VERITEQ
Superior Temperature & Humidity Monitoring

> The Veriteq 4000 Series Universal Input Data Recorder

VL-4000

Veriteq's 4000 Series of data recorders are designed to interface with a wide range of transducers, transmitters and sensors emitting a DC voltage or 4-20 mA current loop.

Contained within the 4000 Series' compact, palm-sized design is a highly accurate, precision monitoring and data recording instrument designed to provide a simple, easily deployable, self-contained system for monitoring a wide range of variables such as pressure, flow, fluid level, PH, electrical properties, moisture and gas concentrations.

Additional system features include:

- Self-powered, long-life 10-year battery
- Single and multi-channel models offer up to four input channels
- Easily set scaling and measurement units for recording
- High accuracy, adjustable time-based digital recording
- Current loop XPS excitation control switch for powering of external transducers
- Veriteq Spectrum Software for the creation of graphs and tabular data representations
- Optional browser-based viewLinc software provides 24/7 multi-stage alarm notification and remote monitoring
- Two year limited warranty

GENERAL

Size	Operating Range	Interfaces	Mounting	PC Software	Internal Clock	Electromagnetic Compatibility	Power Source
71x53x20mm (2.8 x 2.1 x 0.8"), 65g (2.4 oz.)	-40°C to +85°C (-40°F to +185°F) and 0%RH to 100%RH (non-condensing)	RS-232 serial, USB, Ethernet, WiFi network interface available	Magnetic strips, 3M Dual Lock™ fasteners	Graphing & Reporting Software Spectrum for SP-series viewLinc for continuous monitoring & alarming	Accuracy +/- 1 min./month @ 0°C to +50°C (+32°F to +122°F)	FCC Part 15 and CE	Internal 10-year lithium battery (Battery life specified with sample interval of 1 min. or longer)

CURRENT LOOP & VOLTAGE INPUTS

Input Type	Current Loop	Analog Voltage
Available Ranges	0 to 22 mA	0 to 1V, 0 to 10V
Resolution	5.5 µA	0.025% F.S.
Accuracy	+/-0.15% F.S. at +25°C (+77°F)	
Input Impedances	50 ohms	>1 Mohm
Isolation	One common per logger	One common per logger
Overload Protection	60mA max. (reverse-polarity protected)	+/-30 volts max. (reverse-polarity protected)

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INTERNAL TEMPERATURE SENSOR

Sensor	Calibrated Measurement Range	Operating Range	One Year Accuracy	Resolution
Internal precision-tolerance epoxy-encapsulated NTC thermistor	-20°C to +70°C (-4°F to +158°F)	-40°C to +85°C (-40°F to +185°F)	+/-0.25°C over +20°C to +30°C (+/-0.45°F over +68°F to +86°F) +/-0.35°C over -20°C to +70°C (+/-0.63°F over -4°F to +158°F)	0.02°C at +25°C (0.04°F at +77°F)

MEMORY

Memory Type	Non-volatile EEROM
Data Sample Capacity	70,600 12-bit samples
Memory Modes	User-selectable. Wrap (FIFO) or stop when memory is full. User selectable start time.
Sampling Rates	User-selectable (in 10 second intervals) from one 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 below.

Sample Interval	Recording Span				
	Number of Channels				
	1	2	3	4	5
10 seconds	8.1 days	4.1 days	2.7 days	2.0 days	1.6 days
30 seconds	24.3 days	12.2 days	8.1 days	6.1 days	4.9 days
1 minute	1.6 months	24.3 days	16.2 days	12.1 days	9.7 days
5 minutes	8.1 months	4.1 months	2.7 months	2.0 months	1.6 months
15 minutes	2.0 years	1.0 years	8.1 months	6.1 months	4.9 months
1 hour	8.0 years	4.0 years	2.6 years	2.0 years	1.6 years

CHANNEL CONFIGURATIONS

Model Number	Channel Type				
	CH 1	CH 2	CH 3	CH 4	CH 5
SP-4000-1CW	4 to 20mA (with XPS switch)	--	--	--	--
SP-4000-101	--	0 to 10Vdc / 1Vdc (software switchable)	--	--	--
SP-4000-411	0 to 10Vdc	0 to 10Vdc / 1Vdc (software switchable)	0 to 10Vdc	0 to 10Vdc / 1Vdc (software switchable)	--
SP-4000-4CW	4 to 20mA (with XPS switch)	4 to 20mA	4 to 20mA (with XPS switch)	4 to 20mA	--
SP-4000	4 to 20mA (with XPS switch)	0 to 10Vdc / 1Vdc (software switchable)	4 to 20mA (with XPS switch)	0 to 10Vdc / 1Vdc (software switchable)	Internal Temperature

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