

TECHNICAL DATA

5000A-RH/T Precision Humidity and Temperature Data Logger



Product overview: 5000A-RH/T Precision Humidity and Temperature Data Logger

MET/CAL® Plus Calibration Software interface

The 5000A-RH/T is manufactured for Fluke Calibration by Veriteq Instruments Inc. The Fluke Calibration version of this product has been enhanced with an interface to Fluke's MET/CAL® Plus, the worldwide de facto standard in calibration software. This unique feature allows MET/CAL Plus (versions 6.11 or higher) to read temperature and humidity from the 5000-RH/T directly into a calibration record as you start to run a procedure. All the environmental information required for your calibration becomes a permanent part of the calibration record – without requiring you to enter the data manually or add it later when you create a report. And using the 5000-RH/T with MET/CAL Plus is easy, allowing you even greater automation and convenience.

Multi-station, multi-room capability

MET/CAL Plus can read multiple 5000A-RH/T's located in different calibration areas, providing a perfect solution for large calibration labs with multiple rooms or MET/CAL Plus stations. Because each 5000A-RH/T is assigned a unique asset number, it can be viewed from any MET/CAL station in your system. This unique number also provides identification required for traceability in quality and regulatory records.

Reliable, secure and accurate

The 5000A-RH/T features all-solid-state construction, non-volatile memory, and a tamper-proof design to ensure that the information it records is reliable and secure. The rugged thermoset-polymer-based capacitive-relative-humidity sensor offers outstanding resistance to air-borne contaminants and condensation, delivering exceptional in-calibration

service and reliability. Accurate to $\pm 2\%$ RH and 0.25°C , the 5000A-RH/T can sense changes as minute as 0.05% RH and 0.05°C with a time-base accuracy of better than two seconds per day.

Powerful software interface

The 5000A-RH/T comes with Spectrum Software, a powerful Microsoft Windows® based program for configuring, downloading, displaying, analyzing and reporting your collected humidity and temperature data. This flexible software also facilitates access to MET/CAL Plus Calibration Software for increased ease in automated calibrations, as well as for more convenient reporting.

Specifications: 5000A-RH/T Precision Humidity and Temperature Data Logger

Relative Humidity	
Sensor Type	Capacitive polymer-based monolithic integrated circuit
Precision	0.05% RH
5 Year Accuracy	3% RH
Hysteresis	0.8% over full RH range
Measuring Range	0-95% RH
1 Year Accuracy	2% RH over 10 to 90%
Repeatability	0.5% RH at 0-75% RH
Temperature	
Sensor Type	NTC thermistor
Measuring Range	40° to 70°C
Precision	0.05°C at 25°C
1 Year Accuracy	0.15°C at 25°C ; 0.25°C over -20° to 70°C
5 Year Accuracy	0.25°C at 25°C ; 0.35°C over -20° to 70°C
Repeatability	0.01°C
Hysteresis	0.01°C
Memory	
Memory Type	Non-volatile 32K x 8 EEROM
Data Sample Capacity	21,500 12-bit samples
Memory Modes	User-selectable: 1) Wrap when memory full, or 2) Stop when memory full.
Memory Protection	Data retention > 20 years backup without power
Sampling Rates	User-selectable (in intervals of 10 seconds) from once every 10 seconds to once every 24 hours.
Recording Span	Recording span depends on sample interval selected. Adjacent chart details typical sampling rates and length of time logger will retain data in memory before wrapping around or stopping (see Memory Modes).

General Specifications

Size	2.8 x 2.1 x 0.7" (71x53x18 mm); 60g (2.2 oz.)
Operating Range	-40 - 85° C. (-40 - 185° F.) and 0-100% RH
Interfaces	RS-232 serial port; half-duplex; 19,600 baud.
Mounting	Magnetic strips
PC Software	Designed for use with Spectrum Software and Fluke MET/CAL Plus Calibration Software. Compatible with Windows 95, 98 and NT.
Clock	Accuracy: ± 1 min./month at 0- 50° C
Electronic interference	Meets FCC Part 15 for digital devices; meets CE requirements for radiated emissions, electrostatic discharge, & radiated susceptibility.
Power, battery life	Integral lithium battery with life of 10 years at 1 min. sampling rate
Warranty and Calibration Service	<p>Custom calibrations are available for increased accuracy over narrower than specified measurement ranges. Verification documentation at different temperature points also available. Contact Veriteq Inc. 1-800-683-8374</p> <p>-----</p> <p>The 5000A-RH/T carries a recommended one-year calibration cycle. Calibration, warranty and repair services are provided by Veriteq Inc. BC, Canada. 1-800-683-8374, www.veriteq.com. Outside North America contact your local authorized Fluke service center.</p> <p>-----</p> <p>60-day return guarantee; 2 year limited warranty</p>

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