

AirSentinel® 1000B

AMBIENT AEROSOL DETECTOR

The AirSentinel® 1000B is a continuously-operating sensor that functions like a smoke detector for potentially harmful airborne biological threats. The AirSentinel 1000B facilitates the process of identifying bioterror agents to allow timely containment, treatment and remediation. Sensors are designed to detect concentrated levels of specific classes and sizes of particulates. Typical agents released in a bio-threat attack include bacterial spores (such as *B. anthracis*, which causes anthrax), bacteria (such as *Y. pestis*, which causes plague), viruses (such as smallpox) and toxins (such as ricin).

The AirSentinel 1000B sensors operate independently or in a network configuration to form the “first tier” of a building air-security system. Communication and response may be managed through existing building control systems or via an independent network.

The AirSentinel 1000B addresses the requirement for affordable bio-threat detection. It is the first near-real time detection technology designed for economical deployment in commercial facilities. Low price and low operating cost deliver a cost effective and widely deployable biological threat detection approach. After detection, the unit automatically collects a sample for subsequent confirmation analysis.



FEATURES

- Detects changes in concentration of airborne biological particles
- Response time is 30 seconds to 2 minutes depending on required sensitivity
- Automatically collects a particulate sample for subsequent identification when elevated levels of biological materials are detected
- Continuous monitoring - system operates 24/7
- Complete self-diagnostic system identifies need for service and maintenance
- May be programmed for redundant sampling to minimize false alarms
- Easily integrated with most building monitoring and control systems
- No consumables required for monitoring

BIO-THREAT DETECTION IN FACILITIES

Since most biological agents have an incubation period of a few days to a few weeks, the key to minimizing harmful effects is to identify:

1. When a release occurs
2. What biological material is present
3. Where is the location of the exposure
4. Who was exposed

The AirSentinel 1000B helps enable a rapid assessment of these questions, thus making timely treatment and threat containment feasible.

SPECIFICATIONS

Height	11 in (27.9 cm)
Width	10 in (25.4 cm)
Depth	4.4 in (11.3 cm)
Weight	5 lbs (2.3 kg)
Analysis Method	UV fluorescence
Threshold	Tunable for threat level
Response Time	30 sec to 2 min
Operating Temperature	60°F - 95°F (16°C - 35°C)
Operating Humidity	20 - 90% RH (non-condensing)
Maintenance	Pump replacement (annual)
Outputs	Service and alert
Interface Options	USB, Ethernet
Power	24 VDC
Power Consumption	10 watts peak, 8 watts average
Mounts	Wall or ceiling



Optional AirSentinel 1000B configurations include:

- Chemical vapor sensor
- Inlet particle prefilter
- Custom interface
- Wireless communication
- RS-232 communication

