

Vaisala Veriteq Validation/Mapping System

/ WHEN HUMIDITY AND TEMPERATURE ARE CRITICAL



VAISALA

Faster Set-up, Lower Costs, Better Results



"The Vaisala IQ/OQ protocol is very nicely done... [it's] very complete and saved us 2-3 weeks of work."

- Stephan Montag
Head of IT

"After researching several companies that offer data loggers for temperature validation, the decision to purchase from Vaisala was easy. The software is Part 11 compliant and the protocol is outstanding!"

- Jean Wilson
Senior Stability Scientist

Compliance with strict regulatory guidelines and quality requirements demands accurate measurement, secure data, and comprehensive reporting. Unlike any competitive product, the vLog™ system specifies temperature and relative humidity accuracy for one year, eliminating the cost of frequent calibration. It's an easy-to-use, cost-saving, high-accuracy solution for mapping critical and FDA-regulated environments — from stability chambers, to freezers, to warehouses.

Unmatched Performance and Cost Savings

The vLog system is the most accurate and effective solution for understanding your environments and complying with regulations. With easy set-up and placement of self-contained data loggers, you can be mapping a chamber in minutes. Each logger contains highly stable sensors,

large internal memory, and a 10-year battery, eliminating the threat of power failure or lost data — while saving time and money with fast deployment.

vLog maintains all data and events in secure files, providing tamper-proof security with presentation-ready reports. You always have documentation on hand to evaluate each test quickly and meet 21 CFR Part 11.

Unlike other products that only state accuracy when equipment leaves the factory, Veriteq's instruments are calibrated to maintain accuracy for one full year. Each one has NIST-traceable certification from our A2LA-accredited calibration lab. Calibrations are performed at a minimum of 5 points and can be tailored to any customer requirement — including ICH guidelines.

The vLog system provides:

- Temperature: -90 to 70 °C, up to 0.1 °C accuracy and 0.02 °C resolution
- Relative Humidity: 0 to 90 % RH, up to 1 % accuracy and 0.05 % resolution
- Audit trail, 21 CFR 11 compliant graph and tabular reporting
- Measurement accuracy specified for one year, eliminating the need for frequent calibration

Flexible and Secure Reporting

Quick Visual of Results

Display temperature and humidity on one graph or separate graphs. Use cursor limit lines for quick indication that your study ran successfully.

Quality Reports with Simple Check-box Selection

Create standard and customized documents fast, including statistics such as min, max and avg values, Mean Kinetic Temperature and other calculations, or export generic .csv files for further analysis.

System-wide Traceability and Secure Data

With vLog's validated audit trail, no interaction with the system goes unrecorded. Data remains secure and tamper-proof, ensuring reports are always compliant with 21 CFR Part 11.

Industry-standard Security Access

Use all the capabilities of Windows password authentication so your IT staff can implement what they already use to protect other company assets.

Ease of Use and Industry Best Reliability

Simply place the data loggers where you need them — no wires to handle. Their 10-year battery, internal memory, and stable sensors let you focus on test results instead of time-consuming setup and re-calibrations.

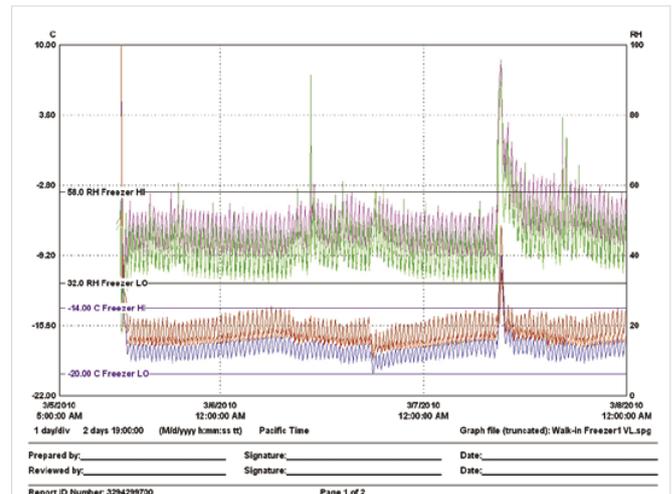
"The Vaisala validation system reduced our setup time for temperature mapping by at least 80 %."

**- Stephanie Cowan
Validation Specialist**



Ideal for mapping ICH Stability areas, Freezers, Refrigerators, Incubators and Warehouses.

Microbial Data Report											
Sample/Channel:	1/1	1/2	2/1	2/2	3/1	3/2	Group	Group			
Serial Number:	01122404	01122405	00021901	00021902	00122401	00022401	00022402				
Channel Description:	Walk-In Freezer1	Walk-In Freezer2									
Channel Units:	°C										
5/8/2012 3:00:00 AM EXTERNAL PROTECTION											
5/8/2012 3:00:00 AM											
Max Value:	-16.60	49.3	-17.26	51.6	-16.87	53.8	-16.87	57.4			
Avg Value:	-17.11	47.3	-18.02	47.8	-17.39	54.3	-18.10	49.0			
Min Value:	-17.24	38.4	-18.30	46.5	-17.39	54.3	-18.10	34.5			
Max Value - Min Value:	0.73	10.9	1.15	5.1	0.00	0.0	0.00	12.5			
Avg Value - Min Value:	0.73	9.0	0.87	8.6	0.00	0.0	0.00	14.6			
Standard Deviation:	0.29	4.5	0.32	4.4	0.32	5.2	0.32	6.8			
Sample Count:	12	12	12	12	12	12	12	12			
5/8/2012 3:00:00 AM EXTERNAL PROTECTION											
Max Value (Sensor/Channel):											
Max Value (Sensor):	-16.60	49.3	-17.26	51.6	-16.87	53.8	-16.87	57.4			
Max Value (Channel):	3:18:10 AM	3:18:10 AM	3:18:10 AM	3:18:10 AM	3:17:40 AM	3:17:40 AM	3:17:40 AM	3:17:40 AM			
Min Value (Sensor/Channel):											
Min Value (Sensor):	-17.24	38.4	-18.30	46.5	-17.24	54.3	-18.10	34.5			
Min Value (Channel):	3:24:10 AM	3:18:10 AM	3:25:10 AM	3:25:10 AM	3:22:10 AM	3:22:10 AM	3:22:10 AM	3:22:10 AM			
5/8/2012 3:00:00 AM EXTERNAL PROTECTION											
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.20	42.9	-18.21	47.4	-16.78	49.1					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.11	44.4	-17.20	50.8	-16.86	49.4					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-16.97	49.3	-17.20	52.4	-16.87	49.4					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-16.60	38.4	-17.19	49.6	-16.87	39.5					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.24	38.4	-18.41	49.5	-16.86	39.5					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.05	39.2	-18.11	48.3	-16.85	40.8					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.18	44.3	-18.11	48.3	-16.85	49.3					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.06	49.8	-17.68	51.7	-16.88	50.9					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-16.60	42.4	-17.15	51.6	-16.88	50.9					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.24	37.8	-18.16	46.2	-16.82	49.2					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.24	39.5	-18.30	46.3	-17.38	39.0					
5/8/2012 3:00:00 AM											
5/8/2012 3:00:00 AM	-17.24	49.3	-18.45	49.1	-17.06	49.1					



Reports can be generated in tabular or graphical formats. Customizable graphics include limit lines for viewing results at a glance.

Comprehensive Support

Service, Maintenance, Warranties



"It's terrific to have real people answering the phones and providing support."

**- Bob Burke,
IT Manager**

We design, develop and produce our own systems, which means that exceptional knowledge and support capabilities are at your service, on demand. You can depend on accurate and responsive support for all your Vaisala products.

Calibration: On-site or Accredited

To maintain the high accuracy measurement of the vLog system, we perform calibrations and complete functional testing in our own A2LA accredited lab, which meets the standards of ISO/IEC 17025 & ANSI/NCSL Z540-1-1994.

Calibrations include:

- Verification of specifications against the original calibration
- Battery check with any necessary firmware updates
- Measurement accuracy specified for one year—a specification that is unique to Vaisala's VL and SP data recorders.

Wherever sending recorders in for recalibration is impractical, we offer onsite calibration for some devices. On-site calibration includes NIST-traceable certificate and reminders of recalibration due dates.

To reduce the costs of calibration, we offer optional 3- or 5-year pre-paid plans that not only provide protection from price increases, they are a significant savings on calibration costs. For your convenience, we provide loaner data recorders while units are being recalibrated.

For decades Vaisala has advanced the science, accuracy and industry standards of humidity and temperature measurement, recording

Productivity and Accuracy without Compromise

- IQ/OQ validation documentation
- Rapid support – answers when you need them
- Cost-saving extended warranties
- Complete calibration plans
- A2LA-accredited calibration, NIST traceability
- Complete service plans

and reporting. With a unique system that combines autonomous internal memory and 10-year battery life for independent recording, we provide the most reliable system wherever data on environmental conditions are critical.

Ours is the only environmental validation system that states the accuracy of its humidity and temperature recorders after one year of field use. Whether your applications are FDA regulated or subject to other stringent quality compliance guidelines, Vaisala's systems deliver best-in-class accuracy, fail-safe data and customizable solutions.

vLog is available and supported both directly and from a worldwide network of distributors. Learn more at www.vaisala.com/veriteq

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For more information, visit www.vaisala.com or contact us at sales@vaisala.com

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