

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 real-time 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.

ASSESS THE SCENE FROM A SAFE DISTANCE

When dangerous conditions exist, or are anticipated, utilize 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 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 utilizing 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
- Analyze, log, and access complex data in an easy-to-understand visual overlay

SPECIFICATIONS

General		MUVE B330
Technology		UV Laser Induced Fluorescence (LIF)
Sampling & Analysis		
Sample Introduction		Airborne particles; triggered aerosol sample collector
Sample Phase		Aerosol; flow rate 4.0 L/min (0.14 ft ³ /min)
Threats		Spores, vegetative bacteria, viruses, and toxins; particle size: 0.7 – 10 microns
Sensitivity		<100 particles/L of air
Sampling & Analysis		Continuous sampling when in operation
Sample Collection		Integrated sample collection
System Interface		
Display & 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 Temp (ambient)		-26 to 120 °F (-32 to 49 °C)
Operating Humidity		5% to 99%, non-condensing
Storage Temp		-38 to 126 °F (-39 to 52 °C)
Integrated Sample Collector Specifications		
Sampling 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

General		MUVE B330
Communication		Ethernet
Physical Features		
Dimensions (L x W x H)		7.6 x 7.6 x 8.5 in (19.3 x 19.3 x 21.6 cm)
Weight		3.17 lbs (1.44 kg)
Enclosure		Windform® SP (Composite polyamide based, carbon filled)

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