

Service ID S00311



Location At user's premises, France

Testing and evaluating sensor devices

Provider service

National Institute for Research in Digital Science and Technology (INRIA)

Link to content

<https://agrifoodtef.eu/catalogue-of-services/testing-and-evaluating-sensor-devices>

Type of Sector

Arable farming, Food processing, Greenhouse, Horticulture, Tree Crops, Viticulture

Accepted type of products

Data, Design / Documentation, Physical system, Other

Type of service

Collection of test data, Data analysis, Desk assessment, People training, Performance evaluation, Provision of datasets, Test

Description

The SOPHIA infrastructure will offer the possibility to test and evaluate the performance of a sensor device in a locally controlled environment. While our indoor facility provides a fully controlled environment (light, volume), all facilities in SOPHIA can be customised to test and evaluate the sensor device. The service consists of three main steps. First, the sensor device will be integrated into the facility. After that, the facility will be customised according to the final application of the sensor device. Then, the performance of the sensor device will be evaluated using quantitative and qualitative metrics. Comparison could be proposed as a complementary option to position the performance of the sensor device in relation to the current state of the technology available in SOPHIA.

How can the service help you

This service can help you test and evaluate your sensor device solutions for agricultural and agrifood applications, measuring their performance against state-of-the-art technologies.

The results will help you assess the reliability and performance of your sensors, identify existing limitations, and uncover areas for improvement. This enables you to refine your solutions, enhance accuracy, and ensure better performance in real-world agricultural environments.

How the service will be delivered

Our service offers fully customisable equipment, sensors, and environments tailored to the customer's needs. However, there may be technical limitations related to sensor compatibility or system performance, which will be addressed during planning. Additionally, customers should be aware of any legal or regulatory requirements that may impact the solution, and we will ensure compliance throughout the process.

Service customisation

Our service provides a detailed report with test results, evaluation insights, and a possible comparison with solutions available at SOPHIA. To ensure smooth delivery, customers must provide clear testing and evaluation criteria, necessary permissions, and any customisation needs.

Our services may require repetitions based on customer requests or anomalies. They can be delivered at any time, except when tied to crop or vegetation seasons for the sensor device. Depending on needs, customisation, and location, testing and evaluation could take from weeks to 2-3 months. Therefore, customers should contact us at least two months in advance.