

Air Quality Control and Data Management



Optimize protection with OnGuard, the air quality control and data management system designed by BreatheSafe. This next generation controller represents a significant innovation offering exceptional insight and safety and is designed to control air quality within any breathing zone.

OnGuard's advanced monitoring capabilities provide real-time air quality measurements and alerts. It actively notifies operators and site staff of any compromising air quality conditions that may affect their health, safety or equipment. For a complete air quality control and data management system, combine OnGuard with BreatheSafe's HEPA filtration solution.

2024-09-25 12:30:43 ✓

Pressure:	+50 Pa	⚙️
Motor:	21%	⚙️
CO₂:	854 ppm	🌞
PM₁₀:	2.1 µg/m ³	🌞
TWA PM₁₀:	1.5 µg/m ³	🌞

Default Screen

The OnGuard home screen displays sensor telemetry and control parameters.

2024-07-16 07:21:45 ⚠️

Pressure:	+316 Pa	⚙️
Motor:	100%	⚙️
CO₂:	1012 ppm	🌞
PM₁₀:	1.0 µg/m ³	🌞
TWA PM₁₀:	0.6 µg/m ³	🌞

Max Pressure Test Function

Maximum pressure result achieved when the motor is running at 100% speed.

2024-07-11 8:15:56 ✖️

Pressure:	-1 Pa	⚙️
Motor:	30%	⚙️
CO₂:	808 ppm	🌞
PM₁₀:	0.8 µg/m ³	🌞
TWA PM₁₀:	0.8 µg/m ³	🌞

Traffic Light System

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

Key Features of the OnGuard™

Real-Time Air Quality Data

Displays complete air quality and system performance parameters, including pressure, particulate matter monitoring, CO₂ concentration, temperature, humidity, and more.

Date and Time

Displays and logs the current date and time in your timezone for accurate data management.



Integrated Sensors

Sensor integration into User-Interface that delivers accurate air quality data from within the breathing zone, including CO₂, temperature, humidity, particulate mass and count in real time.



Main Unit

Manages data storage, processing and communications.

Alert Notification

Shows current alert details and possible solutions to the operator.

Faster System Response Rate

Optimises control to intelligently adjust the pressuriser motor speed.

Pressure Control

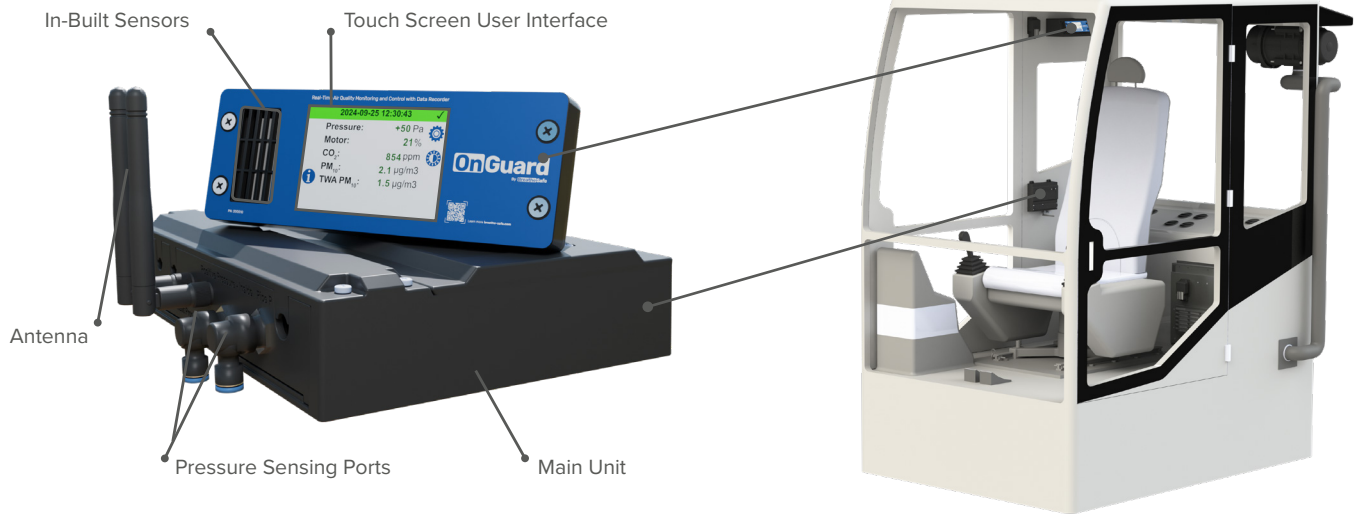
Automatically adjusts the pressuriser fan speed to maintain the target pressure and increase the filter lifecycle.

High CO₂ and Particulate Concentration Flush

Detects elevated CO₂ and particulate levels. Intelligently increasing the fresh air supply to reduce CO₂ and flush excess particulate.

Data Communication

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



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.

Get access to:

- Live and historical system performance and air quality data. Measure pressure, CO₂ 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.
- 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.



Controller Animation

US

+1 608 755 5466

WI: 1201 Norwood Rd, Ste 150, Janesville, WI, 53545

Australia

+61 7 3278 7833

QLD: 62 Mica St, Carole Park, 4300, QLD | WA: 169 Chisholm Cres, Kewdale, 6105, WA | NSW: 4/7 Kelham Pl, Glendenning, 2761, NSW