



Features

- 10-year battery and large onboard memory
- Single and multi-channel models with up to four input channels
- Easily set scaling and measurement units for recording
- Time-based digital recording in a range of sample intervals
- Multiple connectivity options - USB, Ethernet, WiFi
- Optional vNet cradle for Ethernet or Power over Ethernet connectivity
- Traceable to SI units through national metrology institutes.
- Two year limited warranty

DL4000 series of data loggers are designed to interface with a wide range of transducers, transmitters, and sensors with a DC voltage or 0 - 20 mA current loop output.

DL4000 is a simple solution for recording and monitoring pressure, flow, fluid level, PH, electrical properties, moisture and gas concentrations.

Ideal for use in standalone or networked applications, the DL4000 Universal Input logger connects directly to a PC with USB or installs to an existing network via Ethernet, Power over Ethernet or WiFi. Each logger contains a 10-year battery and onboard memory for recording a wide range of variables at the point of measurement. With autonomous power and recording capacity, data is immune to network and power interruptions.

The DL4000 data loggers can be used with Vaisala software, either viewLinc or vLog, to download, display, and analyze environmental data. The viewLinc monitoring system provides 24/7 multi-stage alarm notification, remote, real-time monitoring and gap-free data. The vLog software is a simple solution for validation/mapping applications. The DL4000 data loggers include calibrations traceable to SI units through national metrology institutes.¹⁾

All reports are customizable and can be exported to spreadsheets and PDF to provide records that meet the requirements of 21 CFR Part 11 and Annex 11.

Choose the DL4000 VL series data logger for GxP-compliant environments and the DL4000 SP series for non-GxP applications.

¹⁾ 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

| | |
|-------------------------------|--|
| Operating range | -40 ... +85 °C (-40 ... +185 °F) and 0 ... 100 %RH (non-condensing) |
| Interfaces | RS-232 serial USB Wifi module Ethernet and Power over Ethernet (vNet) |
| Weight | 76 g (2.7 oz) |
| Size | 85 × 59 × 26 mm (3.4 × 2.3 × 1 in) |
| Mounting | 3M Dual Lock™ fasteners |
| PC software | Graphing & Reporting Software vLog SP for SP-series vLog VL for VL-series viewLinc for continuous monitoring & alarming OPC Server to add on to existing OPC compatible monitoring systems |
| Internal clock | Accuracy ±1 min/month at -25 ... +70 °C (-13 ... +158 °F) |
| Electromagnetic compatibility | FCC Part 15 and CE EN 50581:2012 EN 55032:2012/AC:2013 Class B EN 61326-1:2013 |
| RoHS compliance | 2011/65/EU |
| Power source | Internal 10-year lithium battery (Battery life specified with sample interval of 1 min or longer) |

Memory

| | |
|----------------------|--|
| Memory type | Non-volatile EEPROM |
| Data sample capacity | 120 000 12-bit samples |
| Memory modes | User-selectable wrap (FIFO) or stop when memory is full. User-selectable start and stop times. |
| Sampling rates | User-selectable from once every 10 seconds to once a day. (Battery life specified with sample interval of 1 min or longer) |
| Recording span | Recording span depends upon sample interval selected and number of channels enabled. Please see table above. |

Recording Span

| Sample Interval | Number of Channels | | | |
|-----------------|--------------------|------------|------------|-------------|
| | 1 | 2 | 3 | 4 |
| 10 seconds | 13.8 days | 6.9 days | 4.6 days | 3.4 days |
| 1 minute | 2.7 months | 1.3 months | 27.7 days | 20.8 days |
| 5 minutes | 1.1 years | 6.9 months | 4.6 months | 3.4 months |
| 15 minutes | 3.4 years | 1.7 years | 1.1 years | 10.4 months |
| 1 hour | 13.6 years | 6.8 years | 4.5 years | 3.4 years |

Current Loop and Voltage Inputs

| Input Type | Current Loop | Analog Voltage |
|---------------------|---|---|
| Available ranges | 0 ... 20mA | 0 ... 5 VDC, 0 ... 10 VDC |
| Resolution | 5.5 µA | 0.025 % F.S. |
| Accuracy | ±0.15 % F.S. at +25 °C (+77 °F) | ±0.15 % F.S. at +25 °C (+77 °F) |
| Input impedances | 75 Ω | > 1 MΩ |
| Isolation | One common per logger | One common per logger |
| Overload protection | 40 mA max. (reverse-polarity protected) | ±24 VDC max. (reverse-polarity protected) |

Channel Configurations

| Model | 1, 2 or 4 Channels |
|----------|--------------------|
| 4000-405 | 0 ... 5 VDC |
| 4000-40A | 0 ... 10 VDC |
| 4000-40C | 0 ... 20 mA |



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