

Fluke 971 Temperature Humidity Meter

Technical Data



Quickly take accurate humidity and temperature readings in the air. Temperature and humidity are two important factors in maintaining optimal comfort levels and good indoor air quality. The Fluke 971 is invaluable for facility maintenance

and utility technicians, HVAC-service contractors, and specialists who assess indoor air quality (IAQ). Lightweight, rugged, and easy to hold, the Fluke 971 is the perfect tool for monitoring problem areas.

The Fluke 971 has:

- Backlit dual display of humidity and temperature
- 99 record storage capacity
- Ergonomic design with belt clip and protective holster
- Quick-response capacitance sensor with protective cover

General Features

- Compact and lightweight (190 g/6.7 oz)
- Temperature range from -20 °C to 60 °C (-4 °F to 140 °F)
- Measures dew point and wet bulb
- Relative humidity from 5 % to 95 %
- Min/Max/Avg data hold
- Low battery indicator

Specifications

Temperature range	-20 °C to 60 °C (-4 °F to 140 °F)
Temperature accuracy	
0 °C to 45 °C	± 0.5 °C
-20 °C to 0 °C and 45 °C to 60 °C	± 1.0 °C
32 °F to 113 °F	± 1.0 °F
-4 °F to 32 °F and 113 °F to 140 °F	± 2.0 °F
Resolution	0.1 °C / 0.1 °F
Temperature update rate	500 ms
Temperature sensor type	NTC
Relative humidity range	5 % to 95 % R.H.
Relative humidity accuracy	
10 % to 90 % R.H. @ 23 °C (73.4 °F)	± 2.5 % R.H.
<10 %, > 90 % R.H. @ 23 °C (73.4 °F)	± 5.0 % R.H.
Resolution	0.1 % R.H.
Response time (humidity)	For 90 % of total range - 60 sec. with 1 m/s air movement
Humidity sensor	Electronic capacitance polymer film sensor
Data storage	99 points

Specifications cont.

Operating temperature	
Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Humidity	0 °C to 55 °C (32 °F to 131 °F)
Storage temperature	-20 °C to 60 °C (-4 °F to 140 °F) at < 80 % R.H. (with battery removed)
Weight	190 g (6.7 oz)
Dimensions (HxWxD)	194 mm x 60 mm x 34 mm (7.6 in x 2.4 in x 1.3 in)
Battery type	4 AAA alkaline batteries
Battery life	200 Hours
Safety approval	Electromagnetic compatibility: Complies with EN 61326-1
Warranty	12 months

* Humidity sensor hysteresis (excursion of 10 % to 90 % to 10 % R.H.): ± 1 % R.H. with 1 m/s air movement
 * Temperature coefficient: 0.1 times the applicable accuracy specification per °C from 0 °C to 18 °C and 28 °C to 50 °C (32 °F to 64 °F and 83 °F to 122 °F)

Other IAQ Tools from Fluke

Fluke 983 Particle Counter

- Simultaneous display of six size channels on a bright, backlit LCD
- 5000 sample record capacity
- Logged samples include date, time, particle counts, sample volume, temperature and relative humidity
- Rechargeable NiMH battery providing up to 8 hours continuous operation
- Selectable sample time, count data, programmable delay
- Built-in relative humidity and temperature sensors



CO-220 Carbon Monoxide Meter

- Standalone CO meter that does not require a digital multimeter
- Large backlit LCD displays CO levels from 0 to 999 ppm.
- Beeper triggers with increasing frequency as CO levels rise.
- MAX hold function stores and displays the maximum CO level.
- Automatic sensor zeroing and self-test upon startup.



CO-205 Aspirator Kit

The CO-205 flue gas sampling accessory kit contains all the components necessary to provide a clean sample for the Fluke family of gas measuring devices. The CO-205 accessory kit includes:



- Stainless steel sampling tube
- Industrial-grade hand operated aspirator to draw flue sample
- Easily replaceable particulate filter
- Specially designed nose cap for connection to the Fluke CO-220.



Fluke. *Keeping your world up and running.®*

Fluke Corporation
 PO Box 9090, Everett, WA 98206 U.S.A.

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 (0) 40 2675 200 or Fax +31 (0) 40 2675 222
 In Canada (800)-36-FLUKE or Fax (905) 890-6866
 From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116
 Web access: <http://www.fluke.com>

©2005-2011 Fluke Corporation.
 Specifications subject to change without notice.
 Printed in U.S.A. 10/2011 2457037D D-EN-N

Modification of this document is not permitted without written permission from Fluke Corporation.

Ordering Information

- Fluke-971** Temperature Humidity Meter
- Fluke-983** Particle Counter
- Fluke-CO-205** Aspirator Kit
- Fluke-CO-220** Carbon Monoxide Meter