

# Product Datasheet

# MUVE™ B330

## Continuous Biological Detector and Collector

The MUVE™ B330 is a Continuous Biological Detector and Collector purpose-designed for unmanned aerial systems (UAS) to provide realtime continuous monitoring of biological threats while on the move. The B330 leverages the legacy design and performance of the IBAC product line in a SWaP-optimized configuration. The SkyRanger® R70 and R80 SkyRaider™ serves as the platforms for the initial deployment of the MUVE™ B330 payload. The payload is designed to be intuitive, easy to use, and require minimal maintenance. Sensor display is provided via the Mission Control Station (MCS) piloting interface. Alarming conditions and collector status will be displayed to the Pilot to not only alert them to a threat, but also provide positive confirmation that a sample is being collected. The MUVE™ B330 provides next level protection to combat forces by identifying biological threats remotely and down range.



### Access the scene from a safe distance

When dangerous conditions exist, or are anticipated, utilise the MUVE™ B330 to fly in for an initial assessment.

- Continuous air sampling provides real-time feedback of conditions.
- Allows for informed decision making prior to approaching a hazardous scene.
- Locate source of threat and track progression as the scene unfolds.

### Significantly reduce the time to action

Rapidly deploy in a matter of minutes.

- Cover difficult terrain from the air to assess threat.
- Make a quick assessment of the threat perimeter.
- Alarm will initiate upon detection of hazardous conditions.
- Automated sample collection upon alarm indication.

### Fully integrated situational awareness

Gather a comprehensive overview of an active scene utilising visuals and B330 indications.

- Mission Control Station (MCS) application provides plug-and-play operation of the MUVE B330 payload.
- Visually display threats on the map within MCS using easy to understand pin drops.
- Analyse, log, and access complex data in an easy-to-understand visual overlay.

# Specifications

## General

Technology	UV Laser Induced Fluorescence (LIF)
Communication	Ethernet

## Sampling and Analysis

Sample Introduction	Airborne particles; triggered aerosol sample collector
Sample Phase	Aerosol; flow rate 4.0 L/min
Threats	Spores, vegetative bacteria, viruses, and toxins; particle size: 0.7 – 10 microns
Sensitivity	<100 particles/L of air
Sampling and Analysis	Continuous sampling when in operation
Sample Collection	Integrated sample collection

## System Interface

Display and Alerts	Mission Control Station (MCS)
Outputs	Alarm Status, Diagnostics Status, Collector Status
Data Storage	16 GB internal storage
Training Requirements	<8 hrs

## Power

Input Voltage	16 - 36 VDC
Power Consumption	10W (normal operation), 12W (collector running)
Cold Start Time	<5 mins

## Environmental

Operating Temperature (Ambient)	-26 to 120 °F (-32 to 49 °C)
Operating Humidity	5 to 99%, non-condensing
Storage Temperature	38 to 126 °F (-39 to 52 °C)

## Integrated Sample Collector Specifications

Sample Method	Dry collection
Power Consumption	2 watts
Max Flow Rate	30 L/min
Particle Size	1 to 10 microns
Collection Media	Sample Disk
Sample Recovery	Sample extraction from sample disk in vial with liquid buffer

## Physical Features

Dimensions (L x W x H)	19.3 x 19.3 x 21.6 cm
Weight	1.44 g
Enclosure	Windform® SP (Composite polyamide based, carbon filled)

Specifications are subject to change without notice.  
For the most up-to-date specifications, please visit [www.flir.com](http://www.flir.com)

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