

On-site Calibration

for Continuous Monitoring Systems



Features

- Achieve time and cost savings by preventing production downtime
- Ensure highly accurate measurements
- Provide certification and mandatory documentation for instrument calibration standards
- Free up staff to focus on primary work assignments
- Enjoy peace of mind with Vaisalacertified calibration expertise and components
- Take advantage of a wide array of available calibrations

Calibrating Vaisala Continuous Monitoring Systems (CMS) on-site helps to maximize reliability and profitability by minimizing costly equipment downtime, removing the need for in-house or factory calibration, and allowing your staff to focus on what is truly important: your business.

Reliable On-site Calibration for Life Science Applications

On-site Calibration Service offers a range of benefits over the conventional options of either shipping equipment back to the manufacturer or calibrating in-house. Reliable on-site calibration minimizes downtime by keeping your monitoring system in place and operational.

Certain calibrations require removal of the device from process. For these situations Vaisala offers rental devices and device swap services to ensure continuity of monitoring and gap-free data. By outsourcing calibration to Vaisala, you remove the need to invest in specialized calibration equipment and training – allowing staff to focus on their primary tasks.

We provide you with a range of singleand multi-point calibration options using application-specific reference instruments, complete with a certificate of NIST traceability. To maintain the high levels of accuracy and optimal performance of your CMS, the system sends a reminder when calibration is due.

Complete Documentation

On-site Calibration Service provides a thorough analysis with comprehensive paper and digital documentation, including a calibration certificate to ensure verification and standards compliance. Calibration reports, data sheets, and calibration labels can be supplied on-site, with digital backup files saved to disk. Our highly accurate calibrations fulfill international standards and make it easy to comply with regulatory requirements.

Technical Data

Single-point Calibration

Temperature

Temperature	
Range	-90 +70 °C
Unit Under Test acceptance limits	±1 °C
Calibration points	One point at point of use
Adjustment	Not available
Certificate	Includes as-found/as-left data
Traceability	NIST
Available for the following devices	Vaisala Temperature Data Loggers • DL1000 • DL1016 • DL1400 • DL1416 • DL2000 • HMT140
Reference instrument	Vaisala Temperature Data Logger
Temperature for Liquid Nitrogen Applications	
Range	-196 °C
Unit Under Test acceptance limits	±3 °C
Calibration points	One point at point of use
Adjustment	Not available
Certificate	Includes as-found/as-left data
Traceability	NIST
Available for the following devices	Vaisala Temperature Data Loggers DL1700
Reference instrument	Vaisala Temperature Data Logger,
	Fluke 52 Series II
Relative Humidity	
Relative Humidity Range	
-	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature
Range	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C
Range Unit Under Test acceptance limits	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH
Range Unit Under Test acceptance limits Calibration points	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use
Range Unit Under Test acceptance limits Calibration points Adjustment	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use Not available
Range Unit Under Test acceptance limits Calibration points Adjustment Traceability	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use Not available NIST Vaisala Humidity Data Logger
Range Unit Under Test acceptance limits Calibration points Adjustment Traceability Applicable loggers and transmitters	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use Not available NIST Vaisala Humidity Data Logger DL2000, HMT140
Range Unit Under Test acceptance limits Calibration points Adjustment Traceability Applicable loggers and transmitters Reference instrument	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use Not available NIST Vaisala Humidity Data Logger DL2000, HMT140
Range Unit Under Test acceptance limits Calibration points Adjustment Traceability Applicable loggers and transmitters Reference instrument Carbon Dioxide	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use Not available NIST Vaisala Humidity Data Logger DL2000, HMT140 Vaisala Humidity Data Logger
Range Unit Under Test acceptance limits Calibration points Adjustment Traceability Applicable loggers and transmitters Reference instrument Carbon Dioxide Range	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use Not available NIST Vaisala Humidity Data Logger DL2000, HMT140 Vaisala Humidity Data Logger O 20 % at point of use
Range Unit Under Test acceptance limits Calibration points Adjustment Traceability Applicable loggers and transmitters Reference instrument Carbon Dioxide Range Unit Under Test acceptance limits	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use Not available NIST Vaisala Humidity Data Logger DL2000, HMT140 Vaisala Humidity Data Logger 0 20 % at point of use Application dependent
Range Unit Under Test acceptance limits Calibration points Adjustment Traceability Applicable loggers and transmitters Reference instrument Carbon Dioxide Range Unit Under Test acceptance limits Calibration points	Fluke 52 Series II Ambient RH (within range of 10 90 %RH) at any temperature within range of +10 +45 °C ±5 %RH One point at point of use Not available NIST Vaisala Humidity Data Logger DL2000, HMT140 Vaisala Humidity Data Logger 0 20 % at point of use Application dependent One point at point of use
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Multi-point Calibration

Temperature	
Range	-90 +90 °C
Unit Under Test acceptance limits	±0.5 °C
Calibration points	Application-dependent
Adjustment	Available on 3+ point calibrations
Certificate	Includes as-found/as-left data and
	uncertainties
Traceability	NIST
Available for the following devices	Vaisala Temperature Data Loggers with Probes • DL1000 • DL1016 • DL1400 • DL1416 • HMT143 • HMT148
Reference instrument	Ametek ETC159
Relative Humidity	
Range	10 90 %RH at ambient temperature
Unit Under Test acceptance limits	Loggers ±3 %RH
Calibration points	Application-dependent
Adjustment	Available on 3+ point calibrations
Certificate	Includes as-found/as-left data and uncertainties
Traceability	NIST
Available for the following devices	Vaisala Relative Humidity Data Loggers HMT141, DL2000
Reference instrument	Vaisala HMT330
Differential Pressure	
Range	-15 200 psi
Unit Under Test acceptance limits	Range-dependent
Calibration points	Application-dependent
Adjustment	Available on 3+ point calibrations
Certificate	Includes as-found/as-left data
Traceability	NIST
Available for the following devices	Vaisala Differential Pressure Transmitter Series PDT100
Reference instrument	Fluke Process Calibrator / Pressure Modules
Current and Voltage	
Range	0 5 VDC 0 10 VDC 0 20 mA
Unit Under Test acceptance limits	±0.15 %FS at +25 °C
Calibration points	Match Factory Calibration
Adjustment	Yes
Certificate	Includes as-found/as-left data and uncertainties
Traceability	NIST
Available for the following devices	Vaisala Relative Data Loggers HMT140, DL4000, DL2000
Reference instrument	National Instruments PHIe-4141

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