# Key Features of the OnGuard™

#### Real-Time Air Quality

Displays complete air quality and system performance parameters, including pressure, particulate matter monitoring, CO<sub>2</sub> concentration, temperature, humidity, and more.

#### **Date and Time**

Displays the current date and time to the operator for easy data management.

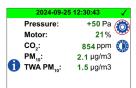
#### **Alert Notification**

Shows current alert details and possible solutions to the operator.

## 2024-09-25 12:30:43 Pressure: +50 Pa Motor: 21% CO<sub>2</sub>: 854 ppm PM<sub>10</sub>: 2.1 μg/m3 1 TWA PM<sub>10</sub>: 1.5 μg/m3

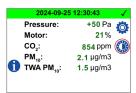
#### **Default Screen**

Shows a live display of critical air quality and system performance parameters with user-friendly touch screen.



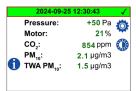
### **Settings**

Offers access to a range of system configurations and commands.



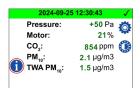
### **Screen Brightness**

Allows adjustable screen brightness to suit individual viewing requirements within the cabin.



### **Traffic Light System**

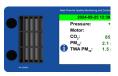
Visualises system status with clear indicators: normal, warning, and alert.



### **More Information**

Provides access to complete telemetry data.

# Key Features of the OnGuard™



#### **In-Built Sensors**

Delivers accurate air quality data from within the breathing zone, including CO<sub>2</sub> and particulate matter concentrations.



#### **Main Unit**

Handles data processing and storage.

### Faster System Response Rate

Optimises control to rapidly adjust the pressuriser motor speed.

#### **Pressure Control**

Automatically adjusts the pressuriser fan speed to maintain the target pressure.

#### High CO<sub>2</sub> Concentration Flush

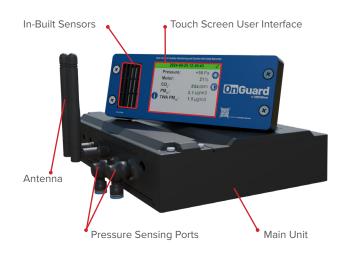
Automatically increases fresh airflow to reduce excessive  $\text{CO}_2$  concentration.

#### **Data Communication**

Provides local and networked, wireless and wired data access capability.

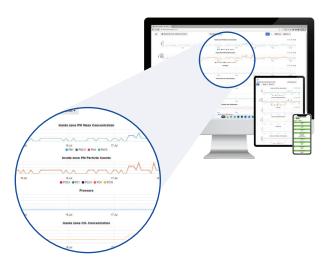
### **Pressure Sensing Ports**

Measures differential pressure between the enclosure and external ambient air.



# Data Management

Gain comprehensive visibility into your air quality system with OnGuard's intuitive dashboard. Displaying real-time data through color-coded dashboards and detailed graphs to provide a clear view of air quality conditions to maintain a safe environment.



When integrated with a site's local network, OnGuard offers remote access and a range of dashboard insights that allow management and optimisation of any air quality system from any location via a web-based user interface.

#### Get access to:

- CO<sub>2</sub> concentration, particulate count and mass concentration, motor load, humidity and temperature, alert times, severity, and details.
- Access remotely from a web-based interface and change cabin pressure, conduct pressure testing, set alarms, recalibrate sensors, and more.
- Automated cabin pressure control maintains optimal cabin pressure for effective airflow and filtration, ensuring a positive pressure environment to keep particulates out and operators safe.
- Historical data analysis: Review and analyse up to 6-years of stored data making it easy to understand system performance and air quality trends, saving lives and protecting equipment.

## OnGuard™



Stay in control with OnGuard, the in-cabin pressure controller by BreatheSafe. This premium controller represents a significant innovation offering exceptional insight and control and is designed to control air quality within any breathing zone.

The OnGuard's advanced monitoring capabilities provide real-time alerts on air quality conditions and actively monitors and reports changes within any breathing zone, maintaining optimal conditions, alerting operators and site staff of any changes that may affect their health, safety, and equipment.

For a complete air quality management system, combine OnGuard with BreatheSafe's HEPA filtration solutions, that not only reduces health risks associated with hazardous dust but also protects valuable equipment in any environment.

With OnGuard's remote access feature, you can make adjustments from anywhere, making it an essential tool for saving lives and protecting equipment.



## **MSHA**

The MSHA Rule mandates operators to comply with stricter standards for respirable crystalline silica exposure, including a reduced Permissible Exposure Limit (PEL) of  $50~\mu g/m^3$ . Operators must conduct mandatory sampling and provide written evaluations regularly, regardless of operational changes.

The OnGuard software aids compliance with its new Time Weighted Average (TWA) feature, calculating and displaying real-time TWA of particulate matter (PM) mass concentration (e.g., TWA PM10: x.x  $\mu$ g/m³). It also offers a user-friendly web interface to view and compute TWA for specific shifts, with an option to extend shift duration from 8 to 12 hours.

# ISO 23875

The BreatheSafe solution exceeds expectations to ensure ISO 23875 compliance. The system features HEPA fresh air filtration and HEPA return air filtration, exceeding all MERV class filters including MERV16. The OnGuard monitors CO2 levels, alerts operators when limits are exceeded, and adjusts airflow to reduce CO2 concentrations and can be integrated with an OEM air conditioning system, it filters both fresh and recirculated air, for enhanced safety. Air filtration systems also manage pressurisation by adjusting blower speed and offers real-time monitoring, autorecording of events, and automatic data logging.



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To learn more, scan the QR code.



Real-Time Air Quality
Monitoring and Control
with Data Recorder

