

Libellus Datasheet

Sensirion Sensor Data Exchange Platform



Features

- Certificate & data distribution platform
- Individualized certificates
- Compatible with every ecosystem
- Available for products bought in distribution API access
- All certified Sensirion products
- Accessible for any volume
- Web access

General Description

Libellus¹ is a cloud storage platform providing certificates and other sensor-specific data to customers of Sensirion and other interested parties. Currently, ISO17025 certificates are available for STS32, STS33, SHT33, and SHT43, while additional sensor-specific data and documentation will be added in future versions of Libellus. Web and API access is available to registered users only.

¹ Registered Trademark. Name derived from Latin: A libellus (plural libelli) was any brief document written on individual pages (as opposed to scrolls or tablets) in the Roman Empire, particularly official documents issued by governmental authorities.



Contents

| Features | 1 |
|---------------------------------|---|
| General Description | 1 |
| 1 Overview | 3 |
| 2 Hosted Content | |
| 3 Access | 3 |
| 3.1 Registration | |
| 3.2 Access | |
| 4 Certificate Individualization | 4 |
| 5 Service Level Agreement | 4 |
| 6 Glossary | |
| 7 Legal Notices | |
| 8 Revision History | |



1 Overview

Libellus is a secure cloud-service hosted by Sensirion for the exchange of sensor specific data between Sensirion, its customers, and other interested parties, where access is only available as a registered user.

2 Hosted Content

Introduced for the exchange of sensor specific data, Libellus currently hosts:

- 1. ISO 17025 certification for STS32, STS33, SHT33, SHT43.
- 2. Future content tbd.

The ISO17025 certification data is available in the formats of:

- 1. PDFs.
- 2. CSVs.
- 3. 7z compressed folders, and
- 4. JSON links.

3 Access

3.1 Registration

Libellus is only accessible to registered users, which must demonstrate valid interest in Sensirion's products. Customer data necessary for identity and affiliation verification is stored only for internal use and never shared with or sold to third parties. Sensirion reserves the right to refuse registration with and without cause. User specific data is neither visible, nor accessible to any other users, yet Sensirion monitors login activities for prevention of misuse.

User registration is available through <u>libellus.sensirion.com</u>, where users can obtain their personal API token (acting as username – password combination), valid for web and API access.

3.2 Access

For testing purposes and access to small numbers of documents and small data sets, access through the Libellus Web interface found at <u>libellus.sensirion.com</u>, is strongly recommended.

When larger number of requests need to be processed, API access is recommended, as described on <u>libellus.sensirion.com/API</u>.

In addition, the Sensirion sensor serial number is necessary to access data on Libellus. Kindly find instructions on how to extract the serial number in the corresponding sensor datasheets.



In case of misuse of Libellus, hosted data, or certificates, sharing of user credentials (not tokens) outside the own organization, or any other form of exploitation or improper actions, Sensirion can revoke or temporarily block user access.

4 Certificate Individualization

End customers often have no possibilities to derive the serial number of the Sensirion sensor within a device, which would be needed to retrieve the corresponding certificate. Therefore, Sensirion offers the possibility to add a preface to the calibration certificate, creating the link between a customer device ID, and the built-in sensor ID. By optionally providing device manufacturer name and device ID during the certificate request on Libellus, the concatenated document, *i.e.*, preface and certificate, can be treated like any other available certificate. This option is available on request only.

Kindly find the instructions described on libellus.sensirion.com/about.

5 Service Level Agreement

Libellus is based on MS Azure CDN, making the <u>Azure CDN Service level agreement</u> (SLA) part of this offering. Based and dependent on the MS Azure CDN, Sensirion guarantees a platform composite SLA, *i.e.*, platform availability, of 99.3%. Planned downtime is announced to all users and on the Libellus landing page two weeks in advance.

0.7% of system unavailability could be related, but not limited to

- Time-outs, caused by network issues at the Azure data center, or update deployment by Sensirion,
- http error 500, caused by an internal server error, or
- http error 404, which indicates the certificate is either not yet available due to sensors still in in production), or a server node which has no access to the file yet.

The SLA excludes:

- Influence of factors outside our reasonable control (for example, natural disaster, war, acts of terrorism, riots, government action, or a network or device failure external to our data centers, including at your site or between your site and our data center),
- 2. Influence that results from the use of services, hardware, or software not provided by Sensirion, including, but not limited to, issues resulting from inadequate bandwidth or related to third-party software or services,
- 3. Requests made during preview, pre-release, beta, or trial versions,
- 4. Results from faulty input, instructions, or arguments (for example, requests to access files that do not exist),
- 5. Maintenance windows as described above.



In addition to using redundant storage plans on MS Azure, Sensirion stores all calibration and certification data on on-premise servers in its headquarters in Staefa, Switzerland, in case data recovery should be necessary.

All sensor-related data remains available on Libellus until minimum 5 years after the respective sensor has reached End-of-Life status and Last-Time-Buy has passed.

6 Glossary

Libellus provides access to sensor-specific data, where each set of data is unique, and thus accessible only using a specific set of parameters. To facilitate access for developers, Table 1 summarizes common parameters and descriptors of electronic components and sensors, potentially needed to access data on Libellus.

| Parameter | Description | |
|-------------------------|--|--|
| Sensor | Physical device that produces an output signal to quantify a physical phenomenon. In this context, a Sensirion product name, e.g., "SHT33". | |
| Tray | Tray packaging option in which sensors might be shipped, typically used for larger sensors or small quantities. | |
| Reel | Tape and Reel packaging option, where sensors are placed in tape-covered pockets of a belt, which is rolled on a reel. Typical packaging for any electronic components for pick & place processes. | |
| Sensor ID | Unique identifier for each Sensirion sensor. Typically, electronically readable from the sensor using I2C commands. | |
| Tray ID | Unique identifier for each tray containing Sensirion sensors. Printed on the tray label. | |
| Reel ID | Unique identifier for each reel containing Sensirion sensors. Printed on the reel label. | |
| ISO17025 | "ISO/IEC 17025" is the ISO/IEC standard for the competence of testing and calibration laboratories. In most countries, this accreditation is required for such laboratories to be deemed technically competent. In many cases, suppliers and regulatory authorities will not accept test or calibration results from a lab that is not accredited. | |
| Calibration certificate | Certificate comprising sensor calibration results and corresponding information for a sensor, tray of sensors, or reel of sensors. | |
| | | |

Table 1. Common parameters needed to access sensor specific data on Libellus.

7 Technical Support

In case technical problems arise, or support is needed for any issue concerning the Libellus platform or associated products, kindly use the Sensirion support contact form, mentioning the platform Libellus to ensure fast processing:

https://sensirion.atlassian.net/servicedesk/customer/portal/1/group/1/create/65



8 Legal Notices

The use of Libellus (by Sensirion AG) requires processing of company and/or personal data. Sensirion collects and maintains personal data of clients, suppliers, and other business partners and of people who work for them, or of people who provide us with business cards or other contact information, of people who use our contact form, of job applicants, employees, contractors, and investors. If the processing of personal data is necessary, we rely on one or more of the following processing conditions: to satisfy any legal and regulatory obligations to which we are subject; our legitimate interests in the effective delivery of products, information and services to you or the company you work for and in the effective and lawful operation of our business (provided these do not interfere with your rights); to perform our obligations under a contract with you or the company you work for; or where no other condition for processing is available, if you have given us consent to process your personal data for the relevant purpose. The processing of personal data, such as the name, job title, company name, address, e-mail address, telephone number, or fax number of a data subject shall always be in line with the General Data Protection Regulation (GDPR), and in accordance with the country-specific data protection regulations applicable to Sensirion AG. By means of this data protection declaration, our enterprise would like to inform the general public of the nature, scope, and purpose of the personal data we collect, use and process. Furthermore, data subjects are informed, by means of this data protection declaration, of the rights to which they are entitled. As the controller, Sensirion AG has implemented numerous technical and organizational measures to protect personal data from loss, misuse, alteration or destruction. Although we use appropriate security measures once we have received your personal data, the transmission of data over the internet (including by e-mail) is never completely secure. We endeavor to protect personal data, but we cannot guarantee the security of data transmitted to or by us. Internet-based data transmissions may in principle have security gaps, so absolute protection may not be guaranteed. For further information kindly refer https://sensirion.com/legal-notice/.

For information on our use of cookies, please refer to: https://sensirion.com/legal-notice/cookie-policy/.

In case neither the above, nor the linked further information provides the desired answers, kindly reach out to Sensirion under privacy@sensirion.com, or reach Sensirion at:

Sensirion AG Laubisrütistrasse 50 CH-8712 Staefa ZH Switzerland



9 Revision History

| Date | Version | Page(s) | Changes |
|---------------|---------|-----------------------|---|
| November 2022 | 0.1 | all | Initial release, preliminary version. |
| November 2022 | 0.2 | 4 | SLA rephrasing, 99.8% correct answers to correct requests. |
| | | 5 6 | Added section "Glossary". Added section "Legal Notices". |
| December 2022 | 1 | 1, 3 4 5 | Updated sensor portfolio. Updated SLA. Added section "Technical Support". |
| June 2023 | 2 | All 3, 4 4 5 | Updated links Updated "Registration" and "Access" Updated "Certificate Individualization" Updated "SLA" |
| August 2023 | 2.1 | 3, 4 | Fixed typo in links to libellus.sensirion.com |
| February 2025 | 2.2 | 3, 4, 5 | Updated links |



Important Notices

Warning, Personal Injury

Do not use this product as safety or emergency stop devices or in any other application where failure of the product could result in personal injury. Do not use this product for applications other than its intended and authorized use. Before installing, handling, using or servicing this product, please consult the data sheet and application notes. Failure to comply with these instructions could result in death or serious injury.

If the Buyer shall purchase or use SENSIRION products for any unintended or unauthorized application, Buyer shall defend, indemnify and hold harmless SENSIRION and its officers, employees, subsidiaries, affiliates and distributors against all claims, costs, damages and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if SENSIRION shall be allegedly negligent with respect to the design or the manufacture of the product.

ESD Precautions

The inherent design of this component causes it to be sensitive to electrostatic discharge (ESD). To prevent ESD-induced damage and/or degradation, take customary and statutory ESD precautions when handling this product. See application note "ESD, Latchup and EMC" for more information.

Warranty

SENSIRION warrants solely to the original purchaser of this product for a period of 12 months (one year) from the date of delivery that this product shall be of the quality, material and workmanship defined in SENSIRION's published specifications of the product. Within such period, if proven to be defective, SENSIRION shall repair and/or replace this product, in SENSIRION's discretion, free of charge to the Buyer, provided that:

- notice in writing describing the defects shall be given to SENSIRION within fourteen (14) days after their appearance;
- such defects shall be found, to SENSIRION's reasonable satisfaction, to have arisen from SENSIRION's faulty design, material, or workmanship;
- the defective product shall be returned to SENSIRION's factory at the Buyer's expense; and
- · the warranty period for any repaired or replaced product shall be limited to the unexpired portion of the original period.

This warranty does not apply to any equipment which has not been installed and used within the specifications recommended by SENSIRION for the intended and proper use of the equipment. EXCEPT FOR THE WARRANTIES EXPRESSLY SET FORTH HEREIN, SENSIRION MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCT. ANY AND ALL WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY EXCLUDED AND DECLINED.

SENSIRION is only liable for defects of this product arising under the conditions of operation provided for in the data sheet and proper use of the goods. SENSIRION explicitly disclaims all warranties, express or implied, for any period during which the goods are operated or stored not in accordance with the technical specifications.

SENSIRION does not assume any liability arising out of any application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. All operating parameters, including without limitation recommended parameters, must be validated for each customer's applications by customer's technical experts. Recommended parameters can and do vary in different applications.

SENSIRION reserves the right, without further notice, (i) to change the product specifications and/or the information in this document and (ii) to improve reliability, functions and design of this product.

Headquarters and Subsidiaries

Sensirion AGSensirion Inc., USASensirion Korea Co. Ltd.Laubisruetistr. 50phone: +1 312 690 5858phone: +82 31 337 7700~3CH-8712 Staefa ZHinfo-us@sensirion.cominfo-kr@sensirion.comSwitzerlandwww.sensirion.comwww.sensirion.com/kr

phone: +41 44 306 40 00 Sensirion Japan Co. Ltd. Sensirion China Co. Ltd. fax: +41 44 306 40 30 phone: +81 45 270 4506 phone: +86 755 8252 1501 info@sensirion.com info-jp@sensirion.com info-cn@sensirion.com www.sensirion.com/jp www.sensirion.com/cn

Sensirion Taiwan Co. Ltd phone: +886 2 2218-6779

<u>info@sensirion.com</u>
To find your local representative, please visit www.sensirion.com
www.sensirion.com/distributors

Copyright © 2024, by SENSIRION. CMOSens® is a trademark of Sensirion. All rights reserved