



# Advanced Multi-Criteria Fire/CO Detector

*World-class fire and carbon monoxide (CO) detection combined in a single addressable device provides a practical and cost-effective solution for today's market.*



Advanced Multi-Criteria Fire/CO Detector installed in B200S sounder base

## Features

- Unique ability to detect all four major elements of a fire
- Separate CO detection signal
- Highest nuisance alarm immunity
- Automatic drift compensation of smoke sensor and CO cell
- Uses only one address on the SLC
- RealTest® CO testing capability
- UL 268 and UL 2075 listed
- Separates audible signal for fire or CO alarm when used with the B200S base (B200SCOA in Canada)
- CO cell end-of-life warning and fault

The Advanced Multi-Criteria Fire/CO Detector (AMCF/CO) is a plug-in, addressable device that provides both fire and carbon monoxide (CO) detection. For fire, the detector combines four separate sensing elements in one unit (smoke, CO, light/flame, and heat) to sense multiple components of a fire. This approach enables enhanced sensitivity to real fire with heightened immunity to nuisance particulate. For CO, the detector's electrochemical sensing cell creates a separate signal for life safety CO detection.

Released through the incomplete burning of various fuels, CO is a colorless, odorless and deadly gas that is virtually impossible to detect with the human senses. Because the potential exists for dangerous levels of CO to accumulate in almost any building, legislation mandating the use of CO detection in commercial spaces continues to increase across the U.S. and Canada. The AMCF/CO is listed to the UL 2075 standard for system-connected life safety carbon monoxide monitoring.

The AMCF/CO should be used in conjunction with the B200S intelligent sounder base, which can generate either a Temp 3 pattern for fire or a Temp 4 pattern for CO alarm indication.

The B200S recognizes the System Sensor synchronization protocol. This enables it to be used as a component of the general evacuation signal — along with other System Sensor horns, horn strobes, and chimes — when connected to a power supply or Fire Alarm Control Panel (FACP) output capable of generating the System Sensor synchronization pulses. With each sounder base carrying a unique address, the FACP can then command an individual sounder — or a group of sounders — to activate. The command set from the panel can be tailored to the specific event, allowing selection of volume, tone, and group. For more information on the B200S visit [systemsensor.com](http://systemsensor.com).

## Agency Listings



S911



7272-1653:208

## Advanced Multi-Criteria Fire/CO Detector Specifications

Physical Specifications	
Height	3.46" installed in B200S base
Diameter	6.875" installed in B200S base
Shipping Weight	4.6 oz
Color	Ivory
Material	Bayblend FR110
Operating Humidity Range	15 to 90% relative humidity (non-condensing)
Application Temperature Range	32°F to 100°F (0°C to 38°C)
Air Velocity	0 to 4000 ft/min (0 to 20 m/sec)

Electrical Specifications	
Operating Voltage Range	15 to 32 VDC
Maximum Standby Current	300 $\mu$ A at 24 VDC (one communication every 5 seconds with LED blink enabled)
Maximum Alarm Current (LED on)	7.2 mA at 24 VDC

Sensitivity Settings and Suggested Applications		
Level 1	1% / ft of smoke	Very clean environments – laboratories
Level 2	2% / ft of smoke	Clean environments – offices
Level 3	3% / ft of smoke	Moderately clean environments – hotel rooms, dorm rooms
Level 4	3% / ft of smoke with different algorithm processing and weighting of sensor elements	Hotel rooms near a shower, boiler rooms
Level 5	4% / ft of smoke	Equipment rooms, kitchens, paint shops
Level 6	Thermal alarm at 135°F (57°C)	

\*Once the CO cell has reached end-of-life, the CO sensor no longer provides life safety protection; however, when the fire detector enters Photo, Thermal, Infrared (PTIR) mode, the following sensitivities apply:

Level 1	1% / ft of smoke	Very clean environments – laboratories
Level 2	2% / ft of smoke	Clean environments – offices
Level 5	3% / ft of smoke	Moderately clean environments – hotel rooms, dorm rooms
Level 6	Thermal alarm at 135°F (57°C)	

### CO Monitoring UL Standard Reference – Alarm Thresholds are as Follows:

Parts Per Million	Detector Response Time
70 $\pm$ 5ppm	60 – 240 min.
150 $\pm$ 5ppm	10 – 50 min.
400 $\pm$ 10ppm	4 – 15 min.

Per UL standard 2075, the AMCF/CO has been tested to the sensitivity limits defined in UL standard 2034.

## Ordering Information

Part No.	Description
AMCF/CO	Advanced Multi-Criteria Fire/CO Detector – Due to the unique nature of this detector, please consult your Fire Alarm Control Panel Manufacturer for specific model and compatibility

Accessories	
B200S	Addressable Sounder Base
B200SCOA	Addressable CO Sounder Base (Canada only)
M02-04-01	Detector Test Magnet
M02-09-01	Telescoping Test Magnet



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