

BioTOF z200

Bio-Threat Solution For Critical Infrastructure



The BioTOF™ z200 comprehensive bio-aerosol detection system is intended for continuous operation in critical infrastructure, operating unattended for months at a time. The system includes a UV LIF trigger sensor and a MALDI time-of-flight mass spectrometer for threat identification. Once triggered, the autonomous threat identification process proceeds, which includes aerosol sampling, sample preparation, sample analysis and data analysis. Where possible, the BioTOF™ z200 is configured to communicate with the building management system to protect unexposed sections of the building by actively controlling the ventilation system. The system automatically resets itself for the next trigger, and is designed for rapid integration into third-party command and control systems and architectures.

A forensics sample can be collected as a laboratory reference sample using an (optional) fully-integrated dry filter unit. The sampler is activated when the trigger signal is received.

KEY SPECS

- Agent identification in 5 minutes from trigger/alarm signal (includes sample collection time)
- Detects all classes of bio-agents
- New threats inexpensively added to threat list via library update
- Excellent sensitivity: 100 threat particles per liter of air
- Specificity: species level

FEATURES

- MALDI time-of-flight mass spectrometer for bio-threat and opioid identification
- Continuously monitors the air for aerosol threats
- Supports active control of the ventilation system
- Inexpensive to operate: no bio-molecular reagents
- Fully autonomous, unattended operation: minimal resource requirements
- Easily networked into secure LAN or cloud
- Optional forensics sample collection

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SPECIFICATIONS

Sensitivity:	100 threat particles per liter of ambient air
Specificity:	Species level for bio-threats
Detection Time:	5 minutes (from trigger to identification)
Maintenance interval:	3 months (but may be adjusted for local ambient conditions)
Consumables for each assay:	None
Power:	Input Power AC Voltage: 110-220Vac Input Power DC Voltage: 24Vdc (opt) Power Consumption: 100 W (nominal)
Size and Weight:	Width 23.6" (60 cm) Height 28.4" (72 cm) Depth 29.5" (75 cm) Weight: 77 lb (35 kg)
Trigger Sensor Air Sampling Flow Rate:	3 liters per minute
Identifier Air Sampling Flow Rate:	30-40 liters per minute
Forensics Air Sampler Flow Rate:	200 lpm (optional)
Environmental:	Intended for indoor applications
Humidity:	5 – 95% (non-condensing)

