

Achieve complete lab access with SampleManager XR software

Enabling scientists to work hands free using extended reality technology to drive process compliance, repeatability and integrity

Organizations rely on laboratory software to support and maintain regulatory compliance, reducing the vast amounts of paper required to demonstrate process adherence, and driving quality and data integrity by eliminating errors

through manual transcription. Using LIMS, lab analysts can constantly refer to SOPs and document actions as and when they occur – but what about when it's not possible to access LIMS as you work?

Why can't analysts always accurately record actions in LIMS as they work?



Clean room environment or other PPE requirement



Working in a fume cupboard/biosafety cabinet



Notes are lost or incorrectly transcribed



Observations are forgotten or inaccurate

Inability to record actions as they happen leads to inaccuracy and a loss of data integrity

Scientists often need to work in clean room environments or in fume cupboards, or wear gloves and other personal protective equipment which makes it impossible to access LIMS simultaneously. Documented actions and observations are then reliant on scribbled notes or memories until they can be added, resulting in questionable processes and potentially unreliable results. Thermo Scientific™ SampleManager™ XR software solves these problems by enabling scientists to access and interact with the LIMS via a mixed reality headset.

- Access the Lab Execution System in SampleManager LIMS where it's previously not been possible
- Analysts see method instructions displayed within field of view as they work
- Capture pertinent method parameters in real time
- Enter data accurately using automatic instrument readings, dictation or optical character recognition (OCR)
- Drive audit traceability by recording data change reasons as they happen
- Record and attach video or images as evidence of correct method execution
- Reduce deviations through mixed reality training, guidance, and support with complex methods

Secure, personalized access

Analysts log in to SampleManager XR software securely using iris recognition, which can also be used to provide eSignatures where required. On login, a personalized to-do list displays any methods assigned or in process which are awaiting execution.



Process compliance and data integrity

Since analysts are able to access the Lab Execution System (LES) hands free to review SOP processes and record notes, observations and instrument readings as they work, SampleManager XR improves process adherence and data quality:

- Multimedia instructions for training, guidance, or support with complex methods.
- For complete hands-free operation, there is the option to use voice commands or gaze, and the reason for any data changes can be recorded as they happen, driving audit traceability.
- Videos or images of method execution can be recorded and attached as evidence that processes are correctly followed.



Scientists view multimedia process instruction through the LES as they work

Instrument connectivity

SampleManager XR makes it possible to view real-time instrument and equipment availability and enter readings into SampleManager LIMS, without a laptop or tablet:

- Connects directly to instruments and equipment, enabling readings to be entered directly into SampleManager software.
- Readings or observations can also be dictated into SampleManager software, driving quality and data integrity.
- Instrument panels show status, availability and workload for quick review.

Improving the scientific experience

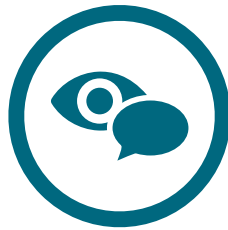
Scientists are often burdened by manual processes and administrative tasks which divert their attention from real goals. As well as delivering productivity gains, applying innovative technologies in the laboratory relieves the scientist of some of those burdens and enables them to focus on science.



SampleManager XR enables analysts to review SOPs and record actions in LIMS as they work



Login securely and provide eSignatures using iris recognition



Option to use voice commands or gaze for complete hands-free operation



Keep track of outstanding tasks with a personalized to-do list



Reminds analyst of substance and hazard warnings as they work



Instrument panels show status, availability and workload for a quick review



Share your view while you work via integrated Microsoft Dynamics 365 Remote Assist

Access the lab of the future today

SampleManager XR software is a dedicated Microsoft HoloLens device app, providing a new interface to SampleManager software features. The app can be downloaded from the Microsoft store and is compatible with SampleManager software 12.3 onwards.

Find out more at thermofisher.com/samplemanager