



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.

LIBERO CI PDF report with multi level alarm criteria

Additional Information
This is an example PDF report of the LIBERO CI indicator with multiple user configurable temperature alarm levels and alarm criteria.
Report data can be hidden in the PDF report to only show OK or ALARM status to the recipient.

LIBERO Configuration

Type	LIBERO CI	Current Status	Shipped
Device ID	7300000002	Shipped	14 Sep 2012 21:51:23
Log Method	1 min	Shipped	14 Sep 2012 21:51:23
Alarm Time Base	UTC	Shipped	14 Sep 2012 21:51:23
Configured by	ELPRO - Partner, 14 Sep 2012 07:43:17	Shipped	14 Sep 2012 21:51:23

Alarm Zone

Alarm Zone	Alarm Time	Total Time	No. of Excursions	Longest Exc.	Status
MO over 40.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK
MO over 35.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK
MO over 30.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK
MO over 25.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK
MO over 20.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK
MO over 15.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK
MO over 10.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK
MO over 5.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK
MO over 0.0 °C	0 s, 0%	0 s	0 / unlimited	0 s	OK

MKT Limits and Maximum Duration

Duration	Alarm Conditions
MO over 40.0 °C	none
MO over 35.0 °C	none
MO over 30.0 °C	none
MO over 25.0 °C	none
MO over 20.0 °C	none
MO over 15.0 °C	none
MO over 10.0 °C	none
MO over 5.0 °C	none
MO over 0.0 °C	none

Logging Results

Parameter	Value	Unit	Start at	Stop at
Maximum Temperature	15.0 °C	°C	14 Sep 2012 04:51:23	14 Sep 2012 07:30:00
Minimum Temperature	15.0 °C	°C	14 Sep 2012 04:51:23	14 Sep 2012 07:30:00
Average Temperature	15.0 °C	°C	14 Sep 2012 04:51:23	14 Sep 2012 07:30:00

LIBERO CI PDF Indicator

- USB Interface
- Any configuration on one device
- Secure Start/Stop button
- Auto expiry date management
- LIBERO PDF Indicator CI
- 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, also by 3rd parties
- Compatible with liberoMANAGER cold chain database
- 100 % calibrated sensors and electronics
- Fully compliant with industry guidelines

Technical Specifications LIBERO CI

Version 2019

Type	PDF Indicator with multiple alarm levels
Application area	Cold Chain Monitoring – applications without need for temperature graph or tabular data
Recording option	Single use
Operating range	-30 °C..+70 °C
Measurement accuracy	<p>The LIBERO CI is the most accurate indicator amongst its peers and features a guaranteed accuracy of ± 0.4 °C in the core range of 0.0 °C to 25.0 °C. The typical accuracy (95 % of all LIBEROs) is even better with ± 0.3 °C in the core range.</p> <p>Accuracy over full temperature range: ± 0.4 °C from 0.0 °C to +25.0 °C ± 0.5 °C from -10.0 °C to -0.1 °C as well as +25.1 °C to +50.0 °C ± 1.0 °C from -30.0 °C to -10.1 °C as well as +50.1 °C to +70.0 °C</p>
Resolution	0.1 °
Measurement interval	1 to 60 minutes, user programmable
Expiry date and battery life	<ul style="list-style-type: none"> - Indicator can be started any time during shelf life - Started data logger runs until logger is stopped (max. expiry date +30 days) - Auto expiry date management: After expiry, display changes status and indicator cannot be started anymore - Use below 0 °C and above +40 °C for prolonged times can limit battery life
Battery type	Button cell contained in equipment, UN3091, exempt from DGR declaration
Certificate	Ilac/NIST/ISO 17025 traceable production calibration certificate
Programmable alarms	<ul style="list-style-type: none"> - 8 temperature alarm levels with single or cumulative delays - 2 temperature thresholds with alarm delay - Alarm on MKT - Alarm on duration/run time
Start-up delay	0 minutes to 24 h
Display	Multifunction LCD, size: 23.5 × 23.5 mm, with large OK and ALARM indicator
Display functionality	<ul style="list-style-type: none"> - Status: Conf, Start, Run, Stop - OK, ALARM or blank - Current temperature measurement - Configuration profile identification
Report	<p>Built-in PDF file generator automatically establishes an evaluation report with embedded 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 FDA 21 CFR Part 11.</p> <ul style="list-style-type: none"> - Customizable report title and filename - Text area for additional information (e.g. shipment information, instructions for recipient, etc.) - Statistics (min/max, average, alarm) and detailed indicator information (ID, configuration, etc.)
Traceability	ID number (traceable to component level)
Case dimension weight	ABS plastic material 96 × 37 × 11 mm (3.8 × 1.5 × 0.5 inch) 38 g (1.34 oz)
Certifications	CE EN12830 EMC RTCA DO-160 RoHS WHO-PQS Safe Transport of Chemical Goods
Indicator configuration and analysis software	<p>liberoCONFIG and SmartStart software to create, store and manage individual settings in a settings profile.</p> <p>liberoMANAGER database as cloud service to store shipment reports and results, analyze shipments, manage release status and trigger customer specific workflows in cold chain processes.</p>