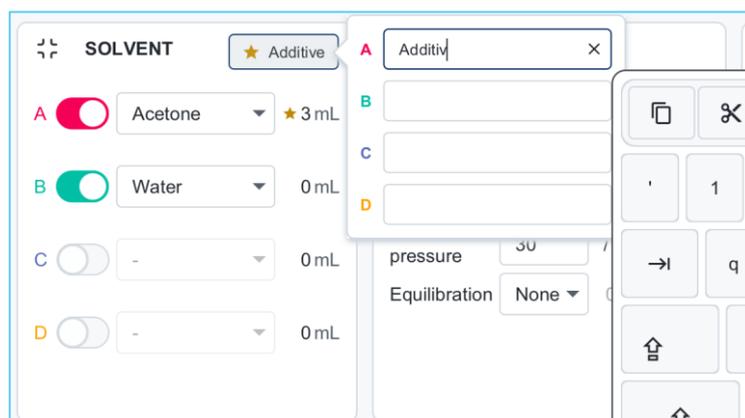
In this tile the user can enable from 1 to 4 channels of solvent and specify the solvent to be used for each way.

On the right of each solvent name is the estimated necessary volume for the equilibration and the purification method using the current elution parameters.



By clicking on “Additive”, a new tile appears over solvent and column tile.

For each solvent used, enter the name of its additive and activate it on the left-hand switch. On the solvent tile, for each channel using an additive, there is now a small star between the name of the solvent and its estimated required volume.



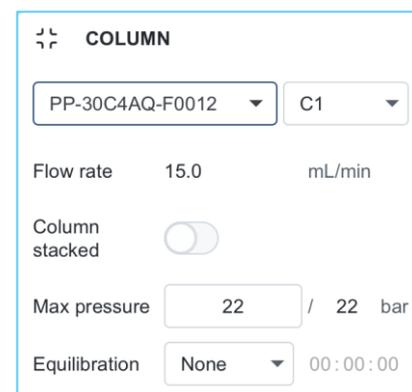
ii. Column tile

This tile sets the column reference, the number of the column holder if more than one is available, and the equilibration mode.

The number of column holders depends on the system configuration. Up to 3 columns holders are available depending on the system configuration.

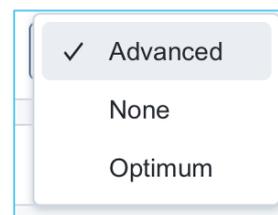
By selecting the column from the column database (see below), the software automatically loads the max pressure (safety max pressure of the selected column) and the flowrate (optimum flowrate of the selected column).

Note: the optimum flowrate cannot be modified here. It is displayed only to inform the user of the optimum flowrate for this column.

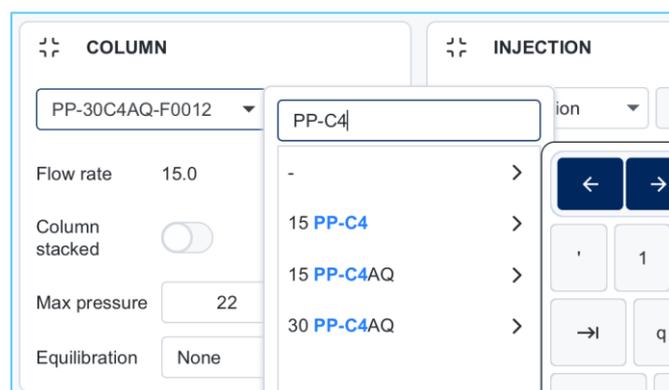


Three modes of equilibration are available:

- **Advanced:** Create a customized equilibration table.
- **None:** No equilibration for both Flash & Preparative purposes.
- **Optimum:** Available only with Interchim® columns. Recommended process to achieve perfect equilibration of the column. The table is not editable, but the end time can be extended.



The drop-down list of columns can be filtered in the “user profile” settings.



iii. Injection tile

➤ Direct injection / injection valve

Two modes are available for injecting a sample: “Direct injection” and “Injection valve”. Each determines the choices available in the drop-down list just below, depending on the system configuration and the valves type.

An “Auto/Wait” switch to determine whether the system pauses and waits for user instructions (Wait) or automatically injects the sample at the end of the equilibration (Auto).

INJECTION

Injection valve ▾ Auto Wait

Dry Load ▾ PF-DLE-F0012 ▾

Choose “Direct injection” to inject the liquid sample directly at the top of the flash column, or to inject the solid deposit by connecting the dry load cartridge to the flash column inlet at the end of the equilibration. “Wait” must be selected to let to the user the opportunity to proceed with the liquid injection or dry load cartridge installation.

To pre-inject liquid or install a dry load on an unequilibrated column, select “Direct injection” and “Auto”.

Choose “Injection valve” to automatically inject the liquid sample via an electric valve and loop (depending on the system configuration and options) or to inject the solid deposit via the dry load cartridge from its specific location.

➤ Autosampler

Two other injection modes are available: “Injection pump” and “Auto sampler”.

If an autosampler is connected to the system, the corresponding injection mode can be selected.

In this mode the user can set:

- the injection volume.
- DMSO volume (Bracketing mode).
- The position of the first sample tube in the rack.

➤ Injection pump

If an injection pump is connected to the system, the corresponding injection mode can be selected.

In this mode the user can:

- Set injection volume.
- Set the injection flowrate.

INJECTION

✓ Auto sampler

Injection pump

Direct injection

Injection valve

INJECTION

Auto sampler ▾

Loop ▾ 0.25 mL ▾

Injected Vol. Full mL DMSO mL

Bubble mL Vial

INJECTION

Injection pump ▾

Liquid ▾

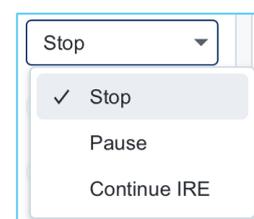
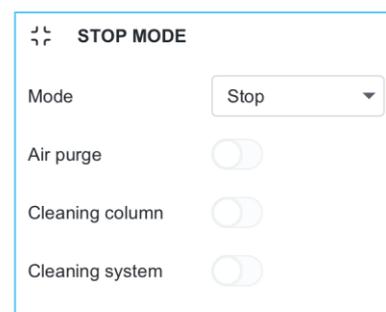
Volume mL

Flow rate mL/min

iv. Stop mode tile

The stop mode corresponds to the behavior of the system when a method ends:

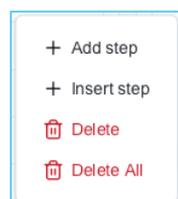
- “Pause”: to pause the system at the end of the method and ask the user to continue or stop the run.
- “Stop”: to stop the run without further notice. The data will be automatically saved, and the method cannot be continued.
- “Continue IRE”: to automatically extend the run for a time set in the system “IRE” parameters (“Time out”). If a peak is detected within this time interval, the peak is collected, and the run continues for a new “Time out” duration. The process is repeated each time a peak is detected. If no peak is detected, the run will stop at the “Time out” time. Note that the IRE mode will end like a stop mode.



v. Elution tile

The elution table summarizes the steps of the purification process. If advanced equilibration mode is selected, an equilibration table is displayed above the “elution table”. For optimum equilibration mode, the process is automatic, and no equilibration table is created.

Clicking on the right of each elution line (⋮), a menu pops up allowing to add or delete elution steps. The content of the menu depends on the selected row location.



| CV | Flow rate (mL/min) | % A | % B |
|-------|--------------------|------|------|
| 0 | 15 | 4 | 96 |
| 0.7 | 15 | 5.3 | 94.7 |
| 1.41 | 15 | 13.3 | 86.7 |
| 2.11 | 15 | 59.5 | 40.5 |
| 8.08 | 15 | 100 | 0 |
| 14.04 | 15 | 100 | 0 |

In the right-hand title bar, a series of 3 buttons can be found.

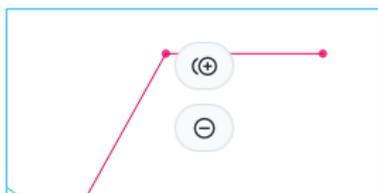
“IIM” is the acronym for “Intelligent Isocratic Mode”. When activated, this feature switches from the current gradient mode to isocratic mode when a peak is detected. The change will take place when the signal is above the collection threshold defined on one of the detection channels chosen in the method as the collection reference. When the signal falls below the threshold again, isocratic mode stops and the gradient resumes automatically.

The isocratic mode can also be manually triggered by clicking “Manual” button at the bottom right of the time ring.



The user can change the display, either a table or a chart.





To add or delete a step, long click on a dot and choose “+” or “-” from the pop-up symbols.

Dots can be “click and drag” to modify the percentage of solvent and/or the time of the starting and ending point of elution segments.

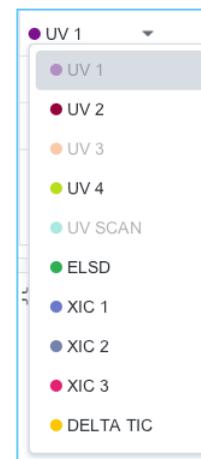
vi. Detection tile

In this tile, the user can set the detection channels. Up to 6 channels are available. A maximum of four channels can be dedicated to UV (single wavelength), and another one for the UV scan. The UV scan is the resulting chromatogram obtained by a weighted average of all chromatograms obtained in the wavelengths range defined as parameter (*i.e.* 200 – 800 nm as shown below). The chosen wavelength range for the UV scan also determines the UV spectrum limits displayed on the “Live panel” screen (read section [5.5.b. UV spectrum](#) for details). For each acquisition channel, a threshold can be assigned by toggling the switch to the right, to target peaks collection.

| DETECTION | | Baseline <input type="checkbox"/> | | Mass | 2 Table |
|-----------|-------------|-----------------------------------|-------------------------------------|------|---------|
| Channel | Value/Range | Threshold | Collected | | |
| UV 1 | 254 | nm 10 mAU | <input checked="" type="checkbox"/> | | |
| UV 3 | 230 | nm 10 mAU | <input checked="" type="checkbox"/> | | |
| UV SCAN | 200 ↔ 800 | nm | <input type="checkbox"/> | | |

If an ELSD or a mass detector is configured and used, the remaining unused channels can be allocated: one channel for the ELSD and up to 4 channels for the mass detector (delta TIC, XIC).

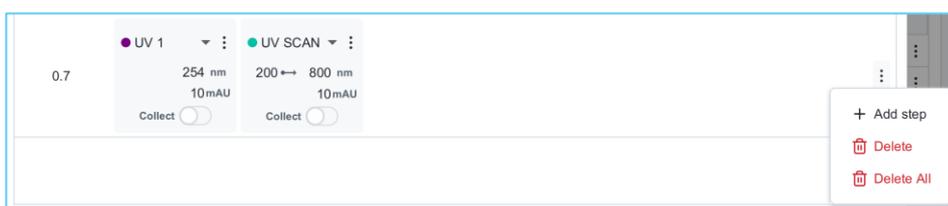
Click on the dropdown list to select a specific acquisition channel.



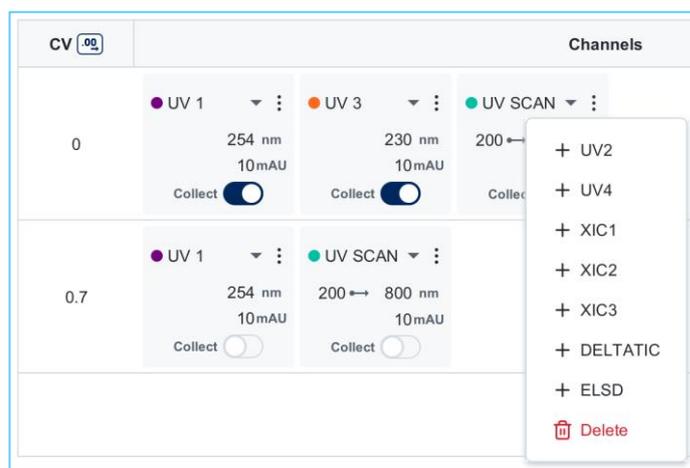
In the detection tile, a detection table can be defined. This table can be used to edit, add, or delete acquisition channels over time. Click on the button **2 Table** to open the detection table.

| CV 00 | Channels | | |
|--------------------|--|--|--|
| 0 | UV 1 254 nm 10mAU Collect <input checked="" type="checkbox"/> | UV 3 230 nm 10mAU Collect <input checked="" type="checkbox"/> | UV SCAN 200 ↔ 800 nm 10mAU Collect <input type="checkbox"/> |
| 0.7 | UV 1 254 nm 10mAU Collect <input type="checkbox"/> | UV SCAN 200 ↔ 800 nm 10mAU Collect <input type="checkbox"/> | |

Time row can be added or deleted by clicking on  on the right of the line.



Acquisition channels can be added or deleted by clicking on the icon  on the top right of the channel tile.



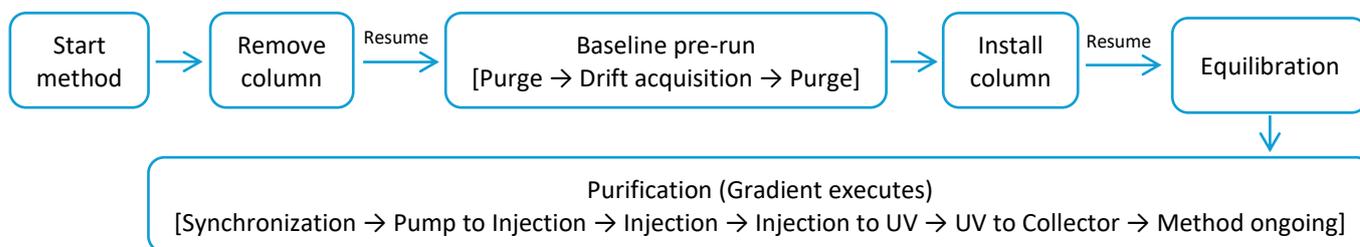
➤ Baseline correction

Baseline correction compensates for signal drift caused by solvent composition (especially during gradients). So, peaks are measured relatively to a stable reference rather than drifting with the baseline.

To enable it, use the Baseline switch on the right side of the Detection tile. Before the run starts, the software identifies the strongest solvent for the selected column and solvent pair.



A method with the baseline correction activated follows the workflow described hereafter.

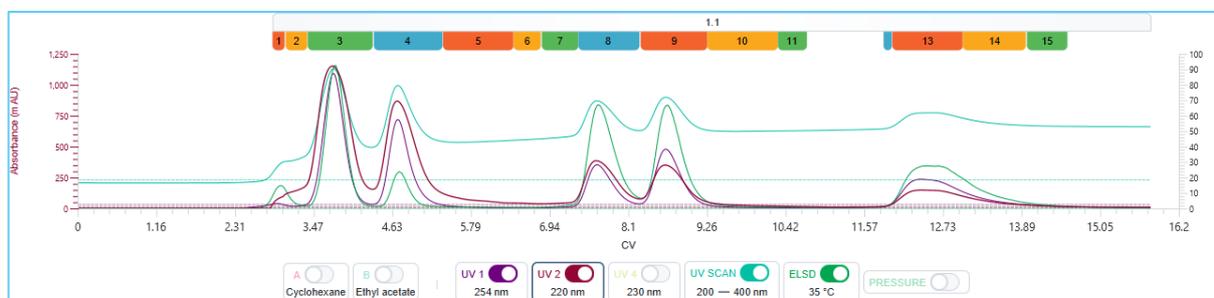


During the Synchronization step, the gradient already starts at the pump level so that the solvent composition reaching the column matches the programmed method when purification begins.

The Elution status shows the current pump composition, while the chart shows the composition actually reaching the column. A tag has been added in the Elution status section to clarify this difference.

| Elution | | Real Time |
|-----------|------------------------------------|------------|
| Flow Rate | <input type="text" value="5.0"/> | 5.0 mL/min |
| Pressure | <input type="text" value="0"/> | 0 bar |
| A | <input type="text" value="99.3%"/> | 4,800 mL |
| B | <input type="text" value="0.7%"/> | 4,966 mL |
| C | <input type="text" value="0%"/> | 5,000 mL |
| D | <input type="text" value="0%"/> | 5,000 mL |

The following chromatogram details the baseline correction applied to the UV channels. UV1 and UV2 are corrected to minimize baseline drift during the gradient, while the UV Scan trace highlights the solvent-related deviation that the correction compensates for.



Notes:

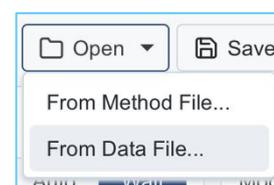
- All modules present in the system configuration must be enabled in the module settings ([3.b.ii. Modules selection](#)), even if they are not used in the method. Otherwise, their tubing volumes are not included in the timing and synchronization calculations.
- Verify that module tubing volumes are correctly configured in the settings ([3.b.ii. Configuration](#)). Internal module volumes have default values, but external modules (for example, Mass and Injection Pump) must be entered manually.
- When changing at least one solvent between methods using baseline correction, it is highly recommended to do a manual purge to be sure that there is no remaining previous solvent in the system otherwise it will alter the results.
- Intelligent Isocratic mode (IIM) is compatible with the baseline correction.
- The elution table cannot be modified during baseline correction.
- When using dry load, the cartridge must be completely filled to ensure accurate baseline correction.
- Only two elution solvents channels must be enabled when the baseline correction is activated.

Load existing baseline pre-run data from a data file:

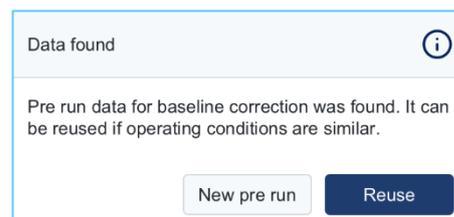
If a previous run was saved with Baseline correction enabled, that data file can be opened and the stored baseline pre-run data can be reused.

This can save time and reduce solvent consumption by skipping a new baseline pre-run sequence.

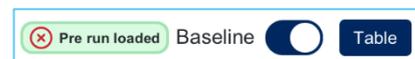
- Click Open → From Data File ([3.e.ii. Open](#)).
- Select a previously acquired data file created with Baseline correction enabled.



- If baseline pre-run data is available, the software detects it and shows Data found.
- Click Reuse (instead of New pre run) to load the existing pre-run data.



- The interface confirms this by showing “Pre run loaded” next to the Baseline control; The pre-run data can be cleared by clicking the red “X”.



vii. MS detection tile

If the system is coupled to a MS detector, the “Mass” button on the top right corner of the tile will display the corresponding parameters.

MS settings

The ion source (ESI or APCI) installed on the system is automatically detected by the software.

- Select the acquisition mode: positive or negative.
- Select the pre-registered ion source parameters in function of the compounds to be detected or populate manually the values.

Split MS

By default, the values for the MS splitter are:

- Valve rotation period: 1.5 s.
- Make Up flowrate: 0.1 mL/min.
- Dilution flowrate: 0.5 mL/min.

The values can be adjusted regarding the sample amount injected on the column.

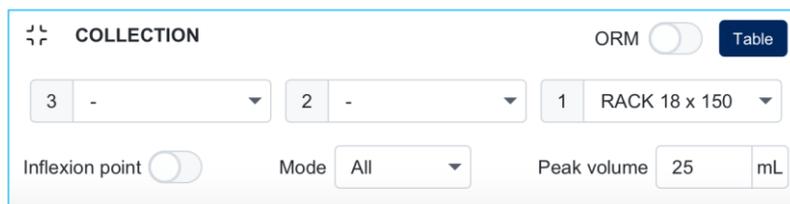


viii. Collection tile

➤ Single mode

On this tile there are two buttons on the top right:

- ORM (Optimum Recovery Mode): if activated, ORM mode stops the pump while the collector arm is moving between two tubes during collection, to limit sample loss.
- The “Table” button lets the user select either “one-line mode”, to use a single condition to target the collection, or “table mode” (see “Table mode” below).



In the tile, 3 dropdown lists (2 with XS series systems) are available for rack selection and location.

Note: thanks to RFID feature, the racks are automatically assigned to position and type.

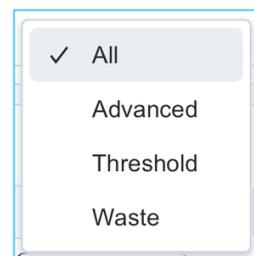
“Inflexion point”: to activate automatic detection of the inflexion point of the curve of partially resolved peak signals and target collection accordingly. When a signal inflexion point above the collection threshold is detected, the fraction collector needle will automatically move to the next collection tube to optimize collection, and the relative purity collected from each peak.

“Mode”: to define the collection mode (see below).

“Peak Volume”: to define the volume to be collected per tube.

“Mode”: four collection modes are available:

- **All:** collection begins at the start of acquisition and is based on volume only. Depending on user preferences, the volume collected will depend on the signal position relative to the defined threshold (read section [5.3.c.ii. Method collection](#) for details).
- **Threshold:** the system diverts the flow in the tubes if a signal is above the collection threshold only. Otherwise, the flow is diverted to waste.
- **Waste:** the flow is only diverted to waste.
- **Advanced:** specific collection mode to have the possibility to target the collection from a combination of signals using “OR” and “AND” conditions.



Example of conditional collection

Conditional collection expression ✕

Condition (UV1 OR ELSD)

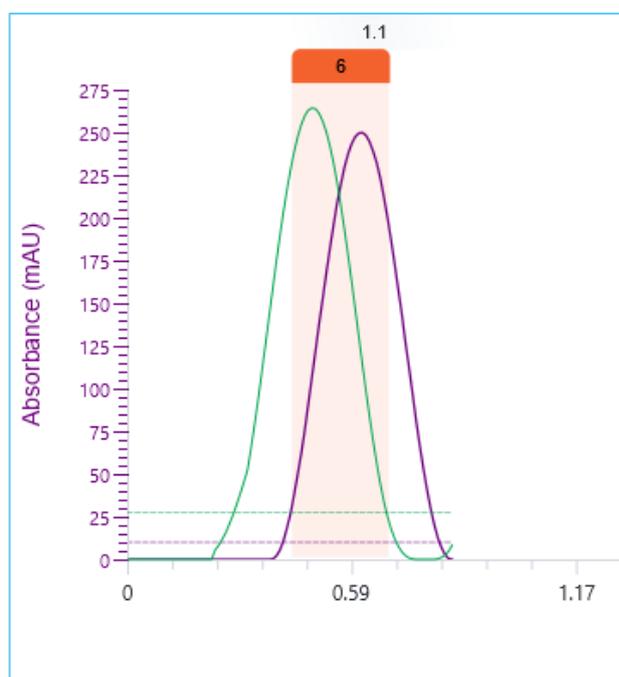
Where UV1 ▾ ✕ OR ▾ ELSD ▾ ✕ +

+ Add Group

Ok

⌵ **COLLECTION** ORM (UV1 OR ELSD) ⌵ Table

Collection starts when both ELSD and UV signal cross the threshold (Green → ELSD trace, Purple → UV1 trace).



➤ Table mode

Click on the table icon on the top right of the Collection tile to switch to table mode display.

This table can be used to edit, add, or delete collection conditions over time.

Clicking on the icon  on the right of a line, a menu pops up allowing the user to add, insert or delete collection steps.



| Time (ms) | Inflexion | Volume | Mode | Action |
|--------------|-------------------------------------|--------|-----------|--------|
| 00 : 00 : 00 | <input type="checkbox"/> | 25 | All | None |
| 00 : 01 : 00 | <input checked="" type="checkbox"/> | 25 | Threshold | None |

ix. TLC (Genius mode)

There are two ways to develop a TLC-based purification method with Genius AI: using the “TLC to Flash & Prep” app or the manual method.

➤ TLC to Flash & Prep Chromatography

The “TLC to Flash & Prep Chromatography” application can be downloaded on the Google Play Store or Apple App store.

First, download and install the application on a smartphone or tablet. Here are the features available:



To take a picture of the TLC plate or download it *via* the smartphone/tablet library.



The compounds are automatically detected. The compounds of interest can be selected with just one click.

Rf The application calculates the Rf of the compounds and ΔCV ($=\Delta K$) values.

ΔCV

From the smallest ΔCV obtained on the TLC plate, the application will score the level of difficulty of the separation.

Enter the solvents used, their ratio and some comments into the appropriate fields.

Send the TLC information to a selected email address or directly to the puriFlash® ClearPeak™ software via Bluetooth.

➤ Manual method

Below is detailed the step-by-step procedure to create a purification method from a TLC plate.

- From the method panel, click on the “TLC” button in the top right corner.
- Genius TLC method development screen is displayed.
- Set the mass of crude sample (mg or g).
- Choose the “Solvent 1” in the dropdown list and enter its percentage.
- Choose the “Solvent 2” in the dropdown list. Its percentage will be automatically calculated.

- Select the compound(s) of interest by touching the check box near compound field.

Select your compound(s) of interest

Rf 0.87

Rf 0.47

Rf 0.22

- Touch the screen symbolizing the TLC plate.

Changing the Rf values can be done manually by clicking in the Rf field. Alternatively, the spot of interest can be clicked and dragged to the screen. Rf value is automatically updated.

- Select a column. The available recommended columns are displayed.

| SELECT A COLUMN | |
|-----------------|-------|
| Column | Stock |
| IR-50SI-F0330 | ● |
| PF-15SIHP-F0120 | ● |
| IR-20SI-F0120 | ● |
| PF-15SIHC-F0120 | ● |
| PF-30SIHP-F0220 | ● |
| PF-50SIHP-F0330 | ● |

- If no purification method can be generated under the selected conditions, an error message is displayed, and the software proposes alternative solvent mixtures. Select one of the suggested mixes to redevelop a new TLC

INTERCHIM NEW PROPOSALS

Cyclohexane 64% / Dichloromethane 36%

Cyclohexane 70% / Tetrahydrofuran 30%

Cyclohexane 72% / Diethyl ether 28%

Cyclohexane 72% / Hexanol 28%

Cyclohexane 87% / Methyl acetate 13%

Cyclohexane 87% / Methyl ethyl ketone 13%

Cyclohexane 89% / Acetone 11%

Cyclohexane 89% / Methyl tert-butyl ether 11%

Cyclohexane 90% / Dioxane 10%

+ NEW TLC

- Injection Mode: answer the question about compound solubility. If the answer is “Yes”, indicate the volume to be injected. If the answer is “No”, select the recommended dry load cartridge from the dropdown list.

INJECTION MODE

Is the crude fully soluble in the below conditions ?

Dichloromethane 96.0%

Pre-mixed (88/12) 4.0%

Yes No

Liquid 0 (ml 36.54 max)

Dry load

In case of a pre-mixed solvent, an information icon appears in the Solvent tile. Click this icon to view the pre-mix composition (solvents and percentages).

SOLVENT

☆ Additive

A Dichloromethane 243 mL

B Pre-mixed *i* Dichloromethane: 88%
Methanol: 12%

C 0 mL Max pressu

If all parameters set match to all Genius recommendations, “Go to Run” is highlighted. Press the button to upload the Genius method and launch the Run.

GO TO MANUAL METHOD

GO TO RUN

If “Go to Run” is not available (“greyed out”), press “GO TO MANUAL METHOD” to finalize the method development from Genius. The method will be directly imported in method pane.

4. SAMPLE QUEUE PANEL

This table allows the user to queue several methods and organize their execution.

| Rank | Name | Sample... | User | Cycles | Column | Column n° | Column incr. | Sample tube | Sample tube incr. | Injected Vol. | State | Time until... |
|------|---------|-----------|-------|--------|------------|-----------|--------------------------|-------------|--------------------------|---------------|---------|---------------|
| 1 | Method1 | | admin | 1 | PP-30C4... | C1 | <input type="checkbox"/> | 0 | <input type="checkbox"/> | 0 | Waiting | 00:20:56 |
| 2 | Method2 | | admin | 1 | PP-30C4... | C1 | <input type="checkbox"/> | 0 | <input type="checkbox"/> | 0 | Waiting | 00:41:52 |
| 3 | Method3 | | admin | 1 | PP-30C4... | C1 | <input type="checkbox"/> | 0 | <input type="checkbox"/> | 0 | Waiting | 01:02:48 |
| 4 | Method4 | | admin | 1 | PP-30C4... | C1 | <input type="checkbox"/> | 0 | <input type="checkbox"/> | 0 | Waiting | 01:... |

Hereafter is the detail of all the columns, from left to right:

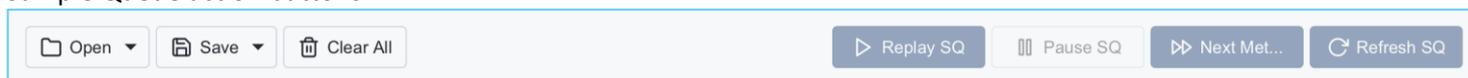
- **Rank:** the rank number of the method in the queue.
- **Name:** the name indicated in the method will be transferred to this field.
- **Sample name:** the sample name indicated in the method will be transferred to this field.
- **User:** this field indicates the name of the user who added the method to the queue.
- **Cycle:** refers to how many times the method will be repeated in the queue before moving on to the next one.
- **Column:** indicates the column reference.
- **Column N°:** indicates the number of the column holder if the system has more than one.
- **Column incr.:** if several cycles are programmed, the column number and position will be automatically incremented with each new injection.
- **State:** displays the current status of the method. It can be "Waiting", "Running x/x" or "Finished".
- **Time until end:** remaining time to the end of the current method / cycle of methods.

Only for systems equipped with an autosampler

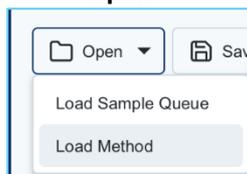
- **Sample Tube:** indicates which tube to start sampling on the autosampler rack.
- **Sample Tube incr.:** from the starting AS sample tube, the system automatically increments the tube position for successive injections.
-

Note: even if the user does not manually add a method to the sample queue, when a single run is launched, the method is automatically added to the sample queue. The sample queue is always active, even with a single method.

Sample Queue action buttons:

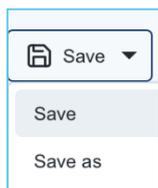


• Open



- **Load Method:** load a method directly in the sample queue.
- **Load Sample Queue:** load a complete saved sample queue.

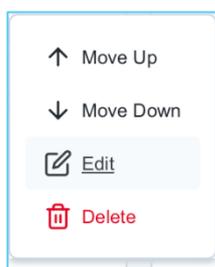
- **Save:**



- **Save:** save the sample queue in the “Sample queue” folder.
- **Save as:** name and save the sample queue in the “Sample queue” folder.

- **Clear all:** removes all the methods from the sample queue, as well as their own panels. Only one line remains available for insertion of a new method.
- **Replay SQ:** change the status “Finished” to “Waiting” for each method. Pressing run after “Replay SQ” will execute the sample queue once again.
- **Pause SQ:** at the end of the current running method, the sample queue is paused until the user presses run again. The “Pause SQ” button remains lit to indicate that the request has been registered. Click again to cancel the pause request.
- **Next Method:** to run next method in the list.
- **Refresh SQ:** remove all the “Finished” methods from the sample queue. The linked method panels are also deleted.

At the end of each row, there are three ellipses as clickable icon (). It opens a context menu:



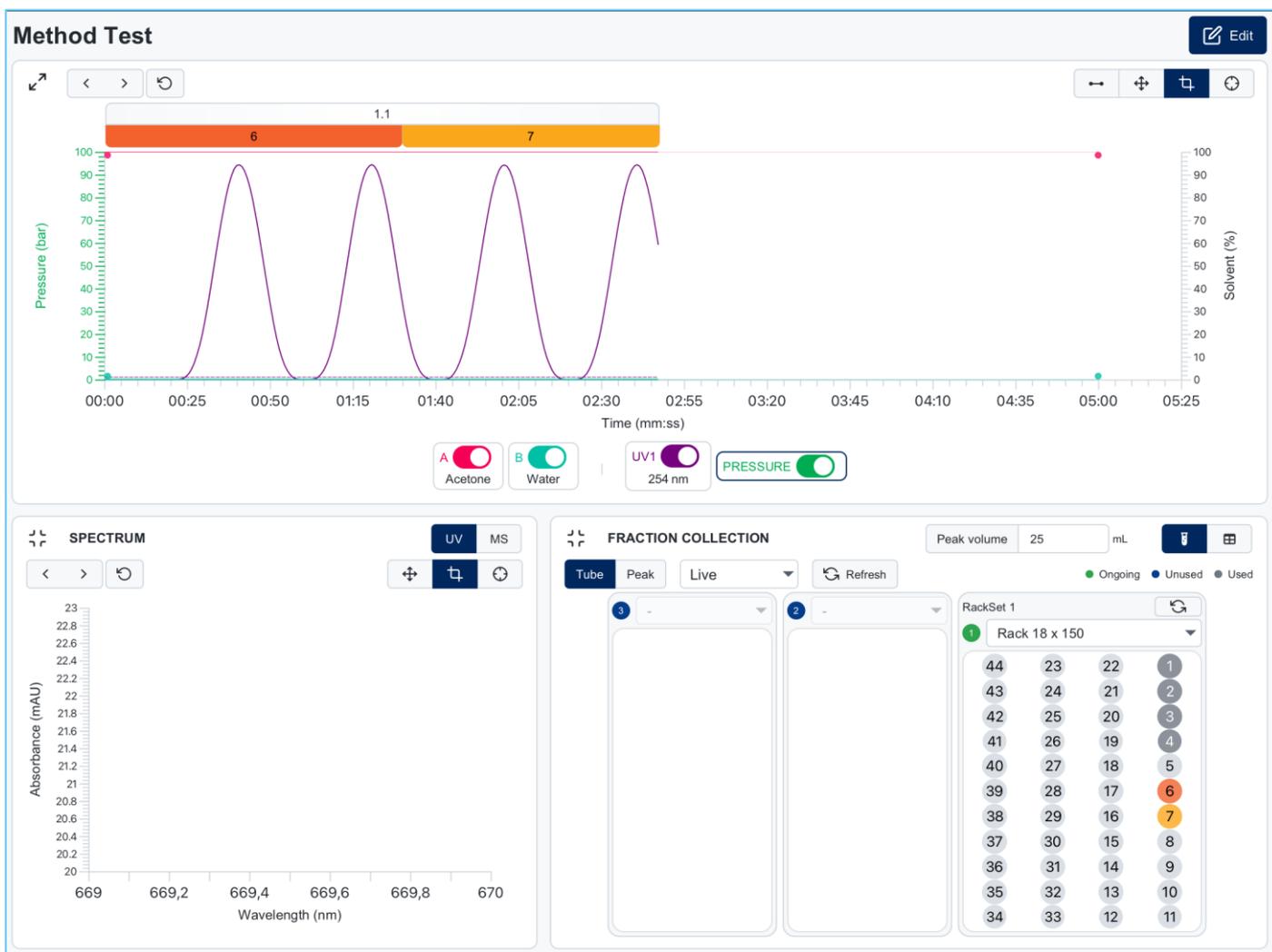
- **Edit:** clicking on this button moves the selected method on the top of the method pane tile and switches to method panel screen. The method can be modified if it has not begun yet.
- **Delete:** removes the selected method from the list (and its panel in the methods pile).

Important remarks

- Pressing the “Stop” button from the action panel does not stop the sample queue. It only stops the current running method or current method cycle. The next method will automatically start. Only the two buttons “Pause SQ” and “Stop SQ”, as described above, can influence the sample queue sequence.
- The run button from the action panel does not have the same behavior depending on the status of the methods in the sample queue:
 - **Single method queue:** even if the method is finished, clicking on run will execute the method again.
 - **Multi methods queue:**
 - If the sample queue has been stopped before its end, all the finished methods are removed from the list, and the sample queue will continue where it has stopped.
 - If the sample queue is finished, it is empty and the current method in Method panel is added to the SQ and executed (for a single method queue).

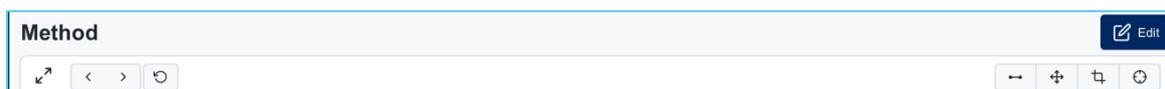
5. LIVE PANEL

The live panel allows the user to see the method in progress and can monitor and modify the run on the fly. From the graphic in the upper half, the user can monitor the progress of a run. Each signal, and solvent line can be shown or hidden thanks to the toggle switches. The lower half displays the spectrum and fraction collection data.

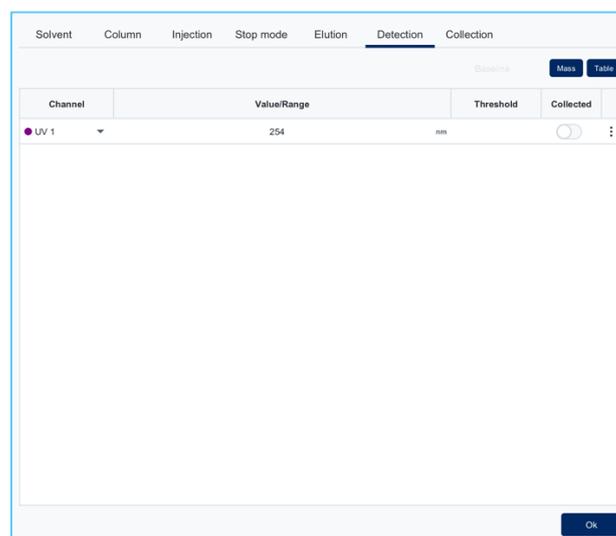


a. Graph section

i. *Header graph section*



With the “Edit” button, the user can edit the method currently running. Clicking on it leads to the editing panel.





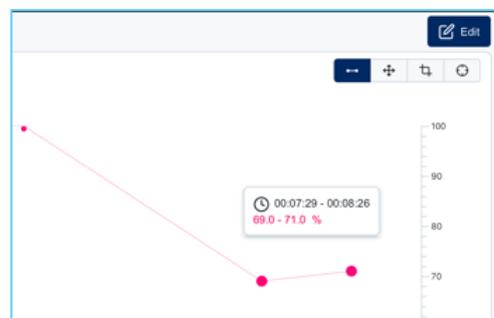
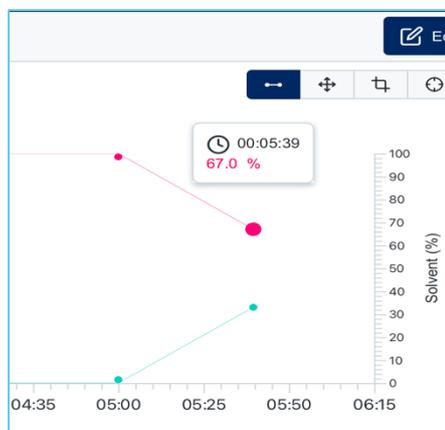
Clicking on this button brings the acquisition graphic to a full page for better viewing.



The next three buttons allow the user to manage the action history. Click on left or right "arrow" button to redo the next or previous action. The third button returns to the initial state.



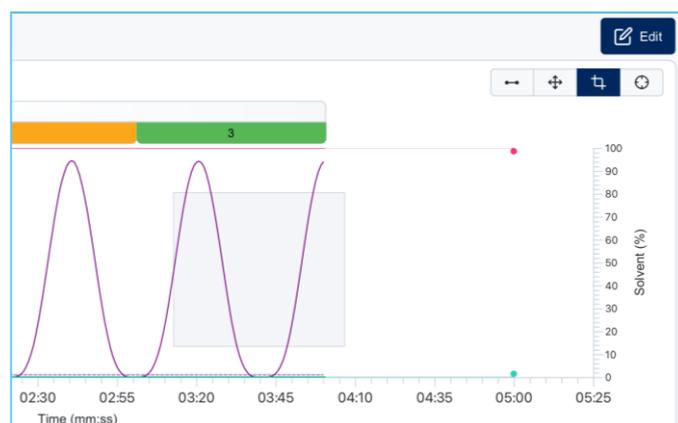
This button allows to move, remove, or add a new solvent point. It is also possible to move a segment.



After zooming in by clicking on the graph, click this button to move the chart in any direction, while retaining the zoom view.



Click on this button to enter in zoom mode. Click on the graph and define the area to zoom in.



This button opens the cursor mode. Click on the button to display a vertical cursor. Slide the cursor on the graph to display the signal, time, back pressure, and solvent information.



On top of the graph, two pieces of information are displayed:

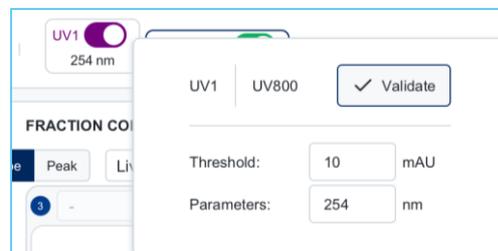
- The rackset used.

- The colored bar shows the progression of the collection in each tube. The position of the tube in the rack is displayed. Clicking on highlights the collection section over the peak.

ii. Footer graph section

Clicking on a wavelength field or solvent name displays the Y axis in % of the solvent of the selected channel.

For each signal the wavelength can be modified at once. The acquisition curve will continue to be displayed using the new value.



b. UV spectrum

The UV spectrum is displayed at the bottom left. The spectrum limits are defined by the upper and lower wavelength limits of the UV scan.

The following buttons have a function similar to that of the graph described above:



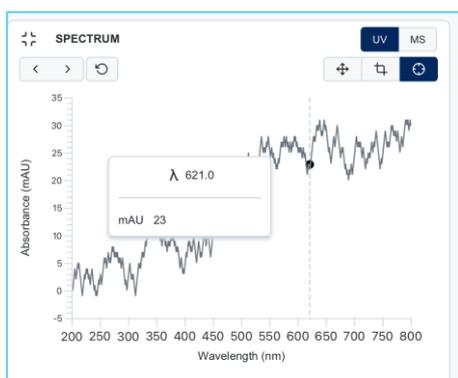
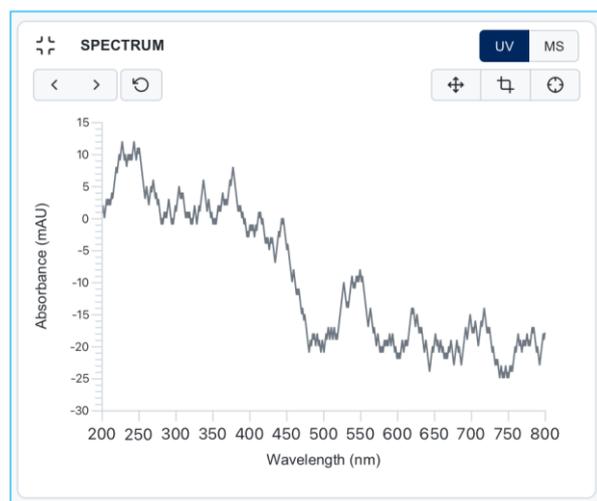
History and reset.



Zoom and move into zoom.

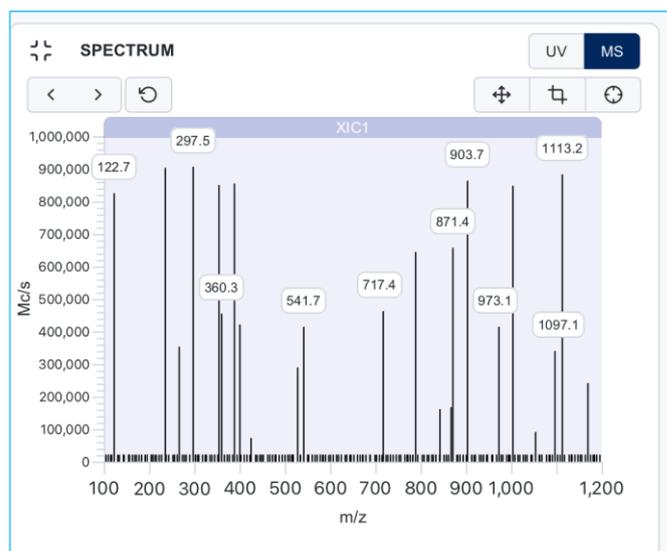


Cursor mode.



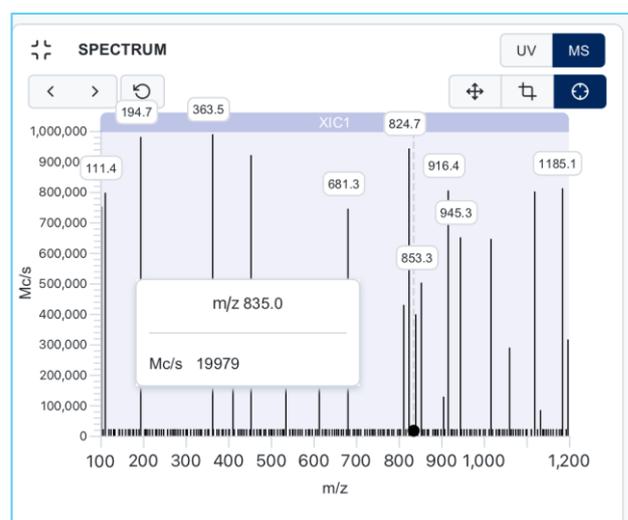
c. MS spectrum

Clicking on the “MS” button on the top right-hand corner of the spectrum tile opens the MS spectrum (if the system is coupled to a mass detector).

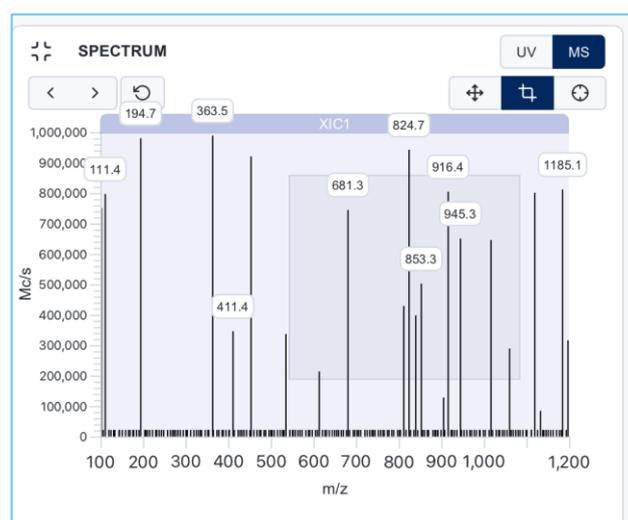


The same buttons can be used to navigate through the tile.

 Cursor mode



 Zoom mode



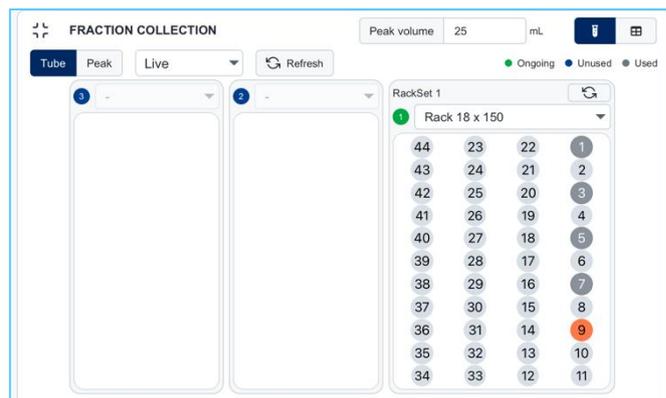
d. Fraction collection

The fraction collection tile summarizes all the information about the collection in progress.

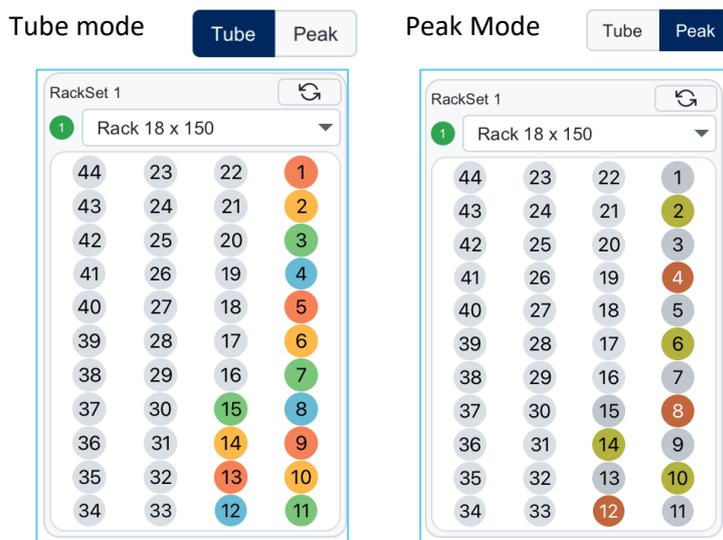
On top and right of the title is a field for immediate modification of the peak collection volume.

The two buttons  on the top right-hand side of the title allow the user to switch between tube (graphical view) or table view (below).

| Rack | Tube | Start time | End time | Volume | Peak | |
|------|------|------------|----------|--------|------|---|
| 1 | 1 | 00:00:01 | 00:00:10 | 23.43 | - | 🕒 |
| 1 | 2 | 00:00:10 | 00:00:19 | 22.5 | 1 | 🕒 |
| 1 | 3 | 00:00:19 | 00:00:22 | 5.02 | 1 | 🕒 |
| 1 | 4 | 00:00:23 | 00:00:30 | 18.76 | - | 🕒 |
| 1 | 5 | 00:00:31 | 00:00:39 | 22.51 | 2 | 🕒 |
| 1 | 6 | 00:00:39 | 00:00:42 | 5 | 2 | 🕒 |
| 1 | 7 | 00:00:43 | 00:00:50 | 18.75 | - | 🕒 |
| 1 | 8 | 00:00:51 | 00:00:59 | 22.5 | 3 | 🕒 |



On the left, two buttons are available to switch between “Tube mode” (the color changes for each tube) and “Peak mode” (all the tubes for a single peak have the same color).



On the right of Tube/Peak mode selection, a dropdown list can be consulted. The “Live” displays the current racks in use and their status. Click on the list to open an historic of all the used racks (rack set) since the beginning of the method. The “Refresh” button clears the full racks in the “Live” tab when the system is running. The rack in use is not erased. When the method is stopped, the “Refresh” button completely clears the “Live” and “Rackset” tabs.

There are also “refresh” buttons for each rack. The rack in use cannot be refreshed, but each “used” rack can be manually refreshed. Whether the system is running or stopped, after refreshing a rack, a new rack of the same type is created in a new rackset.

Only two racks are available for XS series, whereas there are three for puriFlash® Gen 5 series. Click on a tube to see its corresponding collection area in the graph.

6. FIA (FLOW INJECTION ANALYSIS)

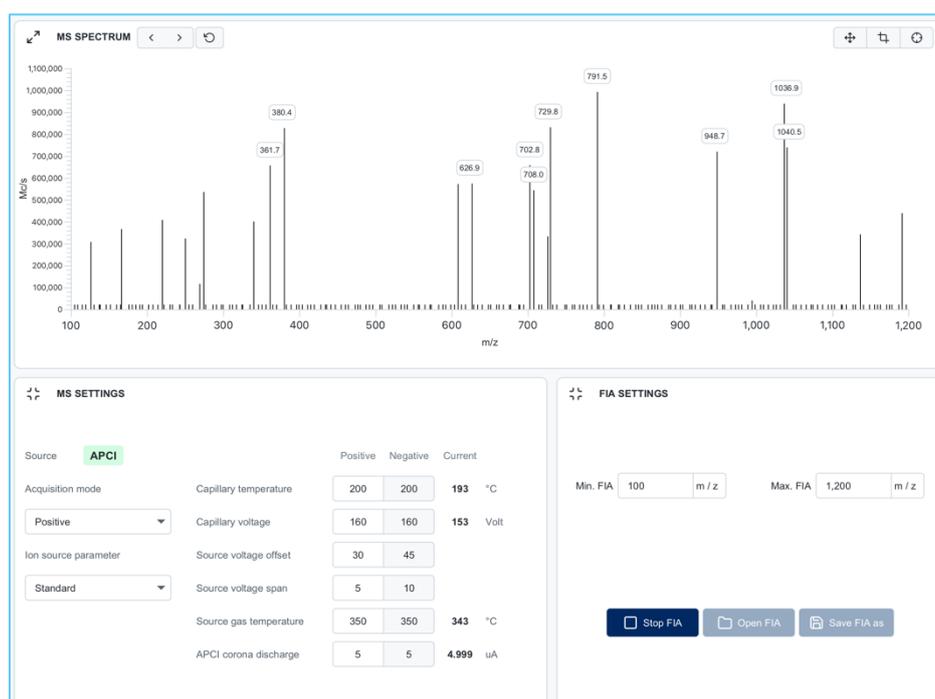
a. General

Prior to purifying a product, it is mandatory to define the source parameters. To do so, the crude sample can be directly injected into the MS detector *via* an injection valve.

Click on the start FIA button:   

On the FIA pane, three tiles are available (see below):

- **MS Spectrum:** the graph displays the mass spectrum of the injected sample.
- **MS Settings:** this tile allows the user to define the source parameters.
- **FIA Settings:** this tile allows to run or stop the FIA, change the minimum and maximum value of the scale, open and save the FIA data.



When the FIA is running, the mass will automatically stabilize. When FIA is stopped, the average of all masses found is displayed.

b. Analysis and method

To define target masses for the detection during the purification, it is possible to directly inject crude samples into the mass spectrometer. To do so, the following procedure must be followed.

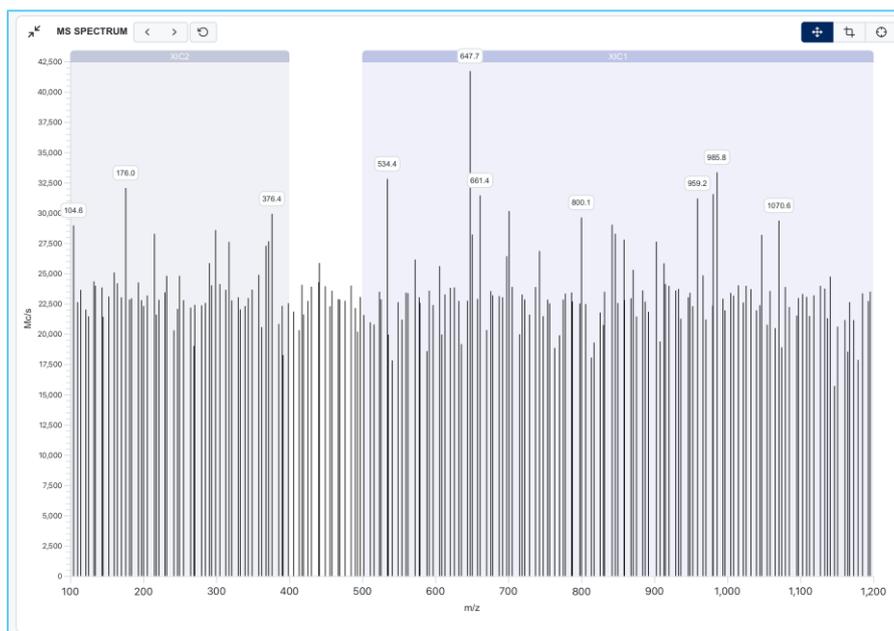
Select XIC channels into the method pane and define a m/z range for each channel.

In this example, XIC 1 and XIC 2 have been added to the method.



The DETECTION pane shows a table with the following data:

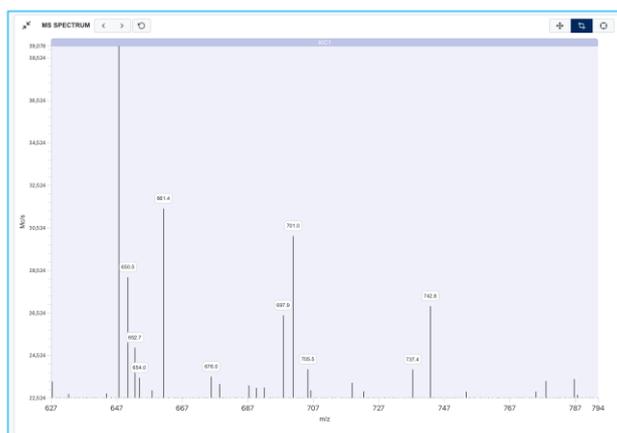
| Channel | Value/Range | Threshold | Collected |
|---------|-----------------|-----------|-------------------------------------|
| UV 1 | 254 nm | 10 mAU | <input checked="" type="checkbox"/> |
| UV SCAN | 200 ↔ 800 nm | | <input type="checkbox"/> |
| XIC 1 | 500 ↔ 1,200 m/z | | <input type="checkbox"/> |
| XIC 2 | 100 ↔ 400 m/z | | <input type="checkbox"/> |



Click on label to upload XIC1 or XIC2 value to the method.



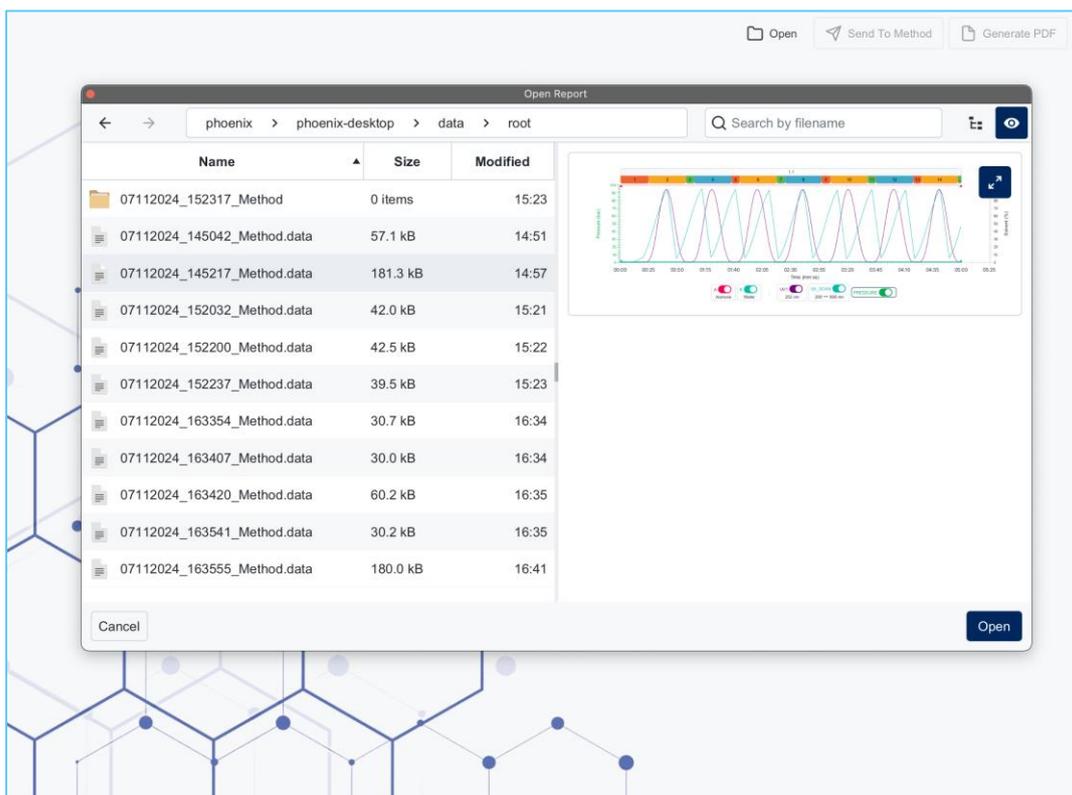
To display more precise sections of the spectrum, use zoom mode () or cursor () to navigate through the graph.



7. REPROCESS

On the top is a series of buttons:

- **Open:** opens a data archive or a PDF reprocess file.
- **Send to method:** loads the method used for current opened data to the method panel for execution.
- **Generate PDF:** to generate a PDF file of the opened data.



a. Data selection

The screenshot shows the 'Details' section for the file '07112024_163555_Method'. The parameters are as follows:

| | | | | | | | |
|----------|---|----------|--------|--------------------|------------------|------------------|------------------|
| Run date | 2024/11/07 16:35:55 | Project | - | Equilibration mode | None | Injection mode | Direct injection |
| User | - | Method | Method | Column | USSC18HQ-150/300 | Injection type | Liquid |
| System | purifFlash® 5250 | Sample | - | Stop mode | Stop | Injection volume | - |
| Options | uvExtended, iELSD, MS-1200, Autosampler, Injection pump | Comments | - | All mode type | Peak/Full | | |

Additional controls include 'Time' and 'CV' buttons.

The first section of the reprocess form is a header containing several information about the system and the method, and a copy of the method graph. As the whole detector wavelength range is scanned during the run anyway, the user can change the wavelength to reconstruct and display the corresponding signal. There is a cursor that can be slide in the chart to see just below the corresponding spectrum at a specific time or volume. Moving it instantly refreshes the spectrum.



Below the chart, some read-only tables detail the elution, the fraction collection, the collection table, and the detection. Each table has arrows at the bottom of the page to navigate between pages.

ELUTION TABLE

| Time | Flow rate (mL/min) | % A | % B | % C | % D |
|----------|--------------------|-----|-----|-----|-----|
| 00:00:00 | 15 | 100 | 0 | 0 | 0 |
| 00:05:00 | 15 | 100 | 0 | 0 | 0 |

FRACTION COLLECTION TABLE

| Start time | End time | P... | Rack... | R... | T... | Volu... | Rack name |
|------------|----------|------|---------|------|------|---------|---------------|
| 00:00:00 | 00:00:24 | 0 | 4 | 1 | 1 | 6.13 | RACK 18 x 150 |
| 00:00:24 | 00:00:57 | 1 | 4 | 1 | 2 | 8.13 | RACK 18 x 150 |
| 00:00:57 | 00:01:04 | 0 | 4 | 1 | 3 | 1.75 | RACK 18 x 150 |
| 00:01:04 | 00:01:37 | 3 | 4 | 1 | 4 | 8.13 | RACK 18 x 150 |
| 00:01:37 | 00:01:44 | 0 | 4 | 1 | 5 | 1.75 | RACK 18 x 150 |
| 00:01:44 | 00:02:17 | 5 | 4 | 1 | 6 | 8.12 | RACK 18 x 150 |
| 00:02:17 | 00:02:24 | 0 | 4 | 1 | 7 | 1.75 | RACK 18 x 150 |

COLLECTION TABLE

| Time | Inflexion | Volume | Mode | Action |
|----------|--------------------------|--------|------|--------|
| 00:00:00 | <input type="checkbox"/> | 25 | All | None |

DETECTION TABLE

| Time | Channels |
|----------|--|
| 00:00:00 | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>UV 1</p> <p>254 nm</p> <p>10 mAU</p> <p>Collect <input checked="" type="checkbox"/></p> </div> <div style="text-align: center;"> <p>UV SCAN</p> <p>200 ↔ 800 nm</p> <p>10 mAU</p> <p>Collect <input type="checkbox"/></p> </div> </div> |

At the end of reprocess form, FIA data (spectrum and settings) can be added.

FIA SPECTRUM

Open FIA

< > ↺

⊕ ⊞ ↻

FIA MASS SETTINGS

Source -

| | Positive | Negative |
|------------------------|----------|----------|
| Acquisition mode | Positive | |
| Capillary temperature | 0 | 0 |
| Capillary voltage | 0 | 0 |
| Source voltage offset | 0 | 0 |
| Source voltage span | 0 | 0 |
| Source gas temperature | 0 | 0 |
| ESI voltage | 0 | 0 |

b. Open a PDF

07112024_163555_Method X 08112024_154406_Method X

Open Send To Method Generate PDF

Zoom 2 / 3 Search ...

1

2

3

Advion Interchim scientific

MS SPECTRUM

UV SPECTRUM

DETECTION TABLE

| Time | Channel | Lower bound | Upper bound | Threshold | Collect |
|----------|---------|-------------|-------------|-----------|---------|
| 00:00:00 | UV 1 | 254 | 254 | 10 | Yes |
| 00:00:00 | UV SCAN | 200 | 800 | 10 | Yes |
| 00:00:00 | XIC 1 | 500 | 1,200 | 0 | Yes |
| 00:00:00 | XIC 2 | 100 | 400 | 0 | Yes |

ELUTION STEPS

| Time | Flow Rate | %A | %B | %C | %D |
|----------|-----------|-----|----|----|----|
| 00:00:00 | 15 | 100 | 0 | 0 | 0 |
| 00:03:00 | 15 | 100 | 0 | 0 | 0 |

FRACTION COLLECTION TABLE

| Start time | End time | Peak | RackSet | Rack | Tube | Volume | Rack name |
|------------|----------|------|---------|------|------|--------|---------------|
| 00:00:00 | 00:00:20 | 1 | 1 | 1 | 17 | 5.001 | RACK 18 x 150 |
| 00:00:20 | 00:00:24 | 1 | 1 | 1 | 18 | 1.124 | RACK 18 x 150 |
| 00:00:24 | 00:00:57 | 1 | 1 | 1 | 19 | 8.251 | RACK 18 x 150 |
| 00:00:57 | 00:01:04 | 1 | 1 | 1 | 20 | 1.75 | RACK 18 x 150 |
| 00:01:04 | 00:01:37 | 1 | 1 | 1 | 21 | 8.25 | RACK 18 x 150 |
| 00:01:37 | 00:01:44 | 1 | 1 | 1 | 22 | 1.75 | RACK 18 x 150 |

2 www.advion-interchim.com | chemistry@advion-interchim.com | +33 4 70 03 73 01



Imprint

Product Identification:

User Manual, ClearPeak™

Publication date:

01.2026

Interchim®

211 Bis avenue J.F. Kennedy 03100 Montluçon - FRANCE Phone: +33 470 038 855

Email: interchim@advion-interchim.com Web site: www.interchim.com www.flash-chromatography.com



Interchim® reserves the right to make changes to the manual as deemed necessary in the light of experience, especially in respect to structure, illustrations and technical detail. This manual is copyrighted. Information from it may not be reproduced, distributed, or used for competitive purposes, nor made available to third parties.

The manufacture of any component with the aid of this manual without prior written agreement is also prohibited.

Advion Interchim Scientific® is the market-facing name of a partnership between Advion®, Inc. and Interchim® SAS, separate companies that have agreed to market and distribute their products together.