

TR9299-WiFi for LEED **A Battery Powered CO₂ Alarm And Monitoring Tool** **For LEED Point Certification**

Key Features

- Wall mounted, no wiring required.
- Battery powered CO₂ and temperature sensor with audible (beeper) and visual (flashing LED) alarm.
- Built-in WiFi communication can be activated to allow remote monitoring or integration to building control systems.
- Battery life: 5 year battery life with WiFi communication turned off, 3 year battery life with WiFi broadcast every 10 minutes.
- On-board data logger can log up to 3,072 points.
- Available with an AirTest hosted, cloud-monitoring service that stores data and provides email and text alerts when alarm thresholds are activated. (Requires WiFi network connected to the Internet).
- Easily configured via a USB plug-in PC interface.
- User adjustable measurement interval and WiFi transmitting interval.
- Zero maintenance self-calibrating CO₂ sensor.
- “Commissioning Friendly” design supports accurate and simple in-field calibration verification or adjustment.
- Provided with locking sub-base for secure mounting.

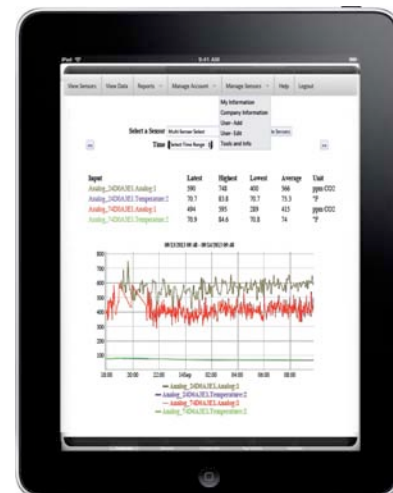


The TR9299-WiFi lead is the first battery powered CO₂ monitoring tool that can operate up to 5 years on two AA batteries. The wall-mounted transmitter requires no wiring and features a locking sub-base that can easily be screwed to any wall. The device includes an audible buzzer and flashing LED that can be activated at a user settable alarm level via a plug-in USB/PC interface. It is an ideal product to meet required LEED Certification for CO₂ measurements. The sensor also incorporates the optional ability to transmit measurement and alarm data when connected to a WiFi network.

Optional WiFi Connectivity

While the WiFi connection is optional, once connected to a WiFi network, data from the sensor can be sent to:

- Any Internet connected device, database or controller (decoding of UDP packets required).
- An AirTest hosted cloud service that stores data and provides email and text alarms. Data can be viewed from any PC, smartphone or tablet.
- Any wired BACnet® or Modbus control network using our WiFi-To-Wire gateway (Model: BB2-7010-06)
- A nearby control input such as a rooftop air handler or building control input using our Point-To-Point WiFi gateway that creates a private network for communication and provides a remote gateway that outputs a 0-10 VDC signal proportional to a 0-2000 ppm CO₂ reading. (Model GW4201).



AirTest offers a cloud based logging and alarm service that allows for readings to be accessed by any smartphone, tablet or PC.

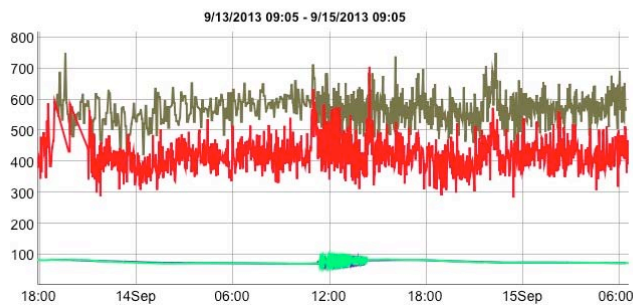
Web Logging Service

AirTest also provides an option with all Wi-Fi communicating products that allows the user to automatically log sensor information to a cloud based database for a nominal monthly fee (first 6 months are free). This is ideal for applications where an ongoing, tamperproof record of readings is important. The webpage interface also allows for automatic report and alarm generation.

View Sensors View Data Reports Manage Account Manage Sensors Help Logout

Select a Sensor Multi-Sensor Select Multiple Sensors
Time Select Time Range

Input	Latest	Highest	Lowest	Average	Unit
Analog_24D0A3E1.Analog:1	565	751	400	570	ppm CO2
Analog_24D0A3E1.Temperature:2	72.7	83.8	70.5	76.4	°F
Analog_74D0A3E1.Analog:1	469	706	284	422	ppm CO2
Analog_74D0A3E1.Temperature:2	72.7	84.9	70.8	76.1	°F



Inside The TR9299-WiFi

USB Configuration Port (Top of enclosure)

Batteries (2 AA Lithium)

5-24 VAC/VDC In

Power Switch



Specifications TR9299-WiFi

Sensors

CO₂ Technology: Wavelength specific LED Infrared source with self-calibration algorithm.

Calibration Interval: No calibration required when self calibration algorithm is activated. Otherwise calibration is recommended every 6 to 12 months.

CO₂ Measurement Range: 0 to 2,000 ppm, 0 to 5,000 ppm, 0 to 1%

CO₂ Operating Conditions: 0° to 50° C, 0 to 95% RH, 950 to 1050 bar

CO₂ Accuracy: +/- 50 ppm, +/- 3% of reading

CO₂ Non Linearity: < 1% of full scale

CO₂ Pressure Dependence: 0.13 % of reading per mm Hg

Temperature Accuracy: (45-120°F)± 0.9°F

Sample Rate: Temperature 15 seconds, CO₂ 2 minutes (Adjustable)

Power

Battery: 3.6 vdc Lithium Thionyl Chloride (2)

Battery Life: up to 157,680 transmissions

External Power (optional): 5-24v DC or AC. 1A peak current, 20mA average current

Wi-Fi

Transmission rate: User programmable

Log rate: User programmable

Broadcast: 12dBm 2.4 GHz 802.11b/g Wi-Fi module

Compatibility: Communicates with Industry Standard Access Points

Encryption: Supports WEP128, WPA-PSK (TKIP), and WPA2-PSK (AES)

General: Small data packets (~75 bytes), Supports DHCP or Static IP, Channel agility

Data Packet Spec Link: [TR9299UDPSpec](#)

Certification: FCC, CE, and IC Class B compliant

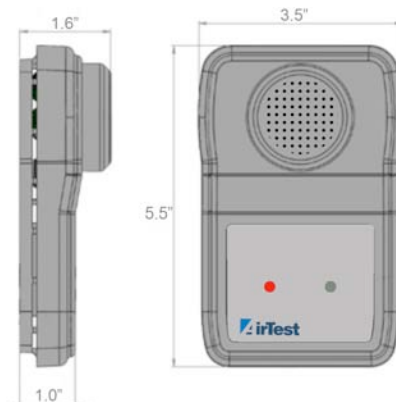
Weight: 5 oz

MADE IN THE USA

This device contains transmitter module

FCC ID: T9J-RN171 IC: 6514A-RN171

US Patent: 6721546 B1



Other WiFi Products available from AirTest:

TR9399 – Temperature And Dew Point

TR9499 – Freezer/Cooler Temp Monitoring

Zigbee Versions also available (Xbee Pro)

4/3/15

AirTest™ Technologies Inc. specializes in the application of cost effective, state-of-the-art air monitoring technology to ensure the comfort, security, health and energy efficiency of buildings.

