sauermann®

KCC - TrackLog

LoRa®-Powered Climatic Conditions Data-Loggers

Easy to use

Data integrity: accuracy and consistency over entire life-cycle

Long-distance connectivity

High relative humidity and temperature accuracy

Power saving solution

Features

- LoRaWan™ and Bluetooth® protocols
- Memory capacity: 20 000 points
- 0.01 resolution (temperature and hygrometry)
- 2-line LCD display
- Real time alarms and alerts
- Safety lock wall mount with inviolability system

Technical specifications

Parameter	Accuracy*	Measuring range	Resolution
Temperature	±0.2°C	From -40 to 60°C	0.01°C / 0.01°F
Relative humidity	±1.5% RH** (from 10 to 80% RH and from 10°C to 50°C***) Hysteresis: 0.8% RH at 25°C	From 0 to 100% RH	0.01% RH
Atmospheric pressure	±3 hPa	From 800 to 1100 hPa	1 hPa
CO_2 concentration	±50 ppm ±3% of reading (at 25°C) Temperature dependency: ±1 ppm CO_2/°C	From 0 to 5000 ppm	1 ppm

*All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurement carried out in the same conditions or with calibration compensation.

** Accuracy in RH depends on temperature: typical ±2% RH below 10°C and above 50°C. Time drift: <0.5% RH per year in normal conditions of use (from 5 to 60°C and from 20 to 80% RH, apart from indoor pollutants)

*** For continuous use at values above 80%RH, please consult us.
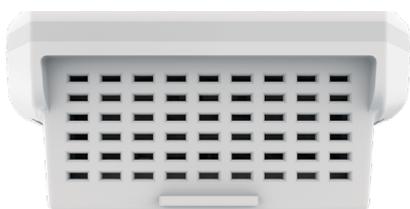
General features

LoRa® frequency	868 Mhz (Europe)
Display	2-line LCD screen Screen dimensions: 49.5 x 45 mm 2 indication LEDs (red and green)
Type of sensor	Temperature: NTC Humidity: Capacitive sensor Atmospheric pressure: piezoresistive CO_2: NDIR
External input	Micro-USB female connector
Recording frequency	From 1 minute to 24 hours
Power supply	2x lithium AA 3.6 V batteries [1]
Battery life	1 year[2]
Protection	IP40
Housing material	ABS housing and compatible with food industry environment
Dimensions	110.2 x 79 x 35.4 mm
Weight (batteries included)	206 g
Operating temperature[3]	From -40 to +60°C[4]
Storage temperature	From -40 to +60°C
Environmental conditions of use	Air and neutral gases Hygrometry: in non-condensing conditions (< 80% RH) Maximum altitude: 2000 m
European Union Directives	2011/65EU RoHS II; 2012/19/EU WEEE; 2014/30/EU EMC; 2014/35/EU

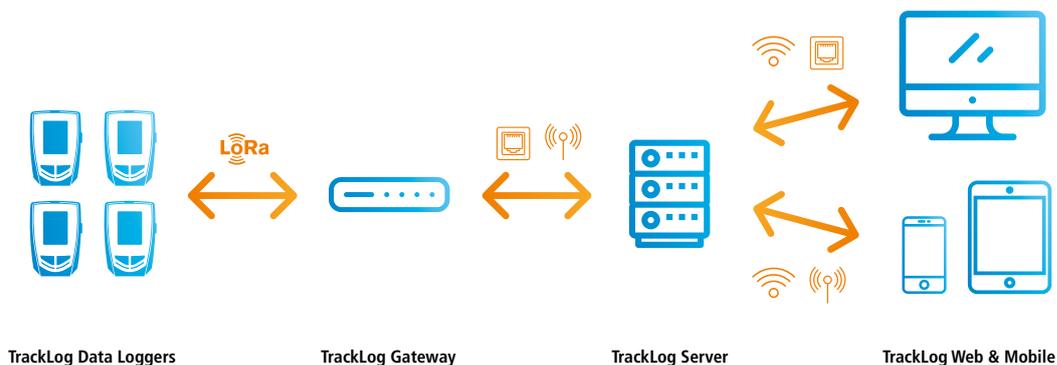[1] We recommend to use high performance batteries as SAFT LS 14500 type when replaced.

[2] On the basis of 1 measurement each for 15 minutes at 25°C.

[3] The screen can be hard to read, and its display speed often slows down at temperatures lower than 0°C. This has no effect on the accuracy of measurements.

[4] Except for CO_2 parameter: 0 to 60°C

Recorder functions

- 4 recording modes: immediate, minimum, maximum and average
- 3 types of dataset starts: by date and time, app (web or mobile) or push-button
- 2 types of dataset stops: by app (web or mobile) or push-button

Kit content

- 1 data logger + 2 batteries + 1 safety lock wall mount with padlock + fixing screws

Accessories

Name	Ref
Gateway	TrackLog Gateway
Cloud subscription offer	See subscription sheet
Calibration certificate	Option
1x AA lithium 3.6 V battery	KBL-AA
Safety lock wall mount with padlock	KAV-320
USB cable	CK-50

What is LoRa® communication?

LoRa® is a physical layer, using radio-frequency bands. LoRa® frequency allows very-long-range connectivity with low power consumption. Data transmitted by an end-node device is received by multiple gateways. Then, each gateway forwards the data packets to a centralized network server.

| TrackLog Data Loggers | TrackLog Gateway | TrackLog Server | TrackLog Web & Mobile |

Source: LoRa® Alliance