

Information about the SISE-Monitor

1 August 2025.

New versions of the SISE-Monitor110 and SISE-Monitor110-demo are provided. In these versions the timing of the measurement loop was changed. In version *100, the measurement loop time was set to 10 ms, and because of additional time between loops the time of measurement at one position (by default 10 s) was slightly longer as intended. In version *110 this was changed. Now the expected duration of the experiment is calculated in the measurement loop and compared with the actual time since start of the experiment. The difference in both values will become the duration of the measurement loop, as long as this value is not less as 7 ms. An exception is made for loops in which the program communicates with the Patchmaster manipulator, these loops will all be 10 ms, to ensure enough time for data exchange.

25 April 2025.

The version SISE-Monitor100 was uploaded to GitHub, as well as the SISE-Monitor100-demo version that can be used to test the program without having to purchase an analog/digital converter and micromanipulator. Both programs are available as Windows executable (.exe) and LabView (.vi) files. The Windows executable files need support of the LabView Runtime engine (version 2025Q1) that can be downloaded from the NI -Website (<https://www.ni.com/>). The virtual instrument (*.vi) files only can be opened with NI-LabView, such as the community edition, which is free for non-commercial use. In addition, the virtual instrument applications make use of SubVI's, which are provided in the SISE-Submodules-(Vis) folder.

A precise description of the programs is uploaded to BioRxiv's (<https://www.biorxiv.org/>) and will be submitted to a scientific Journal.