

> The Veriteq VL-1000-VLT Temperature Data Recorder



VL-1000-VLT

The Veriteq VL-1000-VLT (Very Low Temperature) was designed for direct placement into cold environments and for dependable, high-accuracy measurement and recording of low temperature environments to -90°C (-130°F).

The unit is simple to use and functions as a completely self-contained system, operating without the need for external probes or wiring.

Typical applications include cold-chain shipping and storage, process validation, ultra-low temperature equipment validation and on-going temperature monitoring to meet 21 CFR Part 11 requirements.

Additional system features include:

- > Insitu low temperature operation
- > High accuracy measurement and recording of low temperatures
- > 5-year long life battery
- > NIST-traceable, A2LA accredited calibration available
- > High-stability internal thermistor
- > Veriteq vLog software meets 21 CFR Part 11 requirements
- > Printed validatable reports
- > Self-contained, independent monitoring
- > Reliable and dependable performance
- > Two year limited warranty
- > Companion vLog software provides data graphing, reporting and exporting capabilities
- > Utilization of Steinhart-Hart coefficients stored in each data recorder for high system accuracy

PRODUCT SPECIFICATIONS

Size	92x58x28mm (3.63 x 2.27 x 1.1") , 115g. (4.0 oz)										
Operating Range	-90°C to +35°C (-130°F to +95°F) and 0 to 100%RH Non-condensing										
Measurement Range	-90°C to 0°C (-130°F to +32°F)										
Accuracy (1 Year)	+/-1°C over -90°C to 0°C (+/-1.8°F over -130°F to +32°F)										
Resolution	0.01°C (0.02°F) at -70°C (-94°F)										
Sensor Type	Precision-tolerance epoxy-encapsulated NTC thermistor.										
Interfaces	RS-232 serial port, USB										
PC Software	Veriteq vLog Validatable software.										
Internal Clock	Temperature-compensated over operating range.										
Electromagnetic Compatibility	FCC Part 15 and CE.										
Power Source	Internal lithium battery with 5-year life. Battery is factory replaceable.										
Memory Size	26,900 12-bit samples										
Memory Type	Non-volatile EEROM										
Memory Modes	User-selectable. Wrap (FIFO) or stop when memory is full. User selectable start/stop time.										
Sample Rate	User selectable - Minimum once per minute, selectable in 10-second increments to once per day.										
Recording Span	Recording span depends on selected sample interval. Table below provides typical sampling rates and the length of time the data recorder will retain data in memory before wrapping or stopping.										
	<table border="1"> <thead> <tr> <th>Sample Interval</th> <th>Recording Span</th> </tr> </thead> <tbody> <tr> <td>1 minute</td> <td>18.7 days</td> </tr> <tr> <td>5 minutes</td> <td>3.1 months</td> </tr> <tr> <td>15 minutes</td> <td>9.3 months</td> </tr> <tr> <td>1 hour</td> <td>3.1 years</td> </tr> </tbody> </table>	Sample Interval	Recording Span	1 minute	18.7 days	5 minutes	3.1 months	15 minutes	9.3 months	1 hour	3.1 years
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