

## **MAB**

### BIOLOGICAL AEROSOL MONITOR

Continuous monitoring ensures no missed threats, triggering collection only when a high probability of biological threats exists, greatly reducing sample processing costs.

The MAB is a biological aerosol detector designed to detect and classify bio-threats. It provides continuous early alerts and discerns atmospheric changes from natural variations. By launching collection only if there is a high probability of a biological risk, the MAB reduces sample processing costs considerably.

With its specialized air intake vein, the MAB individually analyzes particles and aerosols with potential bio-agents: bacteria, viruses, and toxins. Its unique design combined with advanced algorithms ensures precise and highly sensitive detection of harmful aerosols, minimizing the false positive and negative rates. The MAB's capabilities for continuous monitoring ensure that no biological hazards are overlooked.



- · Continuous & real-time measurement
- Universal biological agent detection & classification
- Quick response time
- Unrivalled threat detection performance
- · External sampling
- · Measurement of inhalable fraction aerosols
- Performs under harsh conditions (dust, humidity, temperature)
- Rugged design

#### **IDEAL FOR**

- · Land platforms
- Military shelter
- Critical infrastructure

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## BIOLOGICAL AEROSOL MONITOR

#### SPECIFICATIONS<sup>1</sup>

Dimensions:	$300 \times 160 \times 895 \text{ mm} / 11.8 \times 6.3 \times 35.2 \text{ inch}$
Weight:	~14kg (31 lbs) with 4 hydrogen cylinders ~14kg (31 lbs) with hydrogen bottle
Sensing Technology:	Hydrogen Flame Spectrometry (FPD)
Detection:	BWA, biological materials and encapsulated Bio threats (bacteria, viruses, toxins)
	Aerosols: 0.5 – 10 microns
Sensitivity:	20 ACPLA
Response Time:	≤30 seconds
Measurement Frequency:	Continuous
Air Flow Rate:	>16 liters per minute
Sampling Air Flow Rate:	≥1 liter per minute
Storage Temperature:	-39°C to +72°C / -38°F to +162°F
Operating Temperature:	-10°C to +50°C / 14°F to +122°F
Operating Humidity:	95% HR (non-condensing) @T49°C (120.2°F)
Power Supply:	12-32V DC (30W maximum)
H2 Running Time:	From 48 hours² up to 10 days³ (@ room temperature)
Connectivity:	MIL Grade RS-485 connector to a third-party solution or Proengin software solution
Communication:	MODBUS protocols RTU
Regulation/Performance Test:	STANAG 4370 / CE tests (EN 50270)
Warranty:	I year

<sup>&</sup>lt;sup>1</sup> Specifications subject to change

#### KIT OPTIONS

MAB Mini is available in 2 versions:

- MAB 4 cylinders with its pelican case for transportation
- $\bullet$  MAB  $\mbox{H}_{2}$  bottle (compressed hydrogen cylinder) with its pelican case for transportation

#### **ACCESSORIES & SERVICES**

Prepaid maintenance and extended warranty options are available upon initial acquisition.

Proengin does offer turn key CBRN integration solutions such as the biological air sampler, please do not hesitate to contact us for more details.



Bio Air Sampler

# **Proengin**

#### FOR MORE INFORMATION:

WORLDWIDE

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To maximise the value of Proengin's solutions, including white papers, webinars, training and more, visit Proengin Academy.







<sup>&</sup>lt;sup>2</sup> Only on MAB 4 cylinders model

<sup>&</sup>lt;sup>3</sup> Only on MAB H<sub>2</sub> bottle