Applications

- Identify areas with low or substandard ventilation.

- Identify hidden energy savings in overventilated spaces.

- Determine if ventilation is a factor in air quality complaints.

- Locate the presence of combustion fumes from vehicles and appliances.

- Use as a reference to calibrate wall mounted CO_2 sensors.

Features

- Patented dual beam, Absorption Infrared™ gas sensor ensures long term stability and durability.

- Record temperature, CO_2, RH and graph recorded data with supplied software (Model 7001D).

- Large, easy-to-read display. Temperature displayed in °F or °C. CO_2 displayed in ppm. Easily adjusted for altitude changes.

- Fast, simple calibration using external port and display. Calibrate with ambient air or bottled gas.

- Calibrate, set elevation, change °F or °C using on-board controls or optional computer interface (UIP kit model 2072)

- Flip out stand for desktop monitoring.

- Voltage output via RJ45 connector provides easy interface to most data loggers.

- Plug in AC power adaptor.

- Operates for up to 80 hours on four AA alkaline batteries (not included).

- Displays cfm-per-person ventilation rate based on CO_2 inside outside differential reading.

Telaire® 7000 Series

Handheld Indoor Air Quality (IAQ) Monitors

Telaire 7000 Series are Telaire products. Telaire has joined other GE high-technology sensing businesses under a new name— GE Industrial, Sensing.

Telaire 7001

Equipped with Telaire's patented dual beam Absorption Infrared™ technology, the Telaire 7001 is an easy-to-use CO_2/temperature monitor designed for use in residential or commercial applications. With the ability to display CO_2 readings and calculate outside air ventilation rates in cfm/person, the monitor is an ideal tool for: identifying energy saving opportunities in over-ventilated spaces, determining if air quality complaints are due to insufficient ventilation, or locating the presence of combustion fumes generated from vehicles and appliances. Come with a power adapter.

Telaire 7001 and Telaire 7001i

Telaire 7001i

Combines the standard Telaire 7001 CO_2/Temperature monitor with an international adapter kit.

Telaire 7000SK

Combines the Telaire 7001 with a technical reference library (CD), graphing software and Ventulator™ energy analysis program. The Ventulator calculates potential energy savings and provides a detailed report to support your control strategy. The VG Graphing software is a "real-time" graphing software that records and graphs CO2 data directly to your computer.

Telaire 7000SK

Telaire 7001D

Combines the Telaire 7001 and Hobo data logger to provide you with everything you need to record and graph CO_2, temperature, and relative humidity.

Telaire 7001D

7000 Series Specifications

Method
Dual Beam Absorption Infrared™

Sample Method
Diffusion or flow through (50 to 100 ml/min)

Display–LCD
Independent CO_2 and temperature readings. Calculates and displays ventilation rates.

General

Operating Conditions
• 32°F to 122°F (0°C to 50°C)
• 0 to 95% RH, non-condensing

Storage Temperatures
-4°F to 140°F (-20°C tp 60°C)

Certification
FCC Class 15 Part B

Warranty
18 months parts and labor

Performance–CO_2 Channel

Measurement Range
• 0 to 10,000 ppm display
• 0 to 4000 ppm voltage output

Display Resolution
±1 ppm

Accuracy
±50 ppm or 5% of reading, whichever is greater

Repeatability
±20 ppm

Temperature Dependence
±0.1% of reading per °C or ±2 ppm per °C, whichever is greater, referenced at 25°C.

Pressure Dependence
0.13% of reading per mmHg (corrected via user input for elevation)

Response Time
<60 seconds for 90% of step change

Warm-Up Time
<60 seconds at 72°F (22°C)

Calibration Interval
12 months, offset adjustment using single gas at 0 to 1000 ppm CO_2. Full factory calibration available.

Performance–Temperature Channel

Temperature Range
• Voltage output: 32°F to 104°F (0°C to 40°C)
• Display: 32°F to 122°F (0°C to 50°C)

Display Resolution
0.1°F (0.1°C)

Display Options
°F, °C, of off. Set with panel button.

Accuracy
±2°F (±1°C)

Response Time
20 to 30 minutes (case must equilibrate with environment)

Calibration Interval
12 months, offset adjustment using temperature standard at 50°F to 86°F (10°C to 30°C). Full factory calibration available.

Output–Analog

CO_2
0 to 4 VDC, 1 mV/ppm (4000 ppm maximum)

Temperature
0 to 4 VDC linear, 32°F to 104°F (0°C to 40°C)

Output Impedance
100 ohms

Digital Output
RS232 for use with Telaire CO_2View graphing software

Wiring Connection
One RJ45 to connector dual analog output plus digital output

Power Supply

Battery Type
Four AA batteries (not included)

Battery Operation
80 hours (alkaline)

External
6 VDC from external AC/DC adapter (included)

Power Requirements
100 mA peak, 20 mA average from 6V

CFM/Person Ventilation Rate Measurement

The Telaire 7000 Series will calculate the outside air ventilation rate to a space based on the inside/outside CO_2 differential readings. Outside readings can be established by measuring outside levels and holding the "enter" button on the sensor for five seconds. The outside reading can also be manually set using the on-board keypad and display (default 400 ppm).

Accurate interpretation of the ventilation rate indicator requires a measuring two to three hours after occupancy has stabilized in a space or at a peak in daily CO_2 concentrations. In other conditions the indicator may tend to over estimate ventilation rates.

The ventilation rate display assumes a people activity level in the measured space similar to an office type environment (1.2 MET). If higher levels of activity are present the indicator may tend to under estimate ventilation levels.

7000 Series Accessories/ Ordering Information

2070 Cable
Voltage output cable, includes two pigtail leads for connecting to third party devices.

2075 Calibration Kit
Comes with regulator, tubing and gas. The kit can perform up to 20 calibrations.

2077 RH/Temperature Data Logging Kit (7000SK)
Comes with data logger software and cables for recording/graphing measurements.

2077 Hobo Data Logger Kit (7001)
Small data logger that velcro's to the back of the Telaire 7001. Includes CO_2 input with additional temperature and relative humidity measurement, graphing software and all necessary connection cables.

2080 CO_2View
Graphing software for logging CO_2 concentrations directly to PC.

62933 International Power Supply

62285 RJ45 to DB9 Cable

Factory Calibration
Call the factory for a RMA number.

www.gesensing.com