

BIOBATS

COMPREHENSIVE SOLUTION
for Biological Threats



Table of contents

BIOBATS



We Value Our Customers' safety first



	4
Introduction	
	6
Problem	
	7
Solution	
	8
Benefits	
	9
Applications	
	10
Specifications	
	11
Technology	
	13
Call to Action	

Introduction

EBT Co., Ltd. provides innovative and effective solutions to protect our customers from advanced threats. Our products and services are used by a wide range of customers, including military and government organizations, industrial facilities, and commercial businesses.

The Need for Rapid Virus Detection Technology

In COVID-19 era, the world remains experiencing the economic contraction as the viruses are still highly infectious and the people are suffering from the aftereffect of the Long COVID, which are posing a social challenge.

Despite the fact that many are working on developments of various quarantine technologies around the world, the world still doesn't have the technology that can detect the viruses in the air. Thus, it is difficult to track the rapid movement path of confirmed cases, resulting in rapid nationwide spread of the virus.

The Smart Way to Protect Your People and Assets

BioBats rapidly identifies airborne viruses, bacteria, and germs, transmitting this information to users for site condition awareness. Upon detection and warning, the system automatically collects biological material in a disposable cassette filter. This material is then sent to a professional PCR analysis agency for precise identification, while the detection data is also stored on a remote server for statistical analysis and transmission chain tracking, effectively curbing the spread of infectious diseases.





YOUR TRUSTED PARTNER IN ADVANCED DEFENSE TECHNOLOGIES

At EBT Co., Ltd., we pride ourselves on being at the forefront of technology and innovation in the fields of electronic warfare, biological warfare, and chemical warfare defense. Our mission is to provide cutting-edge solutions that empower our clients to safeguard their people and assets from emerging threats in an ever-evolving world.



Trustworthy



Powerful



Advanced

Problem



Airborne viruses and biological organisms, such as bacteria and germs, pose a serious threat to public health. These threats can come from a variety of sources, including natural outbreaks, bioterrorism, and accidental releases. If not detected and contained early, these threats can quickly spread, causing widespread illness and death.

Traditional methods of airborne threat detection are slow and inefficient. They often require the collection of samples and their subsequent analysis in a laboratory, which can take days or even weeks. This delay can allow airborne threats to spread widely before they are detected, making it difficult to contain them.



In addition to being slow and inefficient, traditional methods of airborne threat detection are often expensive and require specialized equipment and training. This makes them inaccessible to many organizations and individuals.

Solution

BioBats Solution

BioBats is a real-time, early-warning biological threat detection system that can detect a wide range of airborne viruses and biological organisms. BioBats is easy to use and maintain, and it can be deployed in a variety of environments, making it the ideal solution for a wide range of organizations and individuals.

BioBats uses a variety of technologies to detect airborne threats, including:

Cyclone-based aerodynamic particle concentrator technology

Laminar flow sample transfer technology

High-sensitivity fluorescence measurement technology

IoT communication technology





Benefits

BioBats is your proactive defense against airborne threats. This real-time detection system continuously monitors for viruses, bacteria, and fungi, providing early warnings to help organizations and individuals protect themselves from a broad spectrum of biological risks. BioBats is user-friendly and affordable, making it a valuable addition to various settings, including healthcare facilities, educational institutions, workplaces, transportation hubs, and public buildings.

Invest in peace of mind with BioBats. Its comprehensive monitoring and early-warning capabilities empower you to proactively safeguard your environment and protect the well-being of those within it.

Early warning detection

BioBats can detect airborne threats within minutes of their release, giving the user time to take action.

Wide range of detection

BioBats can detect a wide range of airborne viruses, bacteria, and fungi.

Easy to use and maintain

BioBats is easy to use and maintain, and it does not require any special training.

Affordable

BioBats is an affordable solution for airborne threat detection.

IoT connectivity

BioBats can be connected to the internet to transmit real-time data to users' smartphones or computers.

Applications

BioBats' versatility makes it an indispensable tool for ensuring air quality and mitigating bioaerosol risks in various environments:



Transportation hubs

High foot-traffic environments like transportation hubs increase the risk of transmitting airborne pathogens. BioBats helps monitor air quality in real-time, providing alerts when bioaerosol levels become hazardous. This allows transit authorities to take proactive measures like increasing ventilation or implementing disinfection protocols, minimizing the spread of harmful agents.



Schools and universities

Educational institutions are particularly vulnerable to outbreaks of infectious diseases due to the close-proximity nature of classrooms and shared facilities. BioBats empowers schools and universities to safeguard their students and faculty by continuously monitoring air quality. Early warnings facilitate rapid responses, contributing to a healthier and more secure learning environment.



Healthcare settings

Biosecurity is paramount in hospitals, clinics, and long-term care facilities. BioBats augments existing infection control measures by providing real-time alerts for elevated bioaerosol levels. This allows healthcare providers to swiftly isolate infected individuals, deploy targeted disinfection protocols, and protect patients, staff, and visitors from the spread of airborne infectious agents.



Public buildings

Libraries, government buildings, and community centers face challenges in maintaining optimal air quality with fluctuating visitor levels. BioBats offers continuous monitoring with real-time alerts, empowering administrators to make informed decisions regarding ventilation adjustments, sanitation procedures, or even crowd control measures if necessary.

Specifications

- **Monitoring:** PM1.0, PM2.5, PM10, Bioaerosols (virus, bacteria)
- **Display:** 10.1 inch touchscreen LCD with LED status indicators
- **Power:** 110/220V, easy-detach power cord, EU/UK plug compatible
- **Connectivity:** USB 3.0, Ethernet, Wi-Fi, Bluetooth
- **Dimensions:** 324(W) x 250(D) x 510(H) mm
- **Weight:** 11 kg
- **Filtration:** Dual filter system with on-site replacement
- **Alerts:** Audible buzzer and visual display notifications
- **Decontamination:** Built-in UVC LED for internal system disinfection
- **Security:** Lockable for access restriction

Additional Features:

- Real-time monitoring and data logging
- Remote control and monitoring via tablet (Bluetooth) or network (Ethernet/Wi-Fi)
- Automatic and manual air sampling
- User-friendly interface with password protection

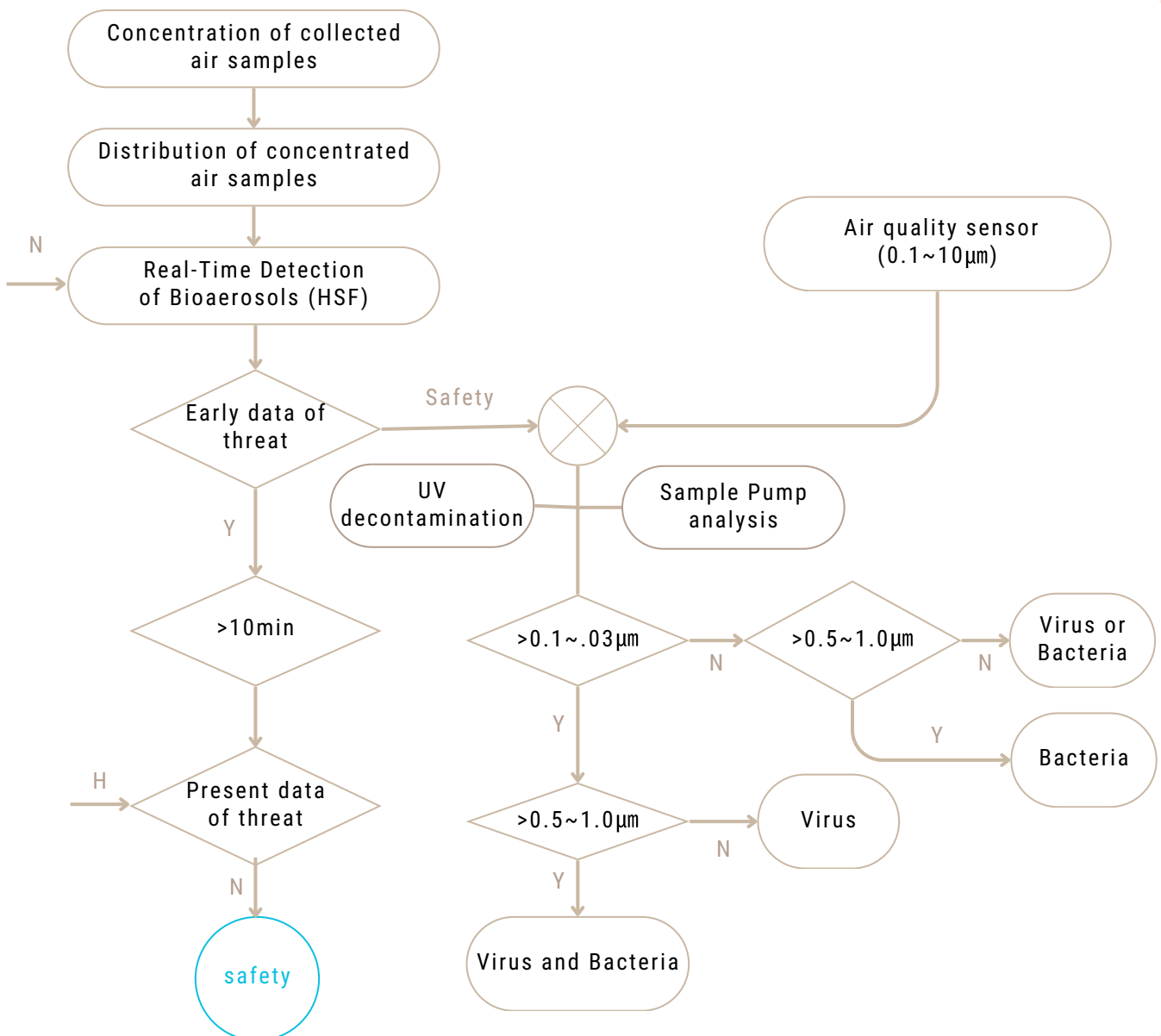


How BioBats works

BioBats works by continuously monitoring the air for airborne threats. The BioBats system first collects air samples using its indoor air quality sensors. The air samples are then concentrated using the cyclone-based aerodynamic particle concentrator technology. The concentrated air samples are then evenly distributed using the laminar flow sample transfer technology.

The concentrated air samples are then analyzed using the high-sensitivity fluorescence measurement technology (HSF). If the system detects a potential airborne threat, the selective virus identification technology is used to identify the specific virus, bacteria, or fungus.

Once the airborne threat has been identified, the BioBats system sends an alert to the user's smartphone or computer. The alert includes information about the type of airborne threat detected, the location of the detection, and the recommended course of action.



Technology

Cyclone-based aerodynamic particle concentrator technology

BioBats uses cyclone-based technology to concentrate airborne particles 10-fold. This allows for more accurate and sensitive detection of viruses and other pathogens.

Indoor air quality sensors

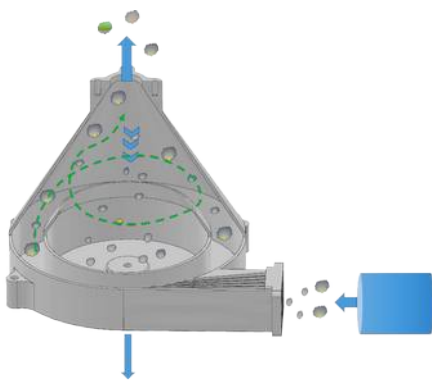
BioBats sensors continuously monitor the air for fine particulate matter (PM), CO₂ levels, and humidity. These measurements are used to identify potential airborne threats and issue early warnings.

Laminar flow sample transfer technology

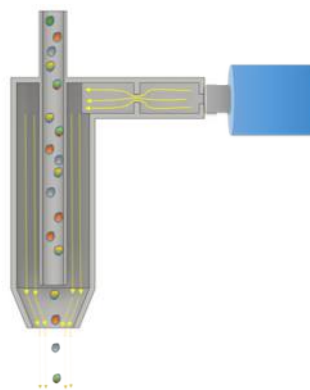
BioBats uses laminar flow technology to evenly distribute concentrated airborne particles. This ensures that all samples are analyzed equally.

High-sensitivity fluorescence measurement technology

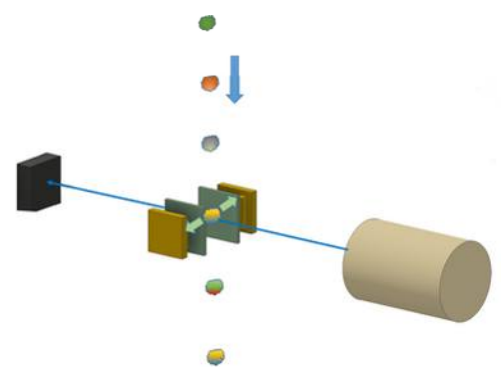
BioBats uses high-sensitivity fluorescence technology to detect concentrated airborne particles. This technology is highly sensitive, allowing for the detection of even very small amounts of viruses and other pathogens.



Cyclone-based aerodynamic particle concentrator technology



Laminar flow sample transfer technology



High-sensitivity fluorescence measurement technology

Call to Actions

BioBats is a real-time, early-warning airborne virus, bacteria, and fungi detection system that can help organizations and individuals to protect themselves from a wide range of biological threats. BioBats is easy to use and maintain, and it is an affordable solution for airborne threat detection.

To learn more about BioBats and how it can help you protect your people and assets from airborne threats, please contact us today. We would be happy to answer any of your questions and provide you with a free consultation.



**CONTACT
US
TODAY**

- www.ebtech.kr
- Phone: +82 31 721 6381
- e-mail: ebt@ebtech.kr



PROJECT

BIOBATS

"THE BEST WAY TO PREDICT THE FUTURE IS TO CREATE IT."

Condition Running Test

BIOBATS-3323

Summary

Real-Time CPM

Sample Pump

Unit Control

Unit Status

Select Mode

BIT

Summary

Detecting
Viruses and
Bacteria



Ultrafine Particles (P

Good

Fine Particles (PM2.5

Good

Coarse Particles (PM

Good