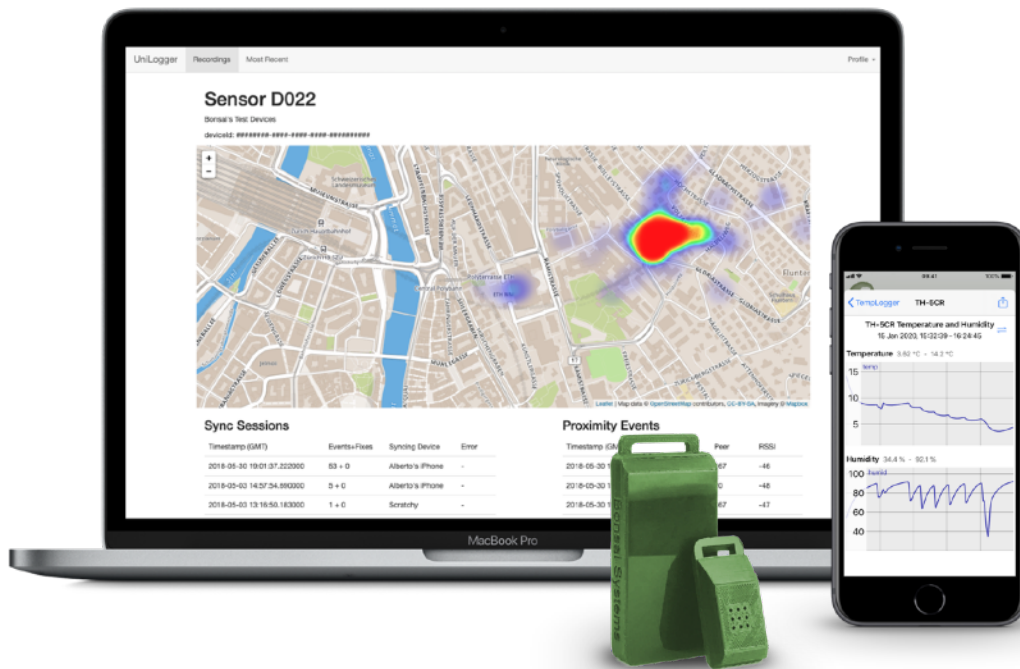# UniLogger by Bonsai Systems®

Universal Data Loggers and Cloud for Industrial Applications

Easy to Use

Start any data logger and download the data with one tap in the Bonsai app. Visualize the data immediately, share with your customers or upload to our Bonsai Secure Cloud for shared access among different stakeholders. Our servers are located in Switzerland!

Variety of Sensors

Our modular loggers measure temperature, humidity, thermal transmittance (U-value), 3d motion/orientation, atmospheric pressure, force, location (GPS) and proximity. Other modalities are available on demand.

Advanced Algorithms

Our expertise in signal processing and machine learning allows us to deploy algorithms directly in the sensor loggers for on-board detection of events, from simple threshold crossings to falls or complex signal patterns.

Customization

Every customer has unique needs. We tailor our modular hardware, software and services quickly and cost-efficiently to fulfil individual customer requirements while still granting high scalability. Special services, like pushing data to external systems (e.g. SAP) or performing automatic data analyses are available upon request.

Secure Data

All data is securely signed by the sensor hardware and cannot be tampered with afterwards. If desired, access to the sensor's data can be restricted by strong authentication.

Intuitive Visualizations

Key to a good understanding of large and complex data sets is an intuitive visualization. Take advantage of our expertise in handling multi-modal data sets and benefit from easily understandable data representations — in mobile apps and in the web browser.

Bonsai Systems®

Flexible and Transparent Pricing Schemes

Choose between a pay-per-use scheme or a flat-rate "**no worries**" subscription. With the flat-rate subscription you just pay a monthly fee per sensor and you get the hardware, relevant services and a life-time warranty on the hardware.

For inquiries and quotes please contact us at info@bonsai-systems.com.

Features and Technical Data	
Measured Parameters	Temperature (max accuracy 0.2°C) Humidity Thermal transmittance (U-value) 3d motion/orientation Atmospheric pressure Force (max accuracy 0.01 N) GPS location (max accuracy 5 m) Proximity (max accuracy ca. 1 m)
Calibration Certificate	On demand we provide a calibration certificate issued by an external body operating according to scientific standards
Logger Configuration	
Measurement Interval	1 second to 1 month
Delayed Recording	Any delay
Data Export from App	CSV (Excel), Cloud upload, other sharing possibilities
LED signalling	LEDs can signal customer-specified events (e.g. alarms)
Operational Characteristics	
Storage	Up to 4 million data points (depending on data type)
Connectivity	Bluetooth 4.0 Low Energy (BLE)
Run-time	Up to 10 years (depending on battery/measurement setup)
Stand-by/Shelf Time	Up to 10 years (depending on battery type)
Battery	
Battery Type	Rechargeable (LiPo, charge over micro-USB port) / Coin cell / Alkaline / Industrial high capacity
Casing and Dimensions	
Case Material	HT-ABS, optionally tamper-evident
Size	Down to 32 x 17 x 10 mm, depending on battery and sensor modalities
Grading	Up to IP67
Marking	Unique ID (with QR Code)
Certifications/Compliance	CE, FCC, EN 61010-1, optionally EN 12830, others on request
In-house Development	Bonsai develops all of its sensors, firmware, casings, algorithms and cloud solutions in house. This high vertical integration enables high configurability and very fast response times in the development and customization of specific products.

Bonsai Systems®