INSTRUTEK®
Elveveien 28, 3262 Larvik
Tlf. 33 16 57 00 - Faks 33 16 57 01
post@instrutek.no - www.instrutek.no

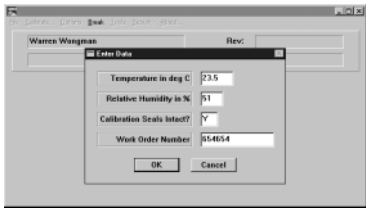
FLUKE®

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

Technical Data

Now with an interface to Fluke MET/CAL® *Plus* Calibration Software for even more convenience in the cal lab.

The 5000A-RH/T is a precision humidity and temperature data logger that enables you to monitor ambient temperature and humidity in calibration environments. It is a compact, convenient alternative to pen-style humidity chart recorders and bulky temperature monitors. Simply place it anywhere you need to track humidity and temperature conditions, and it will record accurate time-based readings covering periods of up to several years. The 5000A-RH/T includes Spectrum™ Software to record temperature and humidity values in a history file for audits and reviews. No charts, wires, connections or power cords are required.



MET/CAL® Plus Calibration Software interface

The 5000A-RH/T is manufactured for Fluke by Veriteq Instruments Inc. Fluke's 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.

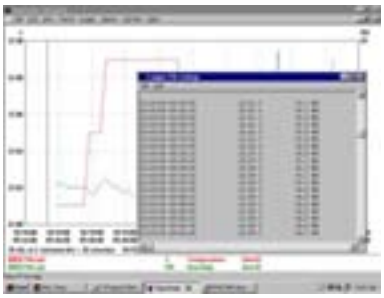
Multi-station, multi-room capability

MET/CAL *Plus* can read multiple 5000A-RH/Ts 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, capacitive-relative-humidity sensor offers outstanding resistance to air-borne contaminants and condensation, delivering exceptional in-calibration service and reliability. Accurate

to ± 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.

Warranty and calibration services
Custom calibrations are available for increased accuracy over narrower than specified measurement ranges. Verification documentation at different temperature points also available. **Contact Veriteq Inc. at 1-800-683-8374.**

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.

60-day return guarantee; 2 year limited warranty.

Specifications

Relative Humidity (RH)	
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	0.015° 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	
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
Electromagnetic Interference	Meets FCC Part 15 for digital devices; meets CE requirements for radiated emissions, electrostatic discharge, and radiated susceptibility
Power Source	Internal lithium battery with life of 10 years at 1 min. sampling rate

Ordering Information

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

Includes Logger unit, RS-232 communication cable and connector, Spectrum configuration and charting software, and 3-point NIST Traceable calibration certificate

Interface requires version 6.11 or later of MET/CAL *Plus*.

Fluke. *Keeping your world up and running.*

Fluke Corporation
PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.
PO Box 1186, 5602 BD
Eindhoven, The Netherlands

For more information call:
In the U.S.A. (800) 443-5853 or
Fax (425) 446-5116
In Europe/M-East/Africa (31 40) 2 675 200 or
Fax (31 40) 2 675 222
In Canada (800) 36-FLUKE or
Fax (905) 890-6866
From other countries (425) 446-5500 or
Fax (425) 446-5116
Web access: http://www.fluke.com/

Printed in U.S.A. 2/2001 1611134 D-ENG-N Rev A

Printed on recycled paper.