



**LIBERO CI**  
 - Multi-Level  
 PDF Indicator  
 - Fully user  
 configurable



TECHNICAL SPECIFICATIONS LIBERO CI

## LIBERO CI

### User configurable PDF Indicator with cold chain database in the cloud

LIBERO CI accepts any temperature profile at the time of use with up to eight alarm levels, MKT or duration as alarm criteria. No need to keep different indicators in stock, simply apply the correct temperature profile, add shipment information and send the indicator together with your product. Decide how much information should be visible for the recipient or if a simple OK or ALARM is all the recipient should see.

Follow all your shipments in the same database, both LIBERO CI Indicator and LIBERO CS and CB PDF Loggers are compatible with liberomanager, ELPRO's cold chain database.

**USB Interface**

**Any configuration on one device**

**Secure Start/Stop button**

**Auto expiry date management**

**LIBERO CI PDF Indicator**

**OK and ALARM indicator**

**Shipment information**

**Multi-level alarm statistics**

**MKT and duration**

**LIBERO CI PDF Report**

we prove it.



- Simple and safe, no equipment, no software
- Quick implementation by any 3rd party anywhere
- Compatible with liberoMANAGER cold chain database
- 100% calibrated sensors and electronics
- Fully compliant with industry guidelines

## Technical specifications LIBERO CI

<b>Type</b>	PDF Indicator with multiple alarm levels
<b>Application area</b>	Cold Chain Monitoring – applications without need for temperature graph or tabular data
<b>Recording option</b>	Single use
<b>Type of probe</b>	Internal NTC probe
<b>Measurement range</b>	-20 °C..+70 °C
<b>Measurement accuracy</b>	± 0.5 °C in the range of 0 °C..+25 °C ± 1.0 °C in the range of -10.0 °C..-0.1 °C as well as +25.1 °C..+50.0 °C ± 1.5 °C in the range of -20.0 °C..-10.1 °C as well as +50.1 °C..+70.0 °C
<b>Resolution</b>	0.1 °
<b>Measurement interval &amp; run time</b>	1 to 60 minutes, user programmable, resulting in up to one year run time Typically 60 days with measurement interval of 10 minutes
<b>Expiry date &amp; battery life</b>	<ul style="list-style-type: none"> <li>- Auto expiry date management: After expiry, display changes status and indicator cannot be started anymore</li> <li>- Indicator can be started any time during shelf life of 12 months</li> <li>- Started indicator can perform a maximum of 8'800 measurements</li> <li>- Long time operating range: -10.0 °C..+50.0 °C for entire shelf life</li> <li>- Exposure to extreme conditions: 10 days at -20.0 °C and 10 days at +70.0 °C</li> </ul>
<b>Certificate</b>	12 month certificate with reference to sensor calibration and indicator test results
<b>Programmable alarms</b>	<ul style="list-style-type: none"> <li>- 8 temperature alarm levels with single or cumulative delays</li> <li>- 2 temperature thresholds with alarm delay</li> <li>- Alarm on MKT</li> <li>- Alarm on duration / logging time</li> </ul>
<b>Start-up delay</b>	0 minutes to 24 h
<b>Display</b>	Multifunction LCD, size: 23.5 x 23.5 mm, with large OK and ALARM indicator
<b>Display functionality</b>	<ul style="list-style-type: none"> <li>- Status: Conf, Start, Run (logging), Stop</li> <li>- Current temperature measurement</li> <li>- OK, ALARM or blank</li> <li>- Configuration profile identification</li> </ul>
<b>Report</b>	<p>Built-in PDF file generator automatically establishes an evaluation report with embedded raw data upon connection to an USB port. Complies with the ISO standard 19005-1 Document Management for the long-term preservation of electronic documents (PDF/A) and 21 CFR Part 11.</p> <ul style="list-style-type: none"> <li>- Customizable report title and filename</li> <li>- Text area for additional information (e.g. shipment information, instructions for recipient, etc.)</li> <li>- Immediate release or quarantine based on alarm status</li> <li>- Statistics (min/max, average, alarm) and detailed indicator information (ID, configuration, etc.)</li> <li>- Detailed indicator information (ID, configuration, etc.)</li> </ul>
<b>Traceability</b>	ID number (traceable to component level)
<b>Case / dimension / weight</b>	ABS plastic material / 96 x 37 x 11 mm (3.8 x 1.5 x 0.5 inch) / 38 g (1.34 oz)
<b>Indicator configuration</b>	liberoCONFIG software to create, store and manage individual settings in an indicator profile as well as SmartStart, a liberoCONFIG component allowing a safe and quick application of profiles and shipment information to individual PDF Indicators is downloadable free of charge.