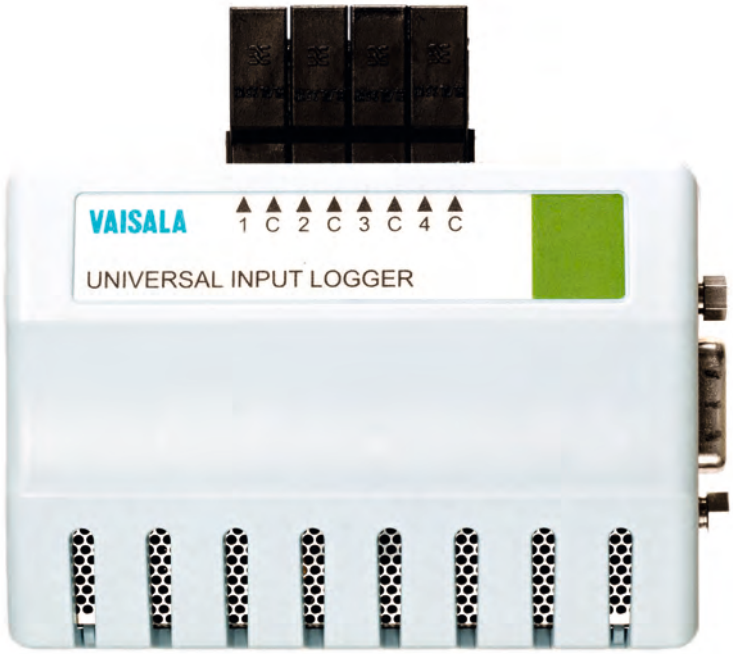
DL4000 Universal Data Logger



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

	Number of Channels			
Sample Interval	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

CE

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