CARBON DIOXIDE (CO2) MONITOR

Features

- Dual beam, Absorption Infrared gas sensor technology
- Built-in CO_2 and temperature sensors
- Large LCD displays CO_2 level, temperature and ventilation rates
- Operates on batteries or plug in, AC power adapter (included)
- Stand-alone or hand-held use
- Monitor and record CO_2 and temperature data with MadgeTech data recorders

Applications

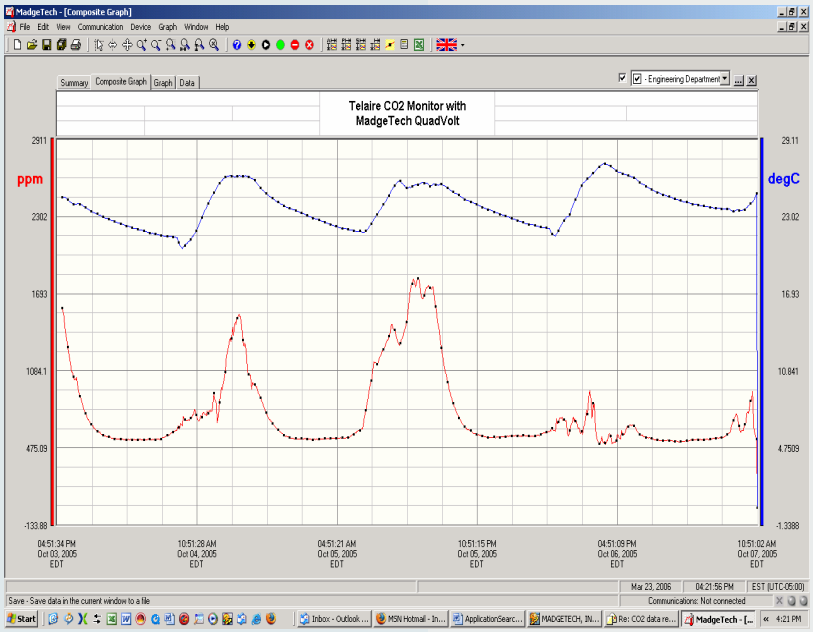
- IAQ (Indoor Air Quality) studies
- Verify proper air ventilation. Poor air quality complaint monitoring.
- HVAC system testing and servicing
- Identify energy savings in over-ventilated spaces
- Sick building studies (hospitals, schools, public buildings, etc.)
- Agricultural, plant growth studies
- Building occupancy monitoring

Designed for residential and commercial use, the Telaire 7001, CO_2 monitor is an essential tool for detecting carbon dioxide and temperature levels in a wide variety of air quality studies and applications. When used with the MadgeTech family of Volt Recorders*, CO_2 levels (ppm) and temperature data can be recorded with time and date stamps for graphing and detailed analysis.

This data can be used to test for low or substandard ventilation in buildings, offices, hospitals, schools, etc. Energy saving opportunities can be identified in over-ventilated spaces. The presence of combustion fumes from vehicles and equipment may also be detected. Poor air quality and ventilation complaints can be verified. Air handlers and exchangers can be diagnosed for service or repairs. Sick buildings may be monitored and improvements made in ventilation systems, from data recorded in baseline and post-retrofit studies. Performance of heating and air conditioning systems can be analyzed. Building occupancy information can also be obtained from CO_2 level data. CO_2 and temperature data are also useful in agricultural, plant growth and greenhouse design applications and studies.

* Volt101 and Volt110 are single channel recorders. To record BOTH CO_2 and temperature data, a QuadVolt or OctVolt, multi-channel data recorder is needed.

Data Sheets Volt101, Volt110, QuadVolt and OctVolt



QuadVolt Recorder with the Telaire Monitor
shows CO_2 (ppm) and temperature data.

The Telaire 7001, CO_2 monitor will operate with the MadgeTech *Volt101, Volt110, QuadVolt and OctVolt data recorders. These models feature screw terminal input plugs. They can be easily connected to the CO_2 monitor's analog voltage output jack, using an available interface cable (CABLE2070). CO_2 and temperature data can be displayed and/or recorded for graphing and analysis with MadgeTech software. Data recorders are optional and sold separately.

For more information about MadgeTech Volt Recorders or to demo our software, visit us online at:
www.madgetech.com

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CARBON DIOXIDE (CO_2) MONITOR SPECIFICATIONS*

CO2 Channel

Measurement Range: 0-10,000 ppm (LCD display)
0-4,000 ppm (voltage output)

Display Resolution: +/- 1 ppm

Accuracy: +/- 50 ppm or +/- 5% of reading up to 5,000 ppm (above 5,000 ppm not specified)

Response Time: <60 seconds for 90% step change

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

Dependencies: Temperature: +/-0.1% of reading per °C or +/- 2 ppm per °C, whichever is greater.
Pressure: 0.13% of reading per mm Hg
(Corrected via user input for elevation)

Calibration Interval: 12 months, offset adjustment using single gas at 0-10,000 ppm CO_2. Please, contact MadgeTech
for calibration details.

Warm-Up Time: <60 seconds at 22°C

Temperature Channel

Measurement Range: 32 to 122°F (0 to 50°C) (LCD display)
32 to 104°F (0 to 40°C) (analog output)

Display Resolution: 0.1°F (0.1°C)

Accuracy: +/- 2°F (+/- 1°C)

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

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

Display Options: °F, °C, or Off. Set with panel button.

Calibration Interval: 12 months, offset adjustment using temperature standard at 50 to 86°F (10 to 30°C). Please, contact MadgeTech for calibration details.

Outputs

Analog CO_2: 0 to 4 volts DC, 1mV/ppm
(4,000 ppm max)

Analog Temperature: 0 to 4 volts DC, linear, 32 to 104°F
(0 to 40°C)

Output Impedance: 100 Ohms

Wiring Connection: One RJ-45, female connector, dual analog output (CO_2 and Temperature)

Display LCD display provides CO_2 levels (ppm), temperature (°F or °C), ventilation rates, elevation and calibration settings, low battery indication
(in US Standard or Metric units)

Power Supply/ General information

Battery Type: Four, AA batteries (not included). Battery life expectancy (80 hours with alkaline batteries)

External Power: 6 volts DC from external AC/DC power adapter (included)

Power Requirements: 100mA Peak, 20mA average from 6 volts

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

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

Certifications: FCC Class 15 Part B, CE

Sensor/ Sampling Method: Dual Beam Absorption Infrared, Diffusion or flow through (50 to 100 ml/min)

*Specifications are subject to change without notice.
Specific warranty and remedy limitations apply.
Call 1-603-456-2011 or go to www.madgetech.com for details.

ORDERING INFORMATION

Model	Description	Price (U.S.)
7001-CO2 MONITOR	Telaire, 7001 CO_2 monitor (includes AC power adapter, manual)	$430.00
CABLE2070	Voltage output cable to connect CO_2 monitor to MadgeTech data recorders	$ 25.00

MadgeTech Volt Recorders and Software sold separately.
Volt101, Volt110, QuadVolt, OctVolt
For more information contact sales@madgetech.com
or visit our web site for more details and pricing. Quantity discounts available

ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Pulse/Event/State
Humidity	Low Level Current
Pressure	Low Level Voltage
pH	RF Transmitters
Level	Intrinsically Safe
Shock	Spectral Vibration

MADGETECH
WE BUILD DATA LOGGERS

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