VAISALA

DL1000-1400 Temperature Data Logger



Features

- · Industry-leading precision and accuracy
- Printed reports for any time period
- 10-year battery
- · Validation and continuous monitoring with the same model
- · Two year limited warranty
- Superior alternative to chart recorders and hard-wired systems
- · Timebase calibrated over the operating temperature range
- · Adjustable time based recording
- · Snap-in logger cradle for easy network connectivity
- Two probe options give high accuracy - from -90 °C to +70 °C
- Traceable to SI units through national metrology institutes.

The 1000/1400 temperature data loggers include the VL series for regulated environments and the SP series for non FDA/GxP regulated industries.

VL series and SP series dataloggers

The VL series of data loggers, together with vLog VL software, provide a superior, high accuracy solution for use in FDA/GxP regulated environments by ensuring tamperproof files and electronic records that meet 21 CFR Part 11 requirements.

The 1000/1400 temperature data loggers include calibrations traceable to SI units through national metrology institutes.3)

The SP-series provides a compact, easily deployable, highly accurate measurement and recording device. Coupled with vLog SP software for

downloading, displaying, analyzing and reporting of recorded environmental data, the SP-series was designed for use in non FDA/GxP regulated environments. Optional browser-based viewLinc software provides 24/7 multi-stage alarm notification and remote monitoring for both the VL and SP series of data loggers.

Applications

The 1000/1400 temperature data loggers are ideal for monitoring and validation of:

- Refrigerators and freezers (to -90 °C)
- Incubators

- · Stability Chambers
- Warehouses
- · Ambient conditions

Autonomous Power and Recording Capacity

Each data logger contains a 10-year battery and onboard memory for recording at the point of measurement. With autonomous power and recording capacity, data is immune to network and power interruptions.

Measurement results are traceable to the international system of units (SI) through national metrology institutes (NIST USA, MIKES Finland, or equivalent) or ISO/IEC 17025 accredited calibration laboratories.



Technical Data

General

Interfaces RS-232 serial, USB, Ethernet,

WiFi, PoE network interface available

PC software Graphing & Reporting Software

vLog SP for SP series vLog VL for VL series

viewLinc for continuous monitoring and alarming OPC Server to add on to existing OPC compatible

monitoring systems

Internal clock Accuracy ±1 min/month

-25 °C ... +70 °C (-13 °F ... +158 °F)

Logger operating/ -40 °C ... +85 °C (-40 °F ... +185 °F)
Storage range 0 ... 100 %RH non-condensing

Power source Internal 10-year lithium battery

(Battery life specified with sample interval of 1 min

or longer)

Electromagnetic FCC Part 15 and CE compatibility EN 50581:2012

EN 55032:2012/AC:2013 Class B

EN 61326-1:2013

RoHS compliance 2011/65/EU



VL-1000-21x

Mechanical Specifications

Size $85 \times 59 \times 26 \text{ mm } (3.4 \times 2.3 \times 1 \text{ in})$

Weight 76 g (2.7 oz)

Mounting 3M Dual Lock™ fasteners

Snap-in connector locks provide secure probe

connections

Internal Temperature Sensor

1000-21x series Precision-tolerance epoxy-encapsulated NTC

thermistor

Memory

1000-2XX ser	ies 48 100	0 12-bit samples	
1400-44X ser	ies 85 300	0 12-bit samples	
Memory type	Non-ve	rolatile EEPROM	
Memory mode	is full.	electable: wrap (FIFO) or stop whe User selectable start time. User sele ime (VL-series only).	-
Sampling rate	es User-s	selectable (in 10 second intervals) fr	rom once



VL-1000-22x

Recording Span: 1000-2xx

Number of Channels Enabled

every 10 seconds to once a day.

Sample Interval	1	2
10 seconds	5.5 days	2.7 days
1 minute	1.1 months	16.7 days
5 minutes	5.5 months	2.7 months
15 minutes	1.3 years	8.3 months
1 hour	5.4 years	2.7 years