



- LIBERO GE**
- > 100% calibrated temperature sensor
- > External Pt100 probe
- > Flight-proof; no DGR declaration required

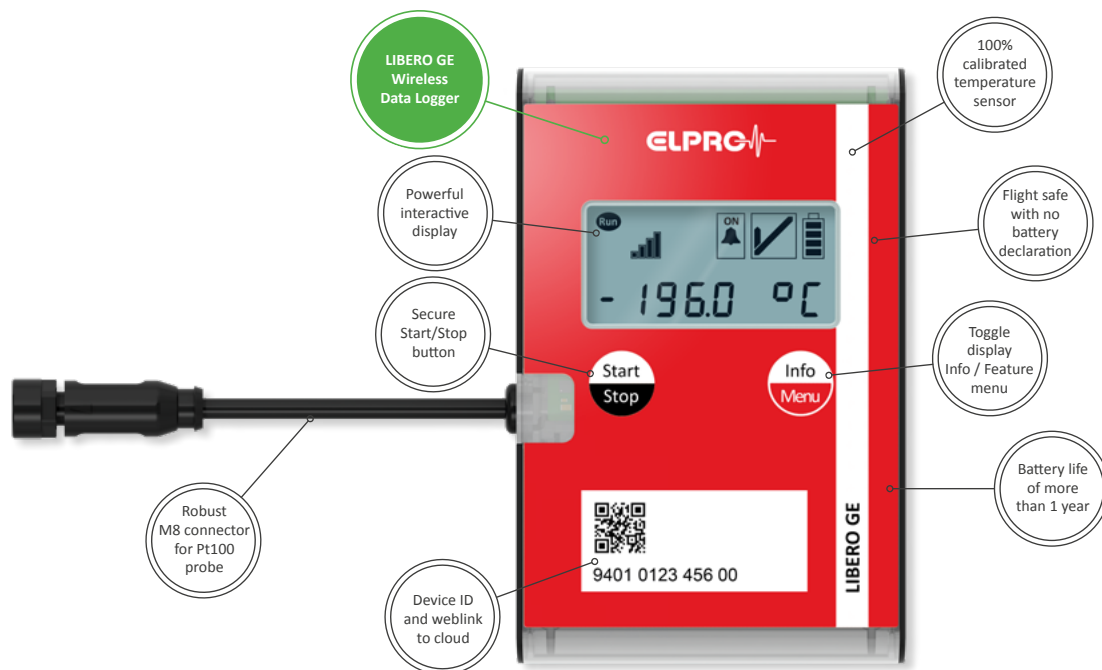


TECHNICAL SPECIFICATIONS

LIBERO GE

Wireless Data Logger with Internal Sensor and External Pt100 Probe

LIBERO GE is the real-time logger that takes your cold chain monitoring to the next level. LIBERO GE covers all kind of applications for transport monitoring and simplifies the shipment process for products with known stability data. The internal temperature sensor is highly accurate and comes with a 100% sensor calibration. Having an external probe (Pt100 probe with M8 connector for safe temperature data transfer), LIBERO GE covers a wide measurement range from -200 °C..+400 °C and allows also monitoring of ultra-low freezers and cryo containers. LIBERO GE is reconfigurable and reusable with a battery life of more than a year. LIBERO GE 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. Having a display, LIBERO GE provides full transparency to the user at any time. Up to 16.000 temperature values can be stored on the logger to temporarily buffer measurement data. A robust, lockable bracket is available in addition. 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.



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 GE

Type	Wireless Data logger with internal sensor and external Pt100 temperature probe (probe not included)	
Application area	Transport Monitoring, (Cryo/Dry ice) Container Monitoring	
Recording options and mode	Multiple use: start/stop	
Sensors	Temperature sensor External probe (Pt100, requires M8 connector) Geographical location	
Measurement range	Measurement range (depending on probe): -200 °C..+400 °C Measurement range of internal sensor: -30 °C..+70 °C	
Application range	0 °C..+55 °C (only short term use above and below application range allowed)	
Measurement accuracy	Internal sensor ±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	External probe (system accuracy*) ± 1.4 °C in the range of -200.0 °C..-100.1 °C (Class B) ± 1.0 °C in the range of -100.0 °C..-50.1 °C (Class B) ± 0.4 °C in the range of -50.0 °C..-10.1 °C (Class A) ± 0.3 °C in the range of -10.0 °C..+25.0 °C (Class A) ± 0.5 °C in the range of +25.1 °C..+100.0 °C (Class A) ± 0.7 °C in the range of +100.1 °C..+200.0 °C (Class A) ± 1.1 °C in the range of +200.1 °C..+400.0 °C (Class A) <small>*Includes data logger and external Pt100 probe of stated class</small>
Resolution	0.1 °	
Measurement interval	15 to 60 minutes, user programmable	
Cellular network	LTE-M and NB-IoT	
Communication interval	2 to 6 hours, user programmable, event-driven immediate communication (e.g. temperature excursion)	
Measurement capacity	16.000 measurement values	
Battery life	Up to 14 months (+ 12 months shelf life) Intensified communication behavior (e.g. bad connection or local provider settings) can shorten battery life	
Battery type	Alkaline batteries (non-replaceable), exempt from DGR declaration	
Configurable alarms	2 temperature thresholds with alarm delay for internal and external sensor	
Start-up delay	User configurable based on time, temperature or button	
Display	Multifunction LCD, size: 42 × 20 mm	
Certificate	Calibration certificate (3-points); additional calibration points or ISO 17025 certification available Validation Certificate	
Traceability	Unique ID number (traceable to component level)	
Reporting	Real-time visibility and notification about temperature excursions or occurrences via an ELPRO cloud solution	
Case dimension weight	ABS plastic material 100 × 65 × 19 mm (3.9 x 2.5 x 0.7 in) 132 g (4.7 oz)	
Conformity	CE FCC ICES RoHS UN38.3 WEEE	
Standards	EN 12830 RTCA DO-160 (EMC) GAMP5	

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