# Indoor Air Quality Instruments


Model CF930

## CompuFlow® IAQ Meters

### Models CF920 and CF930

These Indoor Air Quality Meters are the ideal tools for investigating indoor air quality and performing thermal comfort studies. They simultaneously measure and data log multiple parameters. The CF920 quickly and accurately measures carbon dioxide ($CO_2$), temperature, humidity, and calculates dew point, wet bulb temperature, and % outside air. The Model CF930 adds a measurement of carbon monoxide (CO).

## Features and Benefits

- Stable NDIR sensor to monitor $CO_2$
- Calculates % outside air from $CO_2$ or temperature
- Displays humidity as %RH, dew point, and wet bulb
- Manual or continuous data logging
- Stores 12,700+ sets of downloadable readings with time and date stamp
- Includes LogDat2™ software and interface cable to download to a PC

## Features and Benefits

- Statistics function for average, maximum, and minimum values
- Displays three parameters simultaneously
- Real-time $CO_2$ readings 0 to 5,000 parts per million (PPM)
- Integrated NDIR sensor

## Applications

- Investigating indoor air quality
- Performing thermal comfort studies
- Checking ventilation systems
- Conducting IAQ evaluations

## Model CF910 $CO_2$ Meter (not shown)

The CF910 $CO_2$ Meter is an excellent, cost-effective handheld diagnostic instrument for measuring and monitoring carbon dioxide levels. HVAC professionals use it for conducting IAQ surveys, and evaluating ventilation systems in schools, offices, factories, and hospitals.

*Rugged. Reliable. Professional.*

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# Specifications

CompuFlow Models CF910, CF920, and CF930

### $CO_2$

**Sensor Type** Dual-wavelength NDIR (non-dispersive infrared)
**Range** 0 to 5000 ppm
**Accuracy**[1] ±3.0% of reading or ±50 ppm, whichever is greater
**Resolution** 1 ppm
**Response Time** 20 seconds

### Temperature (Models CF920 and CF930)

**Sensor Type** Thermistor
**Range** 32 to 140°F (0 to 60°C)
**Accuracy** ±1.0°F (±0.6°C)
**Resolution** 0.1°F (0.1°C)
**Response Time** 30 seconds (90% of final value, air velocity at 400 ft/min [2 m/s])

### Relative Humidity (Models CF920 and CF930)

**Sensor Type** Thin-film capacitive
**Range** 5% to 95% RH
**Accuracy**[2] ±3.0% RH
**Resolution** 0.1% RH
**Response Time** 20 seconds (for 63% of final value)

### % Outside Air (Models CF920 and CF930)

**Range** 0 to 100%
**Resolution** 0.1%

### CO (Model CF930 only)

**Sensor Type** Electro-chemical
**Range** 0 to 500 ppm
**Accuracy** ±3.0% of reading or ±3 ppm, whichever is greater
**Resolution** 0.1 ppm
**Response Time** <60 seconds to 90% step change

### Operating Temperature

**40 to 113°F (5 to 45°C)**

### Storage Temperature

**-4 to 140°F (-20 to 60°C)**

### Logging Capability (Models CF920 and CF930)

**Ranges** Model CF920 logs up to 30,300 data points with (3) measurement parameters enabled
Model CF930 logs up to 26,900 data points with (4) measurement parameters enabled
**Time Constant** 1 sec, 5 sec, 10 sec, 20 sec, 30 sec (user selectable)
**Log Intervals** 1 second up to 1 hour (user selectable)

### Meter Dimensions (all models)

**3.3 in. x 7.0 in. x 1.8 in. (8.4 cm x 17.8 cm x 4.4 cm)**

### Probe Dimensions (Model CF910)

**Length** 2.75 in. (7.0 cm)
**Diameter** 0.75 in. (1.9 cm)

### Probe Dimensions (Models CF920 and CF930)

**Length** 7.0 in. (17.8 cm)
**Diameter** 0.75 in. (1.9 cm)

### Weight (with batteries)

**Models CF910**
0.6 lbs (0.27 kg)
**Models CF920 and CF930**
1.16 lbs (0.53 kg)

### Power Requirements

Model CF910 Four AA-size batteries
Models CF920 and CF930
Four AA-size batteries or AC adapter

| | CF910 | CF920 | CF930 |
|---|---|---|---|
| $CO_2$ | • | • | • |
| CO | | | • |
| Temperature | | • | • |
| Humidity | | • | • |
| % outside air | | • | • |
| Dew point | | • | • |
| Wet bulb temperature | | • | • |
| Data logging/downloading | | • | • |
| Statistics | • | • | • |
| Review data | | • | • |
| Certificate of Calibration | • | • | • |

[1] At 77°F (25°C). Add uncertainty of ±0.2%/°F (±0.36%/°C) away from calibrated temperature.

[2] At 77°F (25°C). Add uncertainty of ±0.03% RH/°F (±0.05% RH/°C) away from calibrated temperature.

Specifications subject to change without notice.

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