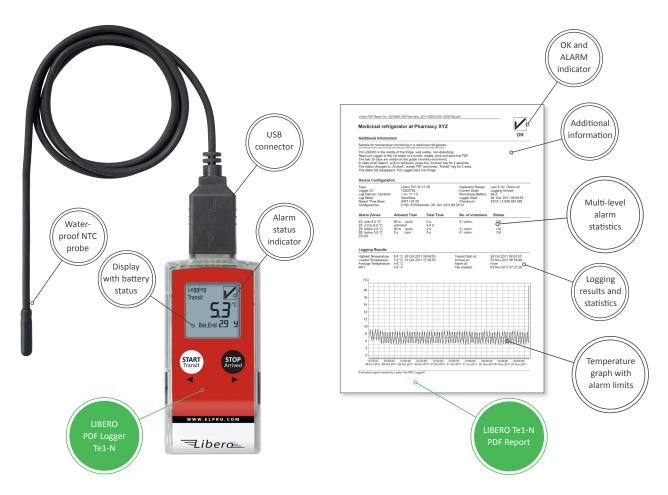


TECHNICAL SPECIFICATIONS LIBERO TE1-N

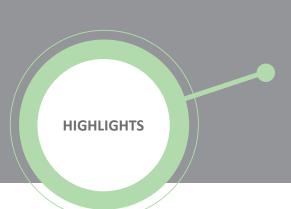
LIBERO Te1-N

PDF Logger for External NTC Temperature Probe

LIBERO Te1-N is the PDF Logger with an external probe for a multiple monitoring application area: refrigerators, freezers, transport boxes, incubators or climate chambers. Especially for site monitoring, the LIBERO PDF Logger is a safe and easy-to-install 24/7 monitoring solution. Measure temperature close to the product with the external probe and see results and alarm status on the data logger display outside of the monitoring area. No software is needed for data download; LIBERO Te1-N automatically generates a PDF report as soon as it is plugged into the USB port of any computer.



we prove it.



- External probe to remotely record temperature
- Eliminates daily inspections and min/max lists
- Simple and safe, no software required for data download
- Compatible with liberoMANAGER cold chain database
- Observes compliance with GLP / GMP guidelines

Technical Specifications LIBERO Te1-Nx

Туре	PDF Logger for external NTC temperature probe (probe not included)
Application area	Site Monitoring Systems, Container Monitoring Systems
Recording options and mode	Multiple use: start/stop or loop mode
Type of probe	External NTC probe with USB connector, maximum cable length 3 m (118.1 inch)
Measurement range	Measurement range of probe: -90 °C+85 °C
	Operating range of data logger: -35 °C+70 °C
Measurement accuracy	System accuracy with ELPRO USB probe:
	±0.2 °C in the range of -10.0 °C+25.0 °C
	$\pm0.5^{\circ}\text{C}$ in the range of -35.0 °C10.1 °C as well as +25.1 °C+85.0 °C
	±1.8 °C in the range of -85.0 °C35.1 °C
Measurement interval	Te1-N: 2 to 60 minutes Te1-NY: 1 to 60 minutes, user programmable
Memory capacity	16'000 measurement values
Battery life	Te1-N: 2 years Te1-NY: 400 days
	Non-replaceable battery Use below 0 °C and above +40 °C can limit battery life
Programmable alarms	- 6 temperature alarm levels with single or cumulative delays
	- 2 temperature thresholds with alarm delay
Start-up delay	0 minutes to 24 h, user programmable
Display	Multifunction LCD, size: 23.5 x 23.5 mm (0.93 x 0.93 inch), with OK and ALARM indicator
Display functionality	- Status: Conf, Start, Logging, Stop
	- Current temperature measurement
	- Configuration profile identification
	- Remaining battery life in days
	- Statistical data (min, max, average)
	- Start and end marking functionality with START and STOP buttons
Report	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.
	- Customizable report title and filename
	- Text area for additional information (e.g. equipment name, location, etc.)
	- Statistics (min/max, average, alarm) and detailed logger information (ID, configuration, etc.)
	- Chart visualizing the temperature curve and alarm limits
Case dimension weight	ABS plastic material 102 x 40 x 19 mm (4.0 x 1.6 x 0.8 inch) 45 g (1.59 oz) without any probe
Accessories	LIBERO Simple bracket, LIBERO Alarm bracket Variety of NTC temperature probes
Alarm output to Alarm bracket	Full functionality for audible and visual alarms (LED, buzzer) incl. internal relay for passing the alarm
	to an external system as GSM interface or telephone dialing unit.
Data logger configuration	liberoCONFIG software to create, store and manage individual settings in a logger profile as well as
and additional analysis software	SmartStart, a liberoCONFIG component allowing a safe and quick application of profiles to PDF Logger.
	elproVIEWER software to access and export embedded data of PDF report, for data analysis and
	comprehensive report features.
	Both software products are downloadable at www.elpro.com/downloads.