



TECHNICAL SPECIFICATION

# LIBERO ITS

Smart, electronic indicator for single use

The compact electronic temperature indicator is the ideal solution for seamless temperature monitoring throughout the entire supply chain – from pharmaceutical products to clinical trials. Designed for clinical kits it can be easily attached to individual units and enables continuous monitoring for up to four years. Its integrated stability budget, supporting up to five temperature zones, works in tandem with intuitive LED indicators to ensure fast and reliable Go/No-Go decisions – exactly where product safety and quality matters most.



we prove it.

SWISS QUALITY



- > Thin and small, durable, smart and cost effective
- > Quick and easy to start
- > Ideal for quick go/no-go decisions
- > 100% calibrated, conforms to regulatory guide lines
- > Temperature monitoring up to the last mile

## Technical Specification LIBERO ITS

<b>Type</b>	Smart, electronic indicator for single use
<b>Application area</b>	Cold Chain Monitoring without need for temperature graph or tabular data <ul style="list-style-type: none"><li>- Last mile, direct-to-patient</li><li>- life-time monitoring on box level</li></ul>
<b>Recording options and mode</b>	Start on tab break; default: no stop. Optional: stop by button.
<b>Operating range</b>	-30 °C..+70 °C
<b>Measurement accuracy</b>	±0.5 °C in the core range of -10 °C to +50 °C Typical accuracy (95 % of all indicators) ±0.4 °C in the core range of -10 °C to +50 °C
	Accuracy outside core temperature range: ±1.0 °C from -30.0 °C to -10.1 °C as well as +50.1 °C to +70.0 °C
<b>Resolution</b>	0.1 °
<b>Measurement interval</b>	1 minute
<b>Expiry date and battery life</b>	<ul style="list-style-type: none"><li>- Auto expiry date management: Expired indicator cannot be started anymore</li><li>- Started indicator runs for maximum 4 years (or optional: until stopped)</li><li>- Option «always blink» and use in frozen applications can limit the battery</li></ul>
<b>Battery type</b>	Button cell contained in equipment, UN3091, exempt from DGR declaration
<b>Certificates</b>	Ilac / NIST / ISO 17025 traceable production calibration certificate
<b>Programmable alarms</b>	5 temperature alarm levels with alarm delay options (single or cumulative)
<b>Start-up delay</b>	0 minutes to 45 days configurable
<b>Display</b>	Alarm status shown by LED (no display)
<b>Status visibility</b>	<ul style="list-style-type: none"><li>- Status: Ready, Operating, Stopped, EOL</li><li>- OK, ALARM</li></ul>
<b>Traceability</b>	Device ID number as data matrix (traceable to component level)
<b>Case   dimension   weight</b>	Metal housing   26 × 28 × 2.8 mm (1.0 × 1.1 × 0.1 inch)   4.5 g (0.16 oz)
<b>Conformity</b>	CE   EN12830   WEEE   RoHS   RTCA DO-160 (EMC)   UN 38.3   Safe Transport of Chemical Goods
<b>Indicator configuration</b>	LIBERO ITS standard profiles: <ul style="list-style-type: none"><li>- Cool (2-8 °C)</li><li>- Room (15-25 °C)</li><li>- No Freeze (above 0 °C)</li></ul> Customized configuration profiles available on request.