Environmental metrology
Product information

Climate measuring station, temperature, air pressure and humidity sensors
for seamless monitoring of the measuring environment

PRECISION IN MEASUREMENT

Length · Angle · Straightness · Vibration · Temperature

Content

Environmental Measurement

Precise environmental monitoring for reliable measurement results.
The need for high-precision measurements is constantly increasing, both in scientific institutions and in industry. Due to the miniaturization of components and structures, precision machines are performing more and more demanding tasks. This is the case, for example, in electronics production, the semiconductor industry and modern mechanical engineering.

Especially in industrial environments, measurements are not always performed under ideal laboratory conditions or in optimized measuring rooms. However, monitoring the environmental conditions is of crucial importance. Even small changes in temperature, air pressure or humidity can affect measurements and lead to inaccurate results. To ensure that measurements are accurate, reproducible and reliable, it is essential to monitor the environmental parameters accurately. In this way, measurement results can be accurately monitored, compensated for if necessary, and measurement errors minimized.

SIOS offers the right environmental measurement technology for seamless monitoring of your measurement environment. You can use our environmental measurement components as standalone measurement systems or as accessories for our laser interferometers.

Application areas of SIOS environmental measurement technology

- Laser interferometric measurement technology

- Measuring room qualification

- Laboratory setups/laboratory environments
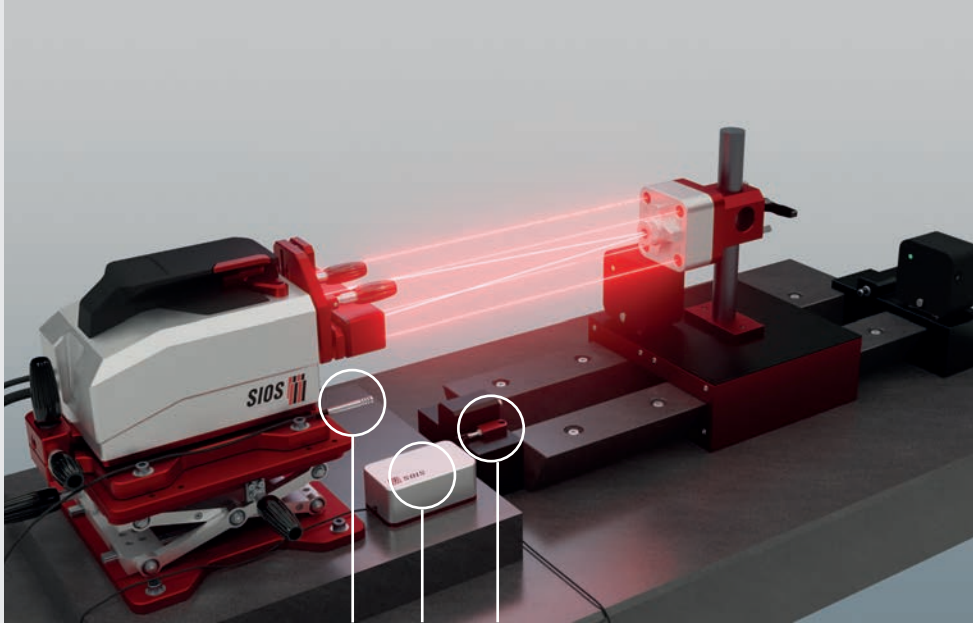
Temperature sensor

page 14

Sensor box SB-22

page 20

Material temperature sensor
page 16

Data acquisition modules

Climate measuring station LCS

The LCS Precision Climate Station is a data acquisition station to which all SIOS environmental sensors can be connected. The data is output in various formats via USB or RS-232 and stored in the supplied LCS-Desk software. The basic version of LCS-Desk is supplied as a Windows version. A Linux version and an extended version for room classification or monitoring are optionally available. On request, LCS-Desk can be pre-installed on a panel PC for wall mounting.

You can operate the LCS climate station as a stand-alone climate station, for example, to monitor temperatures and other environmental data on test setups or to monitor and qualify test rooms.

We also recommend using the LCS precision climate station as an extension to our laser interferometers for environmental monitoring. The rear output of the LCS can be connected to the SB input of the UW-3x interferometer environmental recording modules of the electronic evaluation and supply units of the SIOS interferometers. This allows the operation of the interferometers with more complex environmental sensors and the simultaneous and permanent recording of environmental influences via the LCS-Desk software.

The LCS climate station has several data ports for the measured values, RS-232 and USB, which appear as COM ports on the PC. These data ports can be operated in a proprietary binary format, which is used for the PC software LCS-Desk and for the coupling with the SIOS laser interferometers. Optionally, a freely definable text format can be set. This allows to emulate text based formats from other climate stations.

Connections LCS

Front side	
T	5 connections for temperature transducer TT-01 Up to 15 TT-01 temperature sensors can be connected. For this purpose, the sockets can be connected via the LCS extension station (10 sensors), the TT-01 hub (4 sensors) and the SB-3x sensor boxes (3 sensors) can be added.
P/H	2 connections for a sensor box SB-22 or a sensor box SB-3x or a pin humidity sensor
Antenna	Built-in base station for a sensor network of up to 15 WT-01 wireless temperature sensorsn
USB	Connection to the PC, primarily for the LCS-Desk software
Back side	
COM-Port	RS-232 for data transfer, configurable as text or binary protocol
Extension	Extension socket for connecting an LCS-03 extension station
Mode switch	Switches the protocol of the USB interface between text and binary protocol (e.g. for device configuration)
Voltage	Power supply from plug-in power supply unit 7...18 V

Data acquisition modules

Related articles and extensions LCS

Article	Short description	Explanation
A032123	LCS-01	Climate measuring station, full equipment
A032124	LCS-02	Climate measuring station without radio base station
A033188.x.x	TT-01	all TT-01 based temperature sensors
A038452	SB-22	all SB-22 and SB-3x sensor boxes with air pressure sensor and optional humidity sensor
	SB-3x	
A033189.x.x	WT-01	all WT-01 based temperature sensors
A038501	External humidity sensor in pin form	for the SB connection
A042331	SB-Splitter	for joint connection of an external humidity sensor; and a sensor box on the LCS climate station or UW-3x environmental module
A040099	TT-01 Hub, passive	Distributor and extension up to max. 3 m for up to 5 TT-01 on one connection
A040107	TT-01 Hub, active	Junction and active extension for up to 5 TT-01 to one connection, Cable length freely selectable up to 15 m
A040198	LCS-UW connection cable	LCS-UW connection cable: Connection between climate monitoring station (RS232); and SB input of an UW-3x environmental module
A032612	LCS extension station	LCS Extension for use with LCS-01 or LCS-02; Extension station for max. 10 additional sensors TT-01
Geometric data		
Dimensions	230 mm x 240 mm x 60 mm (W x D x H)	

LCS-Extension

Extension to the LCS climate measuring station

The LCS extension is an expansion module for the LCS climate measuring station that provides
- 10 additional TT-01 temperature sensor connections and
- an additional RS-232 interface

interface to the system.

Article	Short description	Explanation
A032612	LCS-Extension	Climate measuring station extension

Geometric data	
Dimensions	230 mm x 240 mm x 60 mm (W x D x H)

Data acquisition modules

Environmental module UW-3x

The UW-3x environmental module serves as a data acquisition module for installation in the electronic evaluation and supply unit of the SIOS interferometers. Various temperature, air pressure and humidity sensors are available for connection to this module.
The measured values are used internally to correct the laser wavelength in air and are available to the measurement software for further applications.

The UW-3x module is available in different versions that differ in the number and type of connectors.

Connections UW-3x

Connections	Use
T	Connection for the TT-01 based temperature sensors
868-920 MHz Antenna	Radio module for use with WT-01/02 based wireless temperature sensors and the RAS 175 W radio-based rolling angle sensors, max. 15 temperature sensors and 2 rolling angle sensors simultaneously
SB	Connection for the SB-22 or SB-3x sensor box
SC	Output for connection to the SB input of another SIOS electronic evaluation and supply unit (AE). The measured environmental values are then transferred to the other evaluation unit so that it can work with the same sensors.

Connection variants UW-3x

Article	Short description	Anschlüsse
A033419	UW-32	1 x SB, 2 x T
A032471	UW-33	1 x SB, 3 x T
A032472	UW-34	1 x SB, 3 x T, antenna
A032473	UW-35	1 x SC Additional module for a UW-32-34 module
A032474	UW-36	1 x SC, 3 x T Additional module for a UW-32-34 module

Accessories UW-3x

Article	Short description	Explanation
A033188.x.x	TT-01	all TT-01 based temperature sensors
A038452	SB-22	all SB-22 and SB-3x sensor boxes with air pressure sensor and optional humidity sensor
	SB-3x	
A033189.x.x	WT-01	all WT-01 wireless temperature sensors with air or material temperature sensor
A038501	Cable 5 m	Humidity sensor in pin form for the SB connection
A042331	SB-Splitter	for joint connection of an external humidity sensor; and a sensor box on the LCS climate station or UW-3x environmental module
A040099	TT-01 Hub, passive	Distributor and extension up to max. 3 m for up to 5 TT-01 on one connection
A040107	TT-01 Hub, active	Junction and active extension for up to 5 TT-01 to one connection, Cable length freely selectable up to 15 m
A032475		SB-SC connection cable

Measuring probes and sensors

Temperature transducer TT-01

The TT-01 temperature transducer integrates the entire measurement electronics, including the calibration data. The calibration process integrated into the production process calibrates the entire measuring chain from the temperature sensor to the digital result. This offers high precision with easy handling and interchangeability.

Any Pt100 temperature sensor with a 3-5 mm connection cable can be connected to the TT-01 temperature transducer. We offer three different Pt100 designs with different cable lengths as a standard solution. The cable length depends on the application and the installation conditions.

For laser interferometry applications, the air temperature sensor must be placed close to the laser beam. A material sensor is usually attached to the machine bed, the test specimen or near the scales to be calibrated.

The TT-01 temperature transducer is connected to a T-input of the UW-3x environmental module of the electronic evaluation and supply unit of the interferometer or to the LCS precision climate measuring station. Use without one of these base stations is not possible.

Technical data TT-01

Description	Information
Measuring range	+5 ... +35°C or on request
Resolution	0.1 mK
Measurement uncertainty	typically ±50 mK, depending on the calibration
Measuring interval	typically 4 s, interval and internal filter can be adjusted by the manufacturer
Sensor types	Pt100
Cable length	3 m, 6 m, 10 m or on request

Articles and variants TT-01

Article	Short description	Explanation
A033188.x.x	TT-01, stand. Air	Temperature transducer TT-01 Variant: **standard air sensor** Subvariants: Cable length 3 m, 6 m, 10 m or on request
A033188.x.x	TT-01, dyn. air	Temperature transducer TT-01 Variant: **dynamic air sensor** Subvariants: Cable length 3 m, 6 m, 10 m or on request
A033188.x.x	TT-01, material	Temperature transducer TT-01 Variant: **material sensor** Subvariants: Cable length 3 m, 6 m, 10 m or on request

For a description of the temperature sensors available in the variants, see the next Section **„Temperature sensor Pt100"**.

For available calibration options, see section **„Calibrations"** page 32.
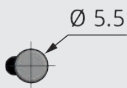
Measuring probes and sensors

Temperature sensor Pt100
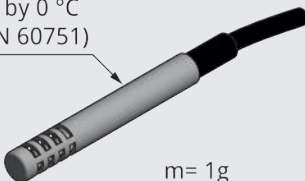for use with the TT-01 temperature transducer

Three different types of Pt100 temperature sensors are offered as standard.

1. Standard air sensor
The standard air sensor is based on an encapsulated Pt100 precision flat measuring resistor.

Ø 5.5

Ø 3

Air temperature sensor
class B by 0 °C
(DIN EN 60751)

Ø 4.5

Ø 5.5

40

m= 1g

2. Dynamic air sensor

The dynamic air sensor is a wound Pt100 measuring resistor in a dynamically favorable needle shape. The design has been optimized with regard to the dynamic properties. The sensor can also be wet-calibrated, which potentially reduces the measurement uncertainty during calibration and makes it unproblematic to use in a humid environment. This design is highly recommended for applications as a wavelength correction sensor for interferometers in a forced-air environment (e.g. actively air-conditioned measuring rooms).

Ø 1.5

Ø 6

33.5

90

m=9 g
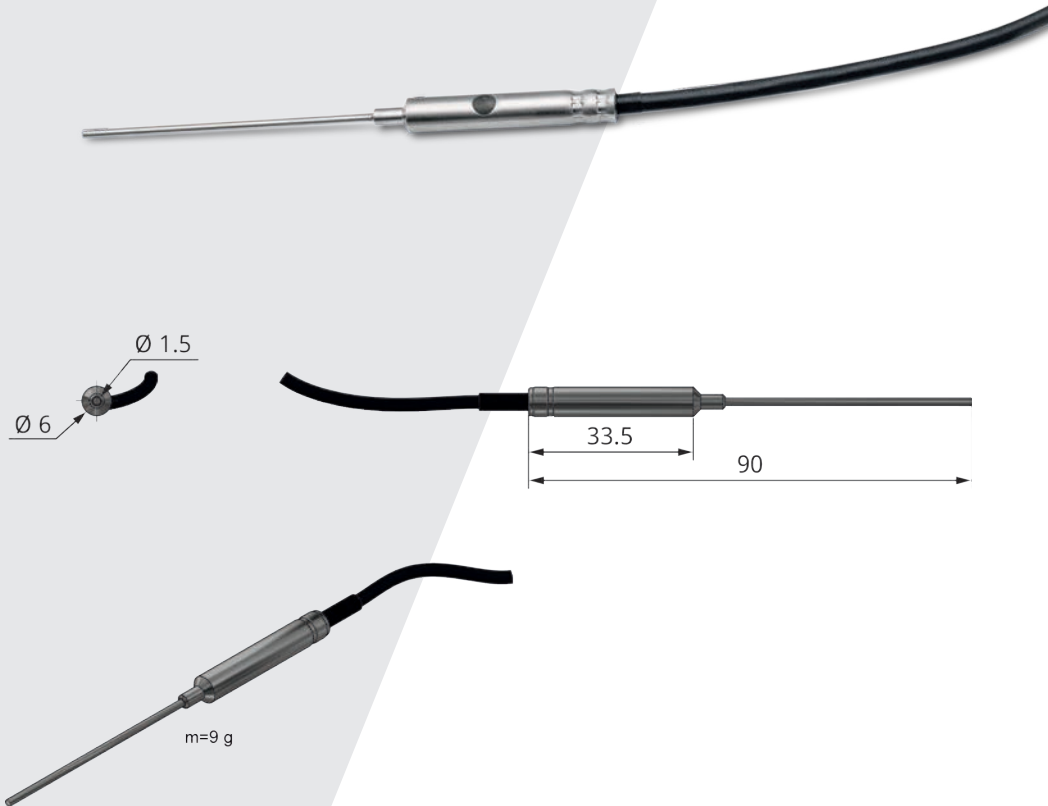
Measuring probes and sensors

3. Material temperature sensor

The material temperature sensor is a Pt100 precision flat measuring resistor in a small aluminum housing. The housing is equipped with magnets for attachment to ferromagnetic materials and a hole for screwing on.

These temperature sensors can be ordered as variants with the TT-01 temperature transducer or the WT-01 wireless temperature sensor.

3.75
14
7.5
Ø 4
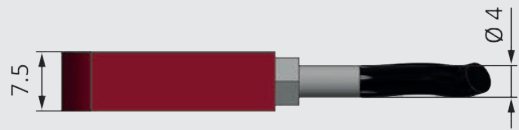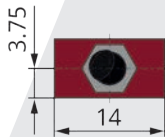
Material sensor
class B by 0°C
(DIN/EN 60751)

m=6 g

27
4
Ø 6.4
4x Magnetic foot
for fixing
10
14
7
17.5
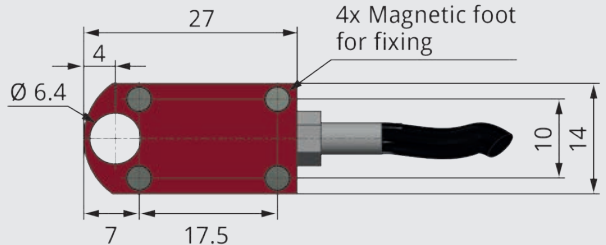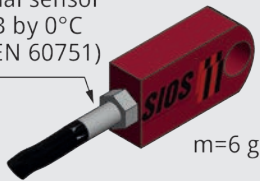
Z-axis

Y-axis

X-axis

Air temperature

Temperature sensor

Machine table

Measuring probes and sensors

Wireless temperature sensor WT-01

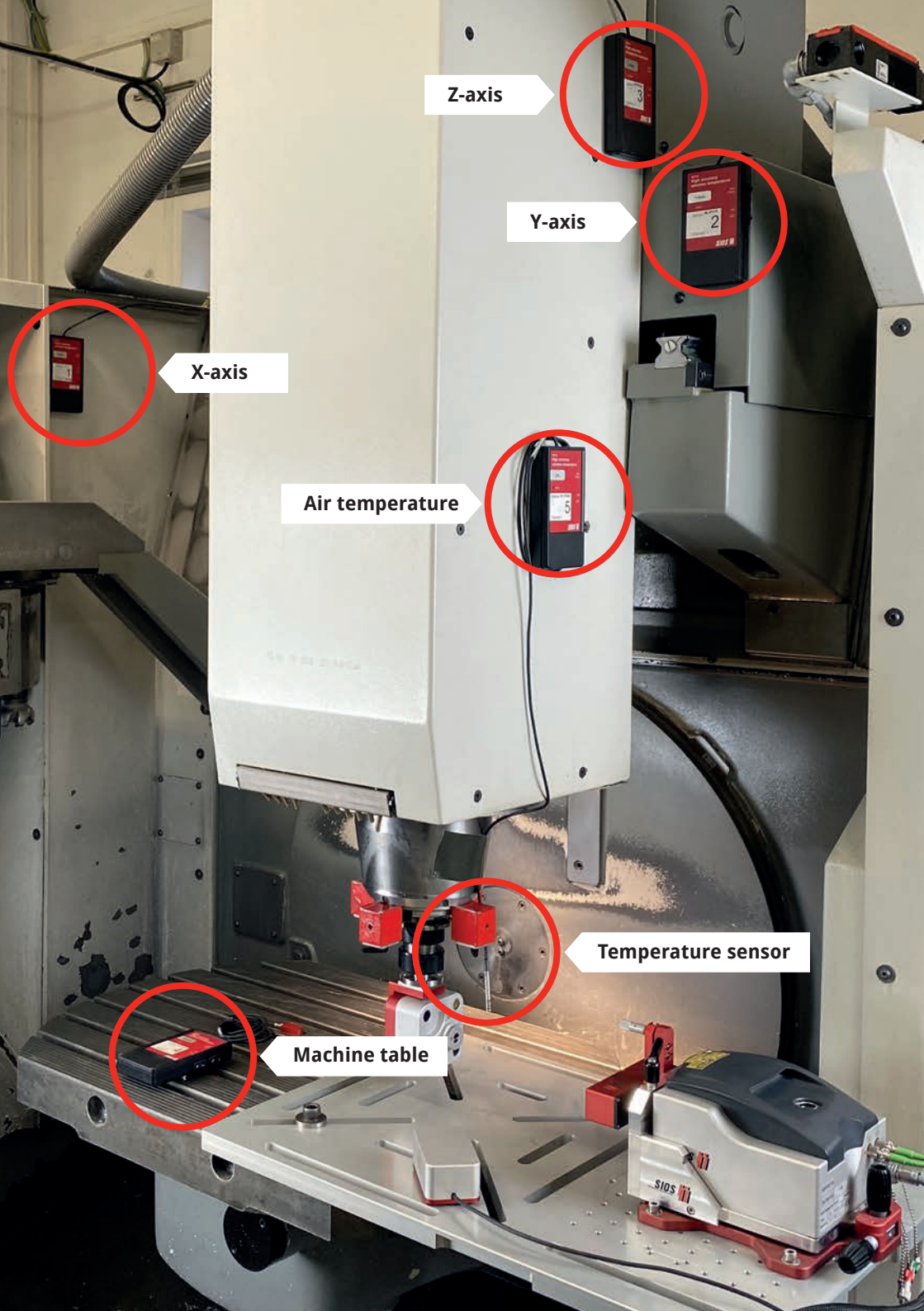Wired temperature sensors potentially enable simple operation and precise measurements. In some applications, however, they are rather impractical, e.g. at remote or difficult to access measuring points or for short-term measurement setups.
Our WT-01 wireless temperature sensors offer an ideal solution by forming a sensor network with up to 15 measuring points with a typical battery life of approx. one month.

The WT-01 wireless temperature sensor can be connected to any Pt100 temperature sensor with a 3 mm connection cable. As a standard solution, we offer three different Pt100 designs with cable lengths of 1 m (material sensor) and 1.5 m (air sensor). Customized lengths are available on request.

The wireless temperature sensor WT-01 requires a corresponding base station, which is integrated in the environmental module UW-34, the climate measuring station LCS-01 and the sensor box SB-32.

Technical data WT-01

Description	Information
Measuring range	+5 ... +35°C or on request
Resolution	1 mK
Measurement uncertainty	typically ±50 mK, depending on calibration
Measuring interval	typically 10 s, on Japan channels: 20 s, Interval and internal filters can be customized by the manufacturer
Frequency ranges	EU: 868 MHz, USA/Canada: 912 MHz, Japan: 920 MHz, 3 channels each
Power supply	9 V block battery, sufficient for approx. 1 month of operation
Sensor network	Up to 15 WT-01 wireless temperature sensors on one channel with one base station
Temperature sensor types	Pt100
Cable length	Material sensor: 1 m, air sensor: 1.50 m, 3 m or 6 m

Articles and variants WT-01

Article	Short description	Explanation
A033189.x.x	WT-01, stand. Air	Wireless temperature sensor WT-01 Variant: **standard air sensor** 1.5 m
A033189.x.x	WT-01, dyn. air	Wireless temperature sensor WT-01 Variant: **dynamic air sensor** 1.5 m
A033189.x.x	WT-01, material	Wireless temperature sensor WT-01 Variant: **material sensor** 1 m

For a description of the temperature sensors available in the variants, see the next Section **„Temperature sensor Pt100"**.

For available calibration options, see section **„Calibrations"** page 32.

Measuring probes and sensors

Sensor box SB-22

The sensor boxes combine precision air pressure transducers with a sensor for relative humidity. They can be connected to the environmental modules UW-32 to UW-34 and to the LCS climate measuring station.

The extraordinarily high accuracy of the air pressure measurement of ±50 Pa is achieved by a special calibration procedure during production.

The sensor boxes can be ordered with different cable lengths. As a rule, the standard connection length of 3 m is sufficient, as the sensor box must be positioned directly next to the interferometer. Positioning in the same room, for example at the height of the measuring section and as far away as possible from heat sources, is sufficient.

Technical data SB-22

Air pressure measurement	
Measuring range	70 000 ... 110 000 Pa (700 ... 1100 mBar)
Resolution	1 Pa (0.01 mBar)
Measurement uncertainty	±50 Pa (±0.5 mBar)
Humidity measurement	
Measuring range	10 - 90 % rH (3...99 % with limited measurement uncertainty)
Resolution	1 % rH
Measurement uncertainty	±5 % rH
Geometric and electronic data	
Dimensions	85 mm x 50 mm x 35 mm (W x D x H)
Connection cable	3 m or 6 m for connection to the SB input of the UW-3x environmental module and to the LCS climate measuring station

Articles and variants SB-22

Article	Short description	Explanation
A038452.x	SB-22	Sensor box with humidity sensor
Geometric data		
Dimensions	50 mm x 85 mm x 35 mm (W x D x H)	

For available calibration options, see section **„Calibrations"** page 32.

Measuring probes and sensors

Sensor box SB-3x

The sensor boxes of the SB-3x series are comparable to the SB-22, but in addition to a precision air pressure sensor and a sensor for relative humidity, they contain additional connection sockets for wired temperature sensors based on the TT-01 temperature transducer and a WT-01 wireless base module for a network of up to 15 wireless temperature sensors. It can be connected to the SB connection of the UW-3x environmental measurement modules or to the P/H connection of the LCS climate measuring station.

An extended version of the sensor box also contains connection sockets for the wired connection of sensors for rolling angle measurement. The wireless versions of the RAS 175 W roll angle sensors are also connected via the SB-3x wireless module.

The SB-3x sensor box is designed for installation directly in the measuring volume. This means that shorter Pt100 sensors can be used and any electromagnetic shielding of the measuring volume does not hinder the use of the wireless temperature sensors.

Technical data SB-3x

Air pressure measurement	
Measuring range	70 000 ... 110 000 Pa (700 ... 1100 mBar)
Resolution	1 Pa (0.01 mBar)
Measurement uncertainty	±50 Pa (±0.5 mBar)
Humidity measurement	
Measuring range	10 - 90 % rH (3...99 % with limited measurement uncertainty)
Resolution	1 % rH
Measurement uncertainty	±5 % rH
Geometric and electronic data	
Dimensions	85 mm x 50 mm x 35 mm (W x D x H)
Connection cable	3 m, 10 m or on request for connection to the SB input of the UW-3x environmental measuring module and to the LCS climate measuring station
Additional connections	3 x T for TT-01 based temperature sensors optional 1 antenna / base station for WT-01 based wireless temperature sensors, optional 2 rolling angle sensors RAS 175 W

Articles and variants SB-3x

Article	Short description	Explanation
A041880	Sensor box SB-32	Sensor box with air pressure and humidity sensor and connections for 3 temperature sensors TT-01
A042870	Sensor box SB-33	Sensor box with air pressure and humidity sensor as well as 2 connections for RAS 175 W rolling angle sensors and connections for 3 temperature sensors TT-01
A041890	Sensor box SB-34	Sensor box with air pressure and humidity sensor as well as radio module for WT-01 and connections for 3 temperature sensors TT-01
A041891	Sensor box SB-36	Sensor box with air pressure and humidity sensor as well as radio module for WT-01 and connections for 3 TT-01 temperature sensors and 2 connections for RAS 175 W rolling angle sensors

For available calibration options, see section

Measuring probes and sensors

Humidity sensor in pin form

The external humidity sensor is always used when

- no air pressure sensor is required and therefore the use of a sensor box is not is not required,
- the humidity is to be measured at a specific location that is not accessible to the sensor box is not accessible for the sensor box (small measuring chambers etc.),
- a higher measuring dynamic is required and/or
- a separate calibration is required.

The same sensor is used in the humidity sensor as in the sensor boxes. The measuring uncertainty is therefore comparable.

The humidity sensor in pin form can be connected to the SB input of the electronic evaluation and supply unit (AE) of the interferometer or to one of the P/H inputs of the LCS climate measuring station instead of the sensor box.

Technical data humidity sensor

Air pressure measurement	
Measuring range	10 - 90% rH, (3...99% with limited measurement uncertainty)
Resolution	1% rH
Measurement uncertainty	±5% rH
Geometric and electronic data	
Dimensions	⌀ 8 mm x 65 mm
Connection cable	5 m for connection to the SB input of the UW-3x environmental measuring module and to the LCS climate measuring station

Article and variant Humidity sensor

Article	Short description	Explanation
A038501	Humidity sensor	Humidity sensor in pin form

For available calibration options, see section **„Calibrations"** page 32.

Accessories

Hub TT-01

Various sensor connections can be extended using splitters. 5-way TT-01 hubs are available for the connections (T) for the TT-01 temperature sensors. These can be used to connect up to 5 TT-01 temperature sensors to one T-connection of the UW-3x interferometer modules, the SB-3x sensor box or the LCS climate measuring station. The TT-01 Hub is available in two versions. The passive version is available with cable lengths from 0.3 to 3 m. With the active version, the TT-01 Hub can be placed up to 15 m away from the UW-3x, SB-xx or LCS.

Article	Short description	Explanation
A040099	TT-01 Hub, passiv	Distributor and extension up to max. 3 m for up to 5 TT-01 on one connection
A040107	TT-01 Hub, aktiv	Junction and active extension for up to 5 TT-01 to one connection, Cable length freely selectable up to 15 m
Front side		
T	5 Connections for temperature transducer TT-01	
USB	Connection to the PC, primarily for the LCS-Desk software	
Back side		
COM-Port	RS-232 for data transfer, configurable as text or binary protocol	
Extension	Extension socket for connecting an LCS-03 extension station	
Mode switch	Switches the protocol of the USB interface between text and binary protocol (e.g. for device configuration)	
Voltage	Power supply from plug-in power supply unit 7...18 V	

SB-Splitter

Even if no additional sensor connections are required, the TT-01 hubs are suitable, for example, for routing the sensor connections together through a vacuum feed-through or into a remote measuring chamber.

The sensor box connections (SB) on the UW-3x environmental modules and the LCS climate measuring station have separate data lines for the sensor boxes and external humidity sensors. To connect an external humidity sensor and a sensor box to the SB socket at the same time, there is an SB splitter that distributes the signals to two sockets.

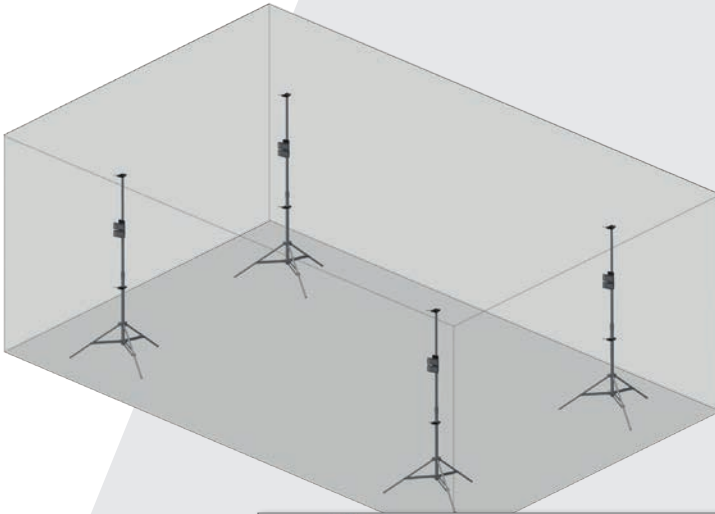| Article	Short description	Explanation
A042331	SB-Splitter	for joint connection of an external humidity sensor; and a sensor box on the LCS climate station or UW-3x environmental module

Measuring room monitoring

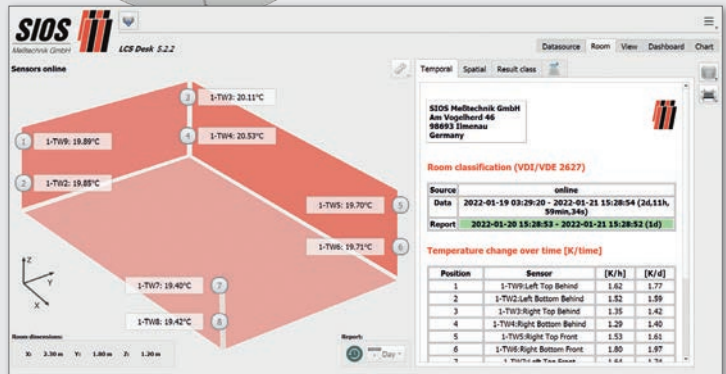### LCS-Temp - Set for measuring room monitoring and qualification

One application of the LCS climate measuring station is the classification and monitoring of measuring rooms in accordance with VDI/VDE 2627.

The LCS-Temp standard set contains eight temperature sensors with factory test certificate in a practical transport case, four tripods and the LCS-Desk software extension. According to the standard, four sensors are also sufficient for pure monitoring.

The touchscreen panel PC for wall mounting is ideal for the permanent installation of measuring room monitoring. This is supplied ready to use, with a Linux-based operating system and a special touchscreen-compatible LCS-Desk version.

Schematic representation of the sensors in the room for monitoring the measuring environment.

Article LCS-Temp

Article	Short description	Explanation
A040366	LCS-Temp Set	Device set for mobile indoor climate classification
A041113	LCS-Desk softwar option VDI2627	Software extension for measuring room classification for LCS-Desk

Associated articles and extensions LCS-Temp

| Article	Short description	Explanation
A043130	Panel-PC	Panel PC with touchscreen for wall mounting with pre-installed LCS-Desk software (LCS-Desk software option VDI2627 not included)
A040633		Transport case for LCS and sensors
A033188.x.x	TT-01	all TT-01 based temperature sensors
	SB-xx	all SB-22 and SB-3x sensor boxes with air pressure sensor and humidity sensor
A033189.x.x	WT-01	all WT-01 wireless temperature sensors with air or material temperature sensor
A040329	Tripod for WT-01	Tripod for temperature sensors in the corners of the room with sensor holders
A042331	SB-Splitter	for joint connection of an external humidity sensor; and a sensor box on the LCS climate station or UW-3x environmental module
A040099	TT-01 Hub, passive	Distributor and extension up to max. 3 m for up to 5 TT-01 on one connection
A040107	TT-01 Hub, active	Junction and active extension for up to 5 TT-01 to one connection, Cable length freely selectable up to 15 m
A040198	LCS-UW connection cable	LCS-UW connection cable: Connection between climate monitoring station (RS232); and SB input of an UW-3x environmental modul
A032612	LCS extension station	LCS Extension for use with LCS-01 or LCS-02; Extension station for max. 10 additional sensors TT-01

Software

LCS-Desk

The LCS-Desk software is included with the LCS climate measuring station and is used to collect, display and save the measured values.

It is possible to display individual measured values as a table, large figures visible from a distance or as a time curve. The user interface can be customized. The program is suitable for short-term measurements in the laboratory as well as for long-term recordings.

The measured values can be saved locally as a text file or, for example, in an external time series database such as InfluxDB. Saving can be continued automatically when the program is restarted.

The LCS climate monitoring station can also be used without the LCS-Desk software via its serial interfaces. In this case, LCS-Desk only serves as a one-time configuration program for the options and communication formats of the LCS climate monitoring station.
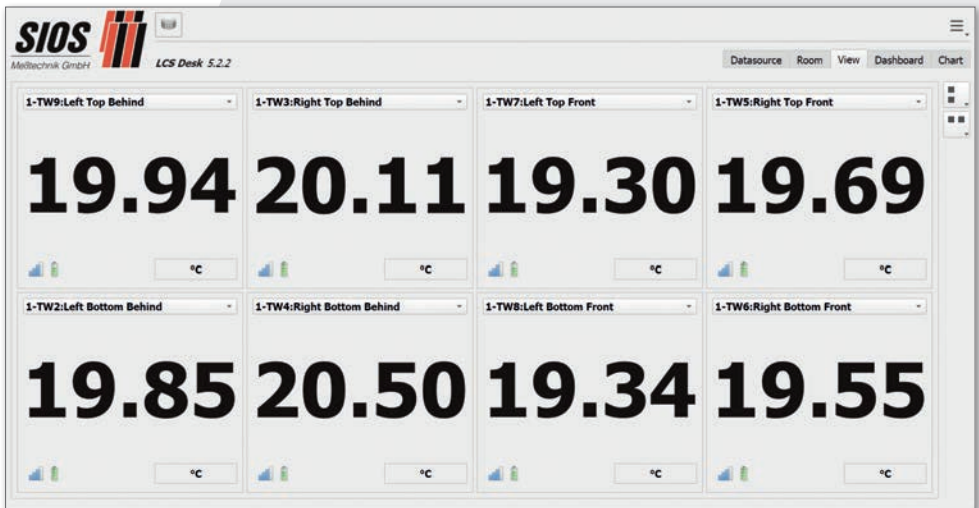
Measured value display in LCS-Desk software
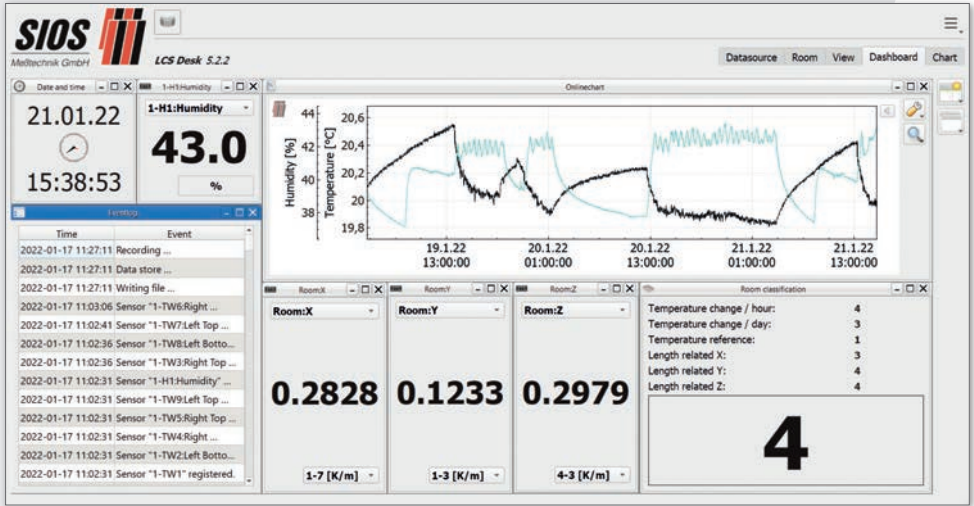
Measured value display with indication of the measuring room class

Data history within a certain period of time

Calibration

Calibration

All SIOS temperature and pressure sensors are calibrated during production to ensure accuracy. The calibration procedures used are based on the best available standards in this field. As a rule, no separate factory test certificate is issued. However, this can be ordered separately and is more cost-effective than recalibration.

All sensors must be recalibrated at regular intervals. Unless otherwise specified for the individual sensors, we recommend an interval of two years. Normally, recalibration only records the condition, but does not change the sensor. However, as the manufacturer, we have the option of recalibrating the sensors and thus potentially increase the accuracy. We do this automatically if the deviation in terms of uncertainty would be too great. If this is not desired (e.g. no readjustment desired), this should be specified when placing an order.

For calibrations at national institutes, please contact us. We will arrange this and, if necessary, support the calibration with the necessary equipment. As such a calibration is cost-intensive, we recommend prior maintenance and calibration as a function check and adjustment if necessary.

Do you have your own calibration laboratory and want to calibrate the sensors yourself? We offer suitable interface hardware (if required) and the software for this.
Please contact us.

| Article	Short description	Explanation
A040367	Factory test certificate (WPZ) TT-01/WT-01 Temperature	Measurement data preparation and issuing of the factory test certificate for temperature for new deliveries TT-01/WT-01
A040368	Factory test certificate (WPZ) TT-01/WT-01 Temperature	Measurement data preparation and issuing of the works test certificate for air pressure for new deliveries SB-22/SB-3x
A032130	WPZ Recalibration temperature	Recalibration and, if necessary, readjustment of a temperature sensor at 15, 20 and 25°C, creation of a factory test certificate
A041442	WPZ Temperature point	Additional freely selectable measuring point for the WPZ calibration of a TT-01 or WT-01 based temperature sensor with a measurement uncertainty of ±50 mK
A031494	WPZ Recalibration air pressure	Recalibration or readjustment of the air pressure sensor of an SB-22 or SB-3x sensor box, creation of a factory test certificate
A019820	WPZ Calibration relative humidity	Calibration of the humidity sensor of a sensor box SB-22 or SB-3x or a humidity sensor in pin form, creation of a factory test certificate
A032131	DAkkS temperature	DAkkS calibration of a TT-01 or WT-01 based temperature sensor at three points with a measurement uncertainty of ±50 mK
A036174	DAkkS temperature point	Additional measuring point for DAkkS calibration of a TT-01 or WT-01 based temperature sensor with a measurement uncertainty of ±50 mK
A030619	DAkkS air pressure	DAkkS calibration of the air pressure sensor of a sensor box SB-22 or SB-3x
A024324	DAkkS humidity	DAkkS calibration of the humidity sensor of an SB-22 or SB-3x sensor box or a sensor in pin form
A040997	Preparation PTB calibration SP 5000 NG, MI series	Testing and calibration of environment/laser at SIOS in preparation for PTB calibration of the overall system
A040998	Preparation PTB calibration SP 15000 C3/C5/C6 NG	Testing and calibration of environment/laser at SIOS in preparation for PTB calibration of the overall system

OEM solutions

OEM solutions

The modular system from SIOS Umweltmesstechnik can also be integrated into other products. This usually requires a version of the LCS climate measuring station base board adapted to the respective requirements. This can also be realized in small quantities with relatively little effort.

Various DLL-based APIs and corresponding interface descriptions are available for integration into the firmware or software of other products.

Please contact us. We will be happy to advise you.
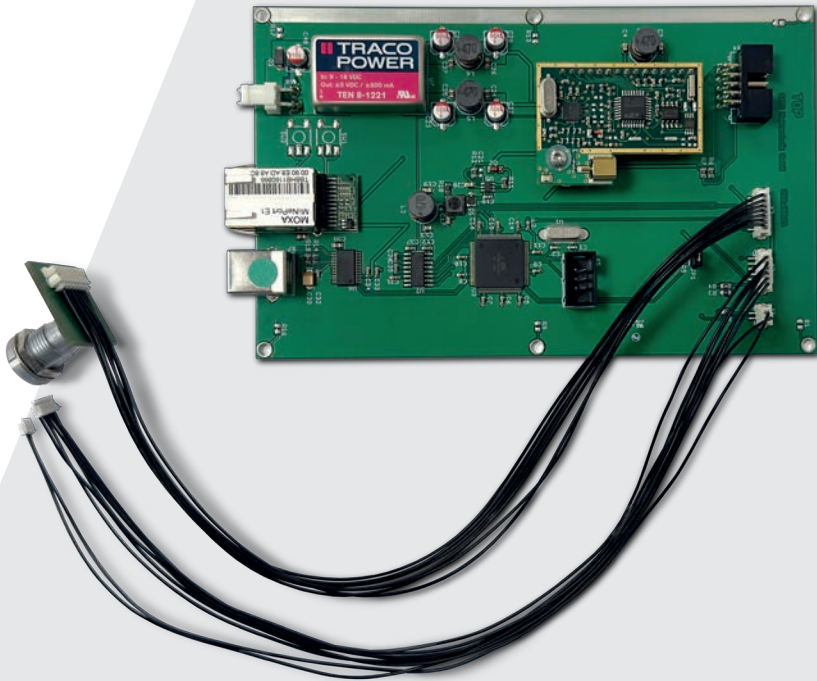
We would be pleased to assist you in solving your measuring tasks.

Rudyard Urtecho
*International sale*s
phone +49 (0) 3677 64 47-33
mobile +49 (0) 1520 41 62 081
e-mail rudyard.urtecho@sios.de

Constanze Christel-Schein
Sales Northern Germany
(postal codes 0 – 5 and Thuringia)
phone +49 (0) 5545 95 06 96
mobile +49 (0) 162 25 53 154
e-mail schein@sios.de

Axel Adams
Sales South Germany
(postal codes 6 – 9 without Thuringia)
phone +49 (0) 3677 64 47-47
mobile +49 (0) 174 831 136 1
e-mail axel.adams@sios.de

Falko Seyfferth
Application Engineer
phone +49 (0) 3677 64 47-49
fax +49 (0) 3677 64 47-8
e-mail falko.seyfferth@sios.de

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We will keep you informed about news, dates and interesting applications from SIOS.

We develop and manufacture laser interferometric measurement technology and precision measuring instruments for calibration and nano metrology.

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Gauging Probe	Nanopositioning
Measurement and Calibration Systems	Stabilized HeNe Lasers
Climate Measuring Station	Measurement Software

For customer-specific versions, OEM applications or integration in special measurement stations, please contact us.

We will be happy to personally assist you in finding solutions for your measuring tasks.

SIOS Meßtechnik GmbH
Am Vogelherd 46
98693 Ilmenau / Germany

phone   +49 (0) 3677 64 47-0
e-mail   contact@sios.de

www.sios-precision.com

April 2024