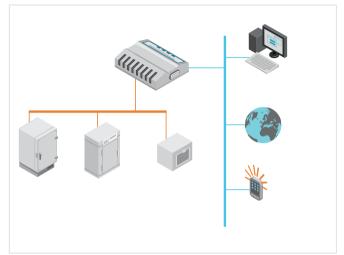
# VAISALA

### Vaisala Multi-application Temperature Data Logger Series DL1016/1416





### **Features/Benefits**

- Industry-leading precision and accuracy
- Real-time monitoring & alarming with viewLinc
- Reliable validation/mapping with vLog
- Easy connectivity to your existing network – wired or wireless
- Validation and continuous monitoring with the same data logger
- Superior alternative to chart recorders and hard-wired systems
- NIST-traceable, ISO 17025 accredited calibration

MODEL NUMBERS & CHANNELS

- VL-1016-22V Two external channels for validatable applications
- VL-1416-44V Four external channels for validatable applications
- SP-1016-22V Two external channels
- SP-1416-44V
  Four external channels

Vaisala's multi-application temperature data loggers monitor temperatures in up to four applications with one logger – ultralow temperature freezers, freezer/ refrigerators and incubators.

The DL1016-1416 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. 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 DL1016-1416VL data logger for GxP-compliant environments and the DL1016-14160SP for non-GxP applications.

## **Technical Data**

### General

Size	85 x 59 x 26 mm (3.4 x 2.3 x 1") 76 g (2.7oz)
Interfaces	RS-232 serial, USB, Ethernet, WiFi, PoE network interface available
Mounting	Magnetic strips, 3M Dual Lock™ Fasteners
	Snap-in connector locks provide secure probe connections
PC Software	vLog Graphing & Reporting Software
	viewLinc for continuous monitoring & alarming
	OPC Server to add Vaisala recorders
	to any OPC-compatible monitoring system
Internal Clock	Accuracy $\pm 1$ min. /month 0 °C to $\pm 50$ °C (32 °F to $\pm 122$ °F)
Electromagnetic Con	mpatibility FCC Part 15 and CE
Power Source	Internal 10-year lithium battery
	(Battery life specified with sample interval of 1 min. or longer)

## **Technical Data**

Temperature Rang	e & Accuracy			
Sensor		e External Probe		
Calibrated	5	-90 °C to +50 °C		
Measurement Range	(-1	30 °F to +122 °F)		
Operating	× ×	-95 °C to +70 °C		
Range	(-1	39 °F to +158 °F)		
Initial Accuracy*		-90 °C to +50 °C		
	(±0.45 °F over -1			
One Year Accuracy*		-90 °C to +50 °C		
2	(±0.63 °F over -1			
Resolution		0.01 °C at +25 °C		
	((	).02 °F at +77 °F)		
1016 Series	X			
Data Sample Capacity	68,6	00 16 bit samples		
1416 series				
Data sample Capacity	101,37	75 16 bit samples		
1016 and 1416 serie	es			
Memory type	non	-volative EEROM		
Memory Modes	User-selectable rates	5		
		to once per day.		
	(Battery life spec			
		1 min. or longer)		
Sampling Rates	User-selectable rates	s from once every		
	10 seconds	s to once per day.		
	(Battery life spec	ified with sample		
	interval of	1 min. or longer)		
Data Logger				
Operating Range	0 °C to +50 °C (-	32 °F to +122 °F)		
	0 %RH to 100 %RH	non-condensing		
Storage Range	-40 °C to +85 °C (-4	0 °F to +185 °F)		
	0 %RH to 100 %RH i	non-condensing		
Recording Span: 1016-22V				
	NUMBER OF CHANNE	LS ENABLED		
SAMPLE INTERVAL	1	2		
1 Minute	1.5 Months	23.8 Days		
5 Minutes	7.6 Months	3.8 Months		
15 Minutes	1.9 Years	11.5 Months		
1 Hour	7.8 Years	3.9 Years		

\*Specification for external channels is for a probe calibrated to the specified channel of the data logger, with the logger at 0 °C to +50 °C (32 °F to +77 °F)



Please contact us at www.vaisala.com/requestinfo

#### 5 Minutes 11.3 Months 5.6 Months 15 Minutes 2.8 Years 1.4 Years 11.3 Months 5.7 Years 1 Hour 11.5 Years

1

Recording Span: 1416-44V

### **Thermistor Probes**

SAMPLE INTERVAL

1 Minute

Sensor	"V" Range
	External Probe
Operating Range	-95 °C to +70 °C
	(-139 °F to +158 °F)
Connector Color Code	Blue
Sensor Tip	Stainless Steel,
	Diameter: 3.2 mm (1/8"),
	Length: 38 mm (1.5")
	Sealed Teflon Tip
	Diameter: 3 mm (0.12"),
	Length: 28 mm (1.1")
Probe Length	3 m (10') and 7.6 m (25') lengths
	available
Cable Construction	2 mm (0.07") Diameter,
	Teflon coated cable

NUMBER OF CHANNELS ENABLED

3

23.5 Days

3.8 Years

3.7 Months

4

17.6 Days

2.8 Months

8.5 Months

2.8 Years

2

2.3 Months 1.1 Months

### **Immersion/Dry Probes**

DESCRIPTION/LENGTH	PART NUMBER
Thermistor V Range probe 25'	235139SP
Thermistor V Range probe 10'	235218SP
Thermistor immersion V Range probe 25'	235140SP
Thermistor immersion V Range probe 10'	235217SP

#### **Temperature Probe Accessories**

EPT-TDB-2: Thermal Damping Block, for use in refrigerators and freezers. Simulates a glycol bottle to reduce alarms generated by opening and closing a door.



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