

COLD CHAIN TEMPERATURE LOGGER



THORNE &
DERRICK
INTERNATIONAL

Thorne & Derrick
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www.heatingandprocess.com

QUICK AND EASY TO USE.

- Freely configurable by user – without software installation
- Clear alarm identification
- Automatic PDF report generation
- Everything in one logger: configuration file, PDF report, instruction manual and calibration certificate
- High storage capacity: 8,000 data point memory
- Manipulation-proof
- Conforms to GxP, EN 12830 and FDA 21 CFR Part 11 / GAMP 5



TECHNICAL INFORMATION.

Applications

Monitoring of the cold chain during transport of sensitive freight such as pharmaceuticals, foods and technical products. The logger is designed for single use only.



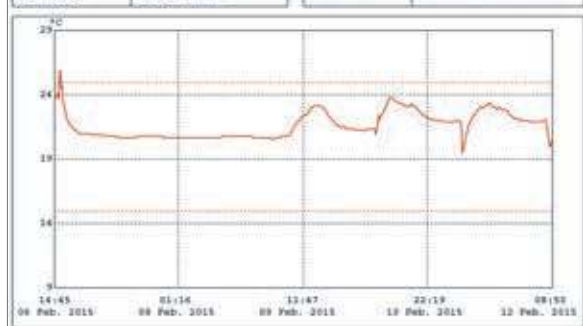
Quick Guide

- Programming: plug into a USB port
- IP65: place into the sleeve and seal closed
- Start logging: press START key for 2 seconds
- Bookmarking: press MARK key
- Downloading of the PDF file: remove the logger from the sleeve, plug into a USB port

PDF Report

SN
14C0039

Device Specification		Statistics(excludes Start Delay)	
Production date	20 Jan. 2015	Duration Time	5Days 18Hrs. 5Min.
Production lot	1403001	Max Temp	26.0°C
Firmware version	V1.0	Average Temp	21.6°C
Original time zone	UTC+1	Min Temp	19.5°C
Start	14:45, 06 Feb. 2015	Std. Dev	1.6°C
Finish	08:59, 12 Feb. 2015	MKT	21.7°C
Sampling Rate	5 Minutes	Total time within	5Days 18Hrs. 5Min.
Start Delay	0 Minutes	Total time above	0Days 0Hrs. 5Min.
Readings	1457 points	File Information	
High Alarm	25.0°C	File created	08:53, 12 Feb. 2015
Low Alarm	15.0°C		
Alarm Delay	0 Minutes		
Alarm Type	Single event		



Index	Date	Time	°C	Index	Date	Time	°C
1	06/02/15	14:50:38	24.0	61	06/02/15	20:50:38	23.4
2	06/02/15	14:55:18	24.0	62	06/02/15	20:55:18	23.4
3	06/02/15	15:00:18	23.9	63	06/02/15	20:59:18	23.4
4	06/02/15	15:05:18	23.8	64	06/02/15	20:55:18	23.4
5	06/02/15	15:10:18	23.8	65	06/02/15	20:20:18	23.3
6	06/02/15	15:15:18	23.8	66	06/02/15	20:25:18	23.3
7	06/02/15	15:20:18	23.8	67	06/02/15	20:29:18	23.3
8	06/02/15	15:25:18	23.8	68	06/02/15	20:35:18	23.3

Would you like more information?

You can find a complete, up-to-date overview on the internet at www.rottronic.com.

TL-CC1

Type of logger	Single use
Parameter	Temperature
Temperature sensor	NTC thermistor
Accuracy	±0.5 °C (-30...70 °C)
Resolution	0.1 °C
Range of application (temperature)	-30...70 °C / -22...158 °F
Range of application (humidity)	< 80 %RH
Protection	IP65 (when placed in plastic bag)
Weight	Approx. 10 g
Battery	CR2032 (not replaceable)
Dimensions without bag	80(L) x 43(W) x 2.5(D) mm
Dimensions with bag	105(L) x 55(W) x 2.5(D) mm
Logging interval	0.5/5/10/30/60/90/120 min
Start delay	0.5/5/10/30/60/90/120 min
Alarm ranges	-20...-10 °C, -10...0 °C, 2...8 °C, 0...15 °C, 0...25 °C, 15...25 °, freely selectable values
Alarm type	Deactivated, single or cumulative
Storage period	12 months
Storage capacity	8192 data points
MARK function	Marking of up to 8 points during transport
Operation	START/STOP button, MARK button
LED indicators	LED « Low » flashes red when value below alarm point LED « Hi » flashes red when value above alarm point LED « OK » flashes green during data logging LED « Battery » flashes red when low battery
Communication	USB 2.0 port, type A
Operating system	Windows
Conformity	GxP, EN 12830, FDA 21 CFR Part 11 and GAMP5

Delivery

In box of 10 with instruction manual: TL-CC1-10

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