aethair PRO for
Wildfires

Real-Time Air Quality Monitoring for Community Protection

Aethair Pro is the ultimate air monitoring solution for wildfire events, offering a dense network of real-time sensors to track particulates (PM1, PM2.5, PM10), carbon monoxide (CO), volatile organic compounds (VOCs), and carbon dioxide (CO_2). By detecting smoke hazards, visibility reductions, and health risks, Aethair Pro enables rapid response to ensure the safety of communities, businesses, and transportation networks.

Importance of Wildfire Air Quality Monitoring

Wildfires release vast amounts of harmful pollutants, creating serious health and environmental concerns. Aethair Pro provides continuous air quality monitoring to:

› **Detect Smoke Hazards**
Monitor airborne particulate levels to assess fire intensity and spread.

› **Assess Visibility Impacts**
Track PM concentrations that reduce visibility and threaten transportation safety.

› **Ensure Public Health Protection**
Identify high-risk pollution events affecting vulnerable populations.

› **Support Emergency Response**
Provide critical real-time situational data to first responders and public safety agencies.

Key Monitoring Capabilities of Aethair Pro

Feature	Specification
PM1, PM2.5, PM10 Monitoring	Real-time measurement of airborne particulates
CO Detection	Tracks carbon monoxide exposure from wildfire smoke
VOC Detection Sensitivity	ppb-level detection for hazardous smoke emissions
CO_2 Tracking	Identifies fire intensity and combustion efficiency
Regulatory Compliance Alerts	Automatic notifications when thresholds are exceeded
Remote Access & Cloud Reporting	Real-time data sharing for emergency response teams

Benefits of Aethair Pro in Wildfire Monitoring

› **Real-Time Smoke Monitoring**
  Detects rising air pollution levels during wildfires.

› **Early Warning System**
  Alerts emergency responders and affected communities.

› **Enhanced Public Health Protection**
  Minimizes exposure to dangerous airborne contaminants.

› **Remote Access & Data Logging**
  Provides cloud-based data for analysis and response.

› **Optimized Visibility Tracking**
  Improves transportation safety during wildfire events.

Key Airborne Contaminants from Wildfires

Contaminant	Source	Potential Impact on Health & Safety
PM1, PM2.5, PM10	Smoke, ash, burning vegetation	Severe respiratory and cardiovascular issues
Carbon Monoxide (CO)	Incomplete combustion	Headaches, dizziness, impaired cognition
VOCs	Burning synthetic materials, vegetation	Long-term health effects, toxic exposure
Carbon Dioxide (CO2)	Wildfire combustion emissions	Greenhouse gas, fire intensity indicator

Applications for Wildfire Monitoring

Application	Monitoring Focus
Community Air Quality Networks	Protecting residential areas from hazardous smoke levels
Emergency Response & Firefighting	Providing real-time air quality data for responders
Transportation Safety	Monitoring visibility and air pollution for roadways, airports, and railways
Workplace & Commercial Protection	Ensuring safe indoor air quality in offices and businesses
Fleet & Logistics Management	Protecting drivers and personnel from hazardous conditions

Conclusion

Aethair Pro is the ideal solution for wildfire air quality monitoring, offering real-time detection of smoke hazards, visibility impairments, and health risks. By creating a dense network of highly accurate sensors, Aethair Pro ensures proactive protection for communities, workplaces, and transportation systems. Fully configurable for indoor, outdoor, and mobile applications, it provides the critical data needed to safeguard public health and safety during wildfire events

How can we help you?

If you would like to find out more about how we can help you, please give us a call or send us an email.

Contact Us: +1 (267) 225-8487   sales@aethair.io

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See The Air You Breathe

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