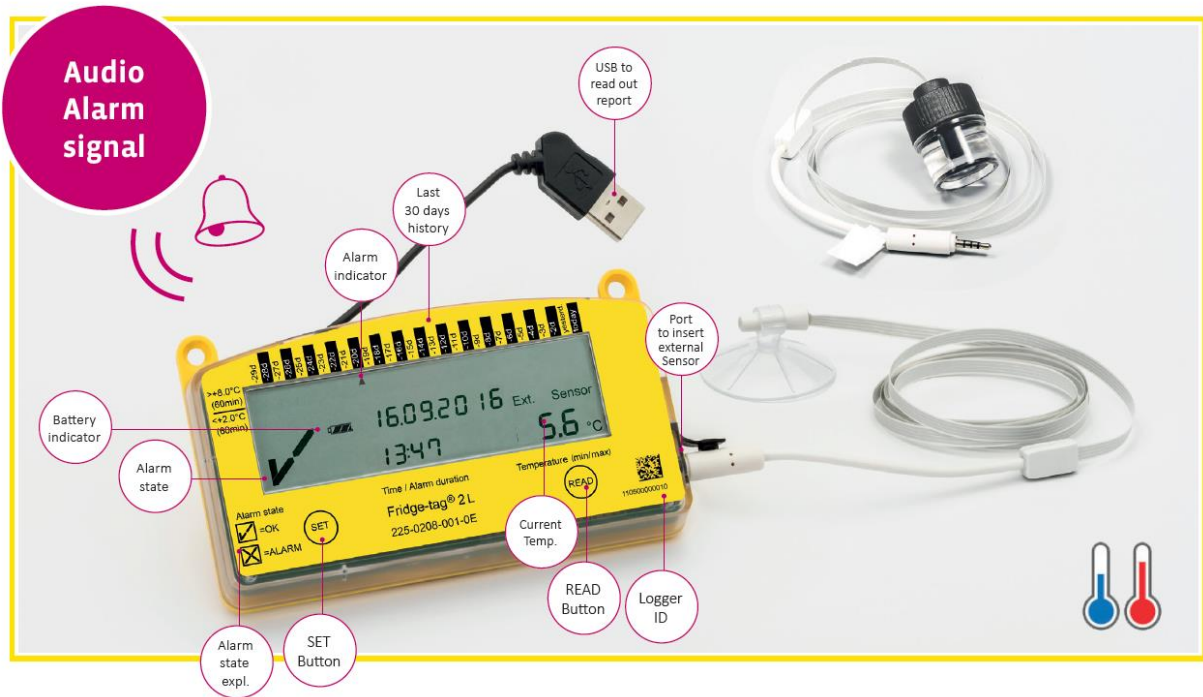


# TEMPERATURE MONITORING

## INDEPENDENT TEMPERATURE MONITORING


## FRIDGE-TAG 2L




## Proven quality combined with new features

A powerful and competitive novelty is the audible alarm signal. The Fridge-tag 2 L automatically triggers an alarm, if a critical temperature deviation out of the predefined temperature range will be measured. This enables you and your staff to react just in time and avoid serious quality issues while complying to various regulations.

Enjoy extended temperature recording up to 112 days. The built-in USB connection generates a secure PDF/A report with all relevant temperature data presented in a clear and easy understandable manner.

- Audio alarm signal intervals for 168h / 7days
- Selectable recording duration 28, 56, 84 or 112 days
- Software for verifying PDF and ASCII file 
- Easily readable display

# TEMPERATURE MONITORING

DESCRIPTION	Electronic temperature logger with USB	
MANUFACTURER'S REF	Fridge-tag 2 L	
TYPICAL APPLICATION AREA	Storage ambient conditions Storage cooling conditions (fridges, freezers, etc.)	
EXTERNAL DIMENSIONS (L X W X H)	128 x 75 x 19 mm, Display 95 x 27 mm	
WEIGHT	112 g	
STORAGE CONDITION (INACTIVE)	0 °C to +30 °C / +32 °F to +86 °F	
	INTERNAL SENSOR	EXTERNAL SENSOR
OPERATING TEMPERATURE*	-25 °C to +55 °C / -13 °F to +131 °F	-40 °C to +60 °C / -40 °F to +140 °F
DISPLAY VISIBLE	-10 °C to +55 °C / +14 °F to +131 °F	-
ALARM TEMPERATURE RANGE	-20 °C to +50 °C, in 0.1 °C increments / -4 °F to +122 °F	-35 °C to +55 °C, in 0.1 °C increments / -31 °F to +131 °F
ACCURACY OF TEMPERATURE MEASUREMENT	+/- 0.8 °C from -25 °C to -10 °C +/- 1.44 °F from -13 °F to +14 °F +/- 0.5 °C from -10 °C to +40 °C +/- 0.9 °F from +14 °F to +104 °F +/- 0.8 °C from +40 °C to +55 °C +/- 1.44 °F from +104 °F to +131 °F	+/- 0.8 °C from -40 °C to -30 °C +/- 1.44 °F from -40 °F to -22 °F +/- 0.5 °C from -30 °C to +40 °C +/- 0.9 °F from -22 °F to +104 °F +/- 0.8 °C from +40 °C to +60 °C +/- 1.44 °F from +104 °F to +140 °F
ALARM LIMITS	2 individually programmable alarm limits (1 upper and 1 lower alarm limit)	
ALARM TRIGGER TIME	1 minute to 23 h 59 min	
ALARM INDICATION	visual, optional audible (buzzer)	
LOGGING INTERVAL	5 min (standard)	
MEASUREMENT ACCURACY OF THE TIME	+/- 30 minutes / year	
CALIBRATION	Every sensor is factory calibrated according NIST/ILAC standard traceable. Calibration certificate on request	
MEMORY SPACE	30 day overview on display; PDF report length factory settable: 28, 56, 84 or 112 day overview	
BATTERY	Lithium battery- complies with IATA DGR Packaging Instruction 970-Section II	
PROTECTION CLASS	IP64 (external sensor not plugged in)	
2D CODE ON LABEL	2D data matrix	
OPERATING LIFETIME AND SHELF LIFE	Up to 3½ years (½ year storage / 3 years useful life). The battery status indicator on the display provides information on the remaining lifetime.	
WARRANTY	2 years from date of delivery (see general Berlinger Terms & Conditions)	
MANIPULATION	Fridge-tag 2 L cannot be manipulated, reset or turned off without destroying it	
FORMAT OF THE ORIGINAL DOCUMENT	PDF / ASCII (it can also be imported by many ERP or data management systems)	
SOFTWARE FOR VERIFYING PDF AND ASCII FILE	 <a href="http://www.berlinger.com/verifier">www.berlinger.com/verifier</a> JAVA™ / The software verifies the digital signature of the ASCII and PDF files. FDA regulation 21 CFR Part 11 compliant. Software is compliant with GAMP 5 requirements.	
STANDARDS	ASTM 2500, 21 CFR Part 11, 21 CFR Part 820, ICH Q8/Q9, ANSI/IEEE 829/830/1008, EN 12830, EN 61000-4-2/6-2/6-3 EMC, EN/IEC 60529 IP protected classes IATA Regulations	



\* for temperatures below 0 °C (+32 °F) and above 40 °C (+104 °F) we recommend to use an external sensor in order to avoid a shorter battery life. Use beyond the extended operating range can limit the battery life time.

Subject to change. Please note that all information in this document is correct at the time of publication. Due to our policy of continuous product development, we reserve the right to change this information without prior notice.



# TEMPERATURE MONITORING

## Glycol vial Version

CABLE LENGTH	1 meter or 1.5 meter flat cable
WEIGHT (CABLE AND FILLED VIAL)	22g
VIAL DIMENSION (L X B X H)	26 x 26 x 34 mm
CONTENT OF BIOSAFE GLYCOL	7 ml
OPERATING TEMPERATURE	-40 °C to +60 °C -40 °F to +140 °F
ACCURACY OF TEMPERATURE MEASUREMENT	+/- 0.8 °C from -40 °C to -30 °C +/-1.44 °F from -40 °F to -22 °F +/- 0.5 °C from -30 °C to +40 °C +/-0.9 °F from -22 °F to +104 °F +/- 0.8 °C from +40 °C to +60 °C +/-1.44 °F from +104 °F to +140 °F



## Standard Version

CABLE LENGTH	1.5 meter (flat cable); 1.7 meter or 2.3 meter (round cable)
WEIGHT (CABLE INCLUDING VACUUM CUP)	12g
VACUUM CUP DIAMETER	41 mm (condition: pressed down)
VACUUM CUP HEIGHT	15 mm (condition: pressed down)
OPERATING TEMPERATURE	-40 °C to +60 °C -40 °F to +140 °F
ACCURACY OF TEMPERATURE MEASUREMENT	+/- 0.8 °C from -40 °C to -30 °C +/-1.44 °F from -40 °F to -22 °F +/- 0.5 °C from -30 °C to +40 °C +/-0.9 °F from -22 °F to +104 °F +/- 0.8 °C from +40 °C to +60 °C +/-1.44 °F from +104 °F to +140 °F

