

# VAISALA

## Vaisala Veriteq Universal Input Data Recorder Series 4000



### Features/Benefits

- Long-life 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
- NIST-traceable calibration
- Two year limited warranty

The 4000 Series of data recorders are designed to interface with a wide range of transducers, transmitters, and sensors with a DC voltage or 0 - 20 mA current loop output. The 4000 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 4000 Universal Input recorder connects directly to a PC with USB or installs to an existing network via Ethernet, Power over Ethernet or WiFi. Each recorder 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 4000 data recorders can be used with Vaisala software to download, display, and analyze environmental data as well as provide tamper-proof electronic records that meet 21 CFR Part 11 requirements. The optional browser-based viewLinc™ system provides 24/7 multi-stage alarm notification, remote, real-time monitoring and gap-free data. Reports are customizable and can be exported to excel and PDF.

# Technical data

## General

Size	85 x 59 x 26 mm (3.4 x 2.3 x 1") 76 g (2.7 oz)
Operating Range	-40 °C to +85 °C (-40 °F to +185 °F) and 0 %RH to 100 %RH (non-condensing)
Interfaces	RS-232 serial USB Wifi module Ethernet and Power over Ethernet (vNet)
Mounting	Magnetic strips, 3M Dual Lock™ fasteners
PC Software	Graphing & Reporting: Spectrum vLog (FDA/GxP regulated) Monitoring, Alarming, Reporting: viewLinc™
Internal Clock	Accuracy ±1 min./month @ -25 °C to +70 °C (-13 °F to +158 °F)
Electromagnetic Compatibility	FCC Part 15 and CE EN 55022:2006 EN 61000-4-2:2001 EN 61000-4-3:2006
Power Source	Internal 10-year lithium battery (Battery life specified with sample interval of 1 min. or longer)

## Memory

Memory Type	Non-volatile EEROM
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 (in 10 second intervals) 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 to 20mA	0 to 5 VDC, 0 to 10 VDC
Resolution	5.5 µA	0.025 % FS.
Accuracy	±0.15 % FS. at +25 °C (+77 °F)	±0.15 % FS. at +25 °C (+77 °F)
Input Impedances	75 Ohms	>1 MOhm
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 to 5 VDC
4000-40A	0 to 10 VDC
4000-40C	0 - 20 mA