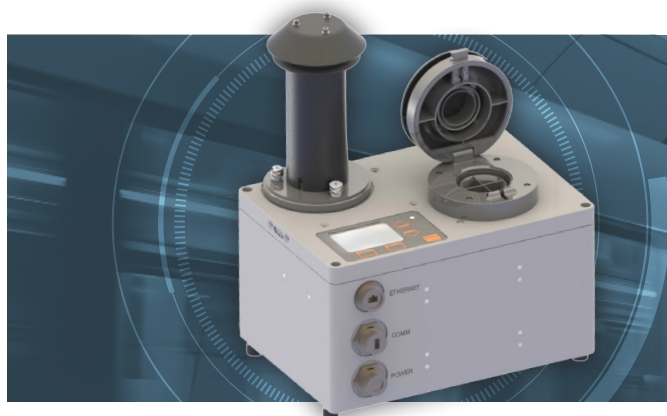


ATHINA® Detector Collector 100

Fluorescing Particle Detector

Chemring

Sensors & Electronic Systems



ATHINA® Detector Collector 100 (DCI00) is an integrated particle detection and collection system that provides early warning of biological threats in homeland security, public health, and military applications. The DCI00 contains a continuously operating detector which triggers a collector and can be used in both indoor and outdoor applications. The Tactical Biological Detector (TAC-BIO) core in the DCI00 was developed to achieve a biological detection capability at a significantly reduced cost, size, weight and power compared to existing systems. Our improved TAC-BIO technology was originally developed by the US Army Edgewood Chemical Biological Center who used ultraviolet light emitting diodes (UVLEDs) for reagentless detection of airborne biological particles.

Characteristics

ATHINA® DCI00 provides broad detection capabilities in a package that is less than one cubic foot and weighs less than 15 pounds. It continuously samples the surrounding air, monitoring for increases in fluorescing particle concentrations. When a potential threat is detected, the DCI00 triggers a sample collection and transmits alarm data to the local user interface and through the communications network for potential response actions. The DCI00 is fully integrated into a mapping and control network interface providing an easy to use, easy to learn, feature rich and intuitive interface. The collector's dry electret filter with rapid filter elution system yields 6 ml liquid sample for subsequent analysis.

Features & Benefits

- Can be used as a stand-alone detector/collector or in combination with networked detections systems.
- Advanced detection gives improved detection performance while minimizing false alarms.
- Designed to operate in harsh indoor and outdoor environments, meeting tough IP66 standards.
- LCD interface and Ethernet connections.
- Can be operated from vehicle or infrastructure power.

Specifications

Threat Detection	Aerosolized Bacteria, Bacterial Spores, Viruses, Toxins
Dimensions (L x W x H)	13 in x 9 in x 7 in (33 cm x 23 cm x 18 cm)
Weight	14 lbs. (6.35 kg)
Power Consumption	18 Watts
Operating Temp.	-10°C to 50°C
Operating Time	24 hours per day, continuously
Aerosol Particle Sizing	1-10 microns
Detector Flow Rate	2.4 liters per minute (LPM) (adjustable)
Enclosure Rating	IP66
Collection Media	Electret Filter with elutor fluid and sample cup
Particle Size Collection	1-10 microns
Sample Size	6 mL
Collection Flow Rate	200 LPM
Data Interface	Ethernet
Data Storage	Internal Flash Memory
User Interface	LCD with membrane keypad; integrated web server; Mapping and Control Software Interface

Chemring Sensors and Electronic Systems

4205 Westinghouse Commons Drive, Charlotte, NC 28273

(980) 235-2200 | info@chemringsensors.com

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