



# CO1224T Carbon Monoxide Detector with RealTest™ Technology

*The System Sensor CO1224T CO detector provides early warning by using electrochemical sensing technology to measure carbon monoxide levels in the air.*



## Features

- RealTest™ technology allows installer to test detector with CO gas
- Full compliance with UL 2075
- A code required trouble relay
- Wiring supervision with SEMS terminals
- A six year end-of-life timer
- 12/24 VDC
- A current draw of 20mA in standby and 40mA in alarm
- Versatile mounting for wall and ceiling
- Electrochemical sensing technology

**With RealTest™ technology,** the CO gas sensing cell of the CO1224T CO detector can be tested using a carbon monoxide gas agent. Simply hold the test button for two seconds. After the alarm cycle (temp 4) the green LED will flash about once per second, indicating that the detector is ready to accept CO for testing. Spray a small amount of CO into the detector per the installation instructions, and within seconds the detector will alarm, indicating successful gas entry.

If dangerous amounts of carbon monoxide is detected, the CO1224T detector will alert residents by sounding and flashing a temp-4 signal alarm. Protection is guaranteed 24/7 by a central station, regardless of whether residents are away from home, sleeping or already suffering from the effects of CO.

This specific device is designed for system operation. The detector is fully listed to UL 2075. It offers a code required trouble relay to send a sensor failure or end-of-life signal to the control panel and the central station. It also uses SEMS-type terminal Philips head screws to provide a quicker and more positive wiring connection and code required wiring supervision. The CO1224T detector offers a low current draw, allowing more devices to be connected to the panel without having to purchase a more expensive panel or an extra power supply.

The CO1224T model will operate on most industry security and fire alarm control panels because it is a 12/24 VDC detector.

## Agency Listings



# CO1224T Carbon Monoxide Detector Specifications

## Architectural/Engineering Specifications

Carbon monoxide detector shall be a System Sensor model number CO1224T, listed to Underwriters Laboratories UL 2075 for Gas and Vapor Detectors and Sensors. The detector shall be equipped with a sounder and a trouble relay. The detector's base shall be able to mount to a single-gang electrical box or direct (surface) mount to the wall or ceiling. Wiring connections shall be made by means of SEMS screws. The detector shall provide dual color LED indication, which blinks to indicate normal standby, alarm, or end-of-life. When the sensor supervision is in a trouble condition, the detector shall send a trouble signal to the panel. When the detector gives a trouble or end-of-life signal, the detector shall be replaced. The detector shall provide a means to test CO gas entry into the CO sensing cell. The detector shall provide this with a test mode that accepts CO gas from a test agent and alarms immediately upon sensing CO entry.

## Electrical Specifications

Operating Voltage	12/24 VDC
Audible Signal	85 dB in alarm
Standby Current	20 mA
Alarm Current	40 mA (75 mA test)
Alarm Contact Ratings	0.5 A @ 30 VDC
Trouble Contact Ratings	0.5 A @ 30 VDC

## Physical Specifications

Size	Length: 5.1 in, Width: 3.3 in, Height: 1.3 in
Approximate Weight	7 oz
Operating Temperature Range	32°F to 104° F (0°C to 40° C)
Operating Humidity Range	22 to 90% RH
Input Terminals	14 to 22 AWG
Mounting	Single-gang back box; surface mount to wall or ceiling

## Operation Modes

Operation Mode	Green LED	Red LED	Sounder
Normal (standby)	Blink 1 per minute	—	—
Alarm	—	Blink in temp 4 pattern	Sound in temp 4 pattern

RealTest™ Feature: The System Sensor CO1224T carbon monoxide detector with RealTest™ can evaluate the functionality of the CO sensing cell using canned test agent.



1. Push and hold the Test/Hush button for two seconds to enter RealTest mode. The green LED will flash once every second to indicate RealTest mode has started.



2. Spray canned CO agent into the detector.



3. Verify CO sensing at the control panel. The detector will automatically exit RealTest alarm mode after about 20-60 seconds.

**NOTE:** Check with local codes and the AHJ to determine whether or not a functional gas test is desired for an installation.

Hush Feature: Pushing the Test/Hush button will silence the sounder for 5 minutes (except in RealTest mode).

Trouble Feature: When the detector is in a trouble condition, it will send a trouble signal to the panel.

End-of-life Timer: After the detector's internal sensor has reached the end of its life, a trouble signal will be sent to the panel. This will indicate that it is time to replace the detector. An electrochemical carbon monoxide detector lifespan is approximately six years, and the detector must be replaced by the date marked on the inside of the product.

## Ordering Information

Part No.	Description
CO1224T	12/24 volt, 4-wire system-monitored carbon monoxide detector with RealTest™ Technology



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A05-0437-000 • 8/08 • #1953