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 twist-open 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-210 Carbon Monoxide Probe

- Use as an accessory to a digital multimeter with DC millivolt inputs
- Displays CO level readings from 0 to 999 ppm, with a resolution of 1 ppm and accuracy of ± 3 %.
- Also used as a standalone device with an LED indicator and beeper that triggers with increasing frequency as CO levels rise.

CO-220 Carbon Monoxide Meter

- Standalone CO meter that does not require a digital multimeter
- Large backlit LCD displays CO levels from 0 to 1000 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-210/CO-220.

Ordering Information

Fluke-971	Temperature Humidity Meter
Fluke-983	Particle Counter
Fluke-CO-205	Aspirator Kit
Fluke-CO-210	Carbon Monoxide Probe
Fluke-CO-220	Carbon Monoxide Meter