

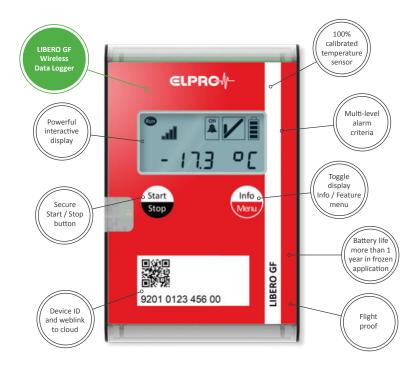


TECHNICAL SPECIFICATIONS

LIBERO GF

Multi Use Real-Time Temperature Data Logger

LIBERO GF is the real-time logger for the temperature monitoring of frozen shipments. The internal temperature sensor is highly accurate and comes with a 100% sensor calibration. With an ensured runtime of more than a year up to -35 °Celsius, LIBERO GF is ideal for the monitoring of your frozen temperature sensitive products. Allowing to set alarm criteria, but also does LIBERO GF monitor the location of the shipment. LIBERO GF features a powerful, interactive display to facilitate your shipment process. LIBERO GF uploads all measured data automatically to a save cloud environment where all shipments are monitored. LIBERO GF ideally complements the existing (USB) data logger portfolio. 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.



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 GF

Туре	Wireless Data logger with internal temperature sensor
Application area	Transport Monitoring: Global distribution of temperature sensitive products, frozen applications
Recording options and mode	Multiple use: start/stop
Sensors	Temperature sensor Geographical location
Measurement range	Measurement range of internal sensor: -40 °C+70 °C
Application range	-35 °C+55 °C (only short term use above and below application range allowed)
Measurement accuracy	Internal Sensor ±1.0 °C for -40.0 °C20.1 °C ±0.5 °C for -20.0 °C0.1 °C ±0.4 °C for 0.0 °C+65.0 °C ±0.5 °C for +65.1 °C+70 °C
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	Lithium-Metal batteries (non-replaceable), UN3091 (contained in equipment)
Configurable alarms	2 temperature thresholds with alarm delay
Start-up delay	User configurable based on time, or button
Display	Multifunction LCD, size: 42 × 20 mm
Certificate	Calibration certificate (3-points); additional calibration points or ISO 17025 certification ¹ 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) 109 g (3.8 oz)
Conformity	CE FCC ICES RoHS UN38.3 WEEE
Standards	EN 12830 RTCA DO-160 (EMC) GAMP5
	1

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