



- LIBERO GL**
- > 100% calibrated & compliant
- > Flight-proof; no DGR declaration required
- > Multi-level alarm criteria



TECHNICAL SPECIFICATIONS

# LIBERO GL

Multi Use Real-Time Temperature Data Logger

With its unbeatable runtime of more than one year, LIBERO GL is the flexible and compliant real-time temperature data logger for various applications. The internal temperature sensor is highly accurate and comes with a 100% sensor calibration. In addition to temperature, LIBERO GL monitors the location of the shipment. LIBERO GL features a powerful, interactive display to facilitate your shipment process. LIBERO GL uploads all measured data automatically to a save cloud environment where all shipments are monitored. The automatic flight detection and the abandonment of lithium batteries allows the usage for airfreight without cumbersome dangerous goods declaration. Up to 16.000 temperature values can be stored on the logger to temporarily buffer measurement data. At the end of the shipment release products directly based on the OK or ALARM status on the display and download the PDF report from the cloud. Optionally, a robust, lockable bracket is available. The multi use capability of the LIBERO GL significantly lowers cost per use, making the LIBERO GL a versatile, cost effective choice.



we prove it.

SWISS QUALITY



- > Real-time insights of your valuable shipments on road, air and sea
- > Highly accurate and 100% calibrated temperature sensor
- > Simple and safe in use and application
- > Fully compliant with industry guidelines

## Technical Specification LIBERO GL

<b>Type</b>	Wireless Data logger with internal temperature sensor
<b>Application area</b>	Transport Monitoring: applications with stability data or other allowed time/temperature excursions
<b>Recording options and mode</b>	Multiple use: start/stop
<b>Sensors</b>	Temperature sensor   Geographical location
<b>Measurement range</b>	Measurement range of internal sensor: -30 °C..+70 °C
<b>Application range</b>	0 °C..+55 °C (only short term use above and below application range allowed)
<b>Measurement accuracy</b>	<b>Internal Sensor</b> ±1.0 °C for -30.0 °C..-20.1 °C ±0.5 °C for -20.0 °C..-0.1 °C ±0.4 °C for 0.0 °C..+65.0 °C ±0.5 °C for +65.1 °C..+70 °C
<b>Resolution</b>	0.1 °
<b>Measurement interval</b>	15 to 60 minutes, user programmable
<b>Cellular network</b>	LTE-M and NB-IoT
<b>Communication interval</b>	2 to 6 hours, user programmable, event-driven immediate communication (e.g. excursion, last will)
<b>Measurement capacity</b>	16.000 measurement values
<b>Battery life</b>	Up to 14 months (+ 12 months shelf life) Intensified communication behavior (e.g. bad connection or local provider settings) can shorten battery life
<b>Battery type</b>	Alkaline batteries (non-replaceable), exempt from DGR declaration
<b>Configurable alarms</b>	2 temperature thresholds with alarm delay
<b>Start-up delay</b>	User configurable based on time, or button
<b>Display</b>	Multifunction LCD, size: 42 × 20 mm
<b>Certificate</b>	Calibration certificate (3-points); additional calibration points or ISO 17025 certification <sup>1</sup> available Validation Certificate
<b>Traceability</b>	Unique ID number (traceable to component level)
<b>Reporting</b>	Real-time visibility and notification about temperature excursions or occurrences via an ELPRO cloud solution
<b>Case   dimension   weight</b>	ABS plastic material   100 × 65 × 19 mm (3.9 x 2.5 x 0.7 in)   125 g (4.4 oz)
<b>Conformity</b>	CE   FCC   ICES   RoHS   UN38.3   WEEE
<b>Standards</b>	EN 12830   RTCA DO-160 (EMC)   GAMP5

<sup>1</sup> Reported without customer contact information according to ISO 17025 7.8.1.3 due to data protection requirements.