



# BOREAL

## GasFinder2-AB (AIRBORNE GAS DETECTION)

- No cross interference with other gases
- Instantaneous response
- Autonomous operation

SET

FORGET

DETECT

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## GasFinder2-AB (AIRBORNE GAS DETECTION)



Airborne Cell with R44 Mount

### WHAT IT DOES

- Provides **immediate and unambiguous** detection of the target gas in the ambient atmosphere
- Our technology **counts every target molecule** in the measurement path to give a ppm concentration
- The system combines the ppm concentrations, GPS coordinates, and associated diagnostic data **for intuitive data interpretation**

### BENEFITS

- **No Interference** with other gases and **No False Alarms**
- **Fast Response Times and No Memory Effects:** much faster response than other gas detection technologies
- Provides the **best return on investment** compared to any other system
- Can be used in **all weather conditions**
- **Minimal Maintenance:** checks internal reference cell every minute, robust design, and requires no consumables
- **Low cost of ownership**
- **Free and Unlimited** phone and email support

### HOW IT WORKS

- The **analyzer is housed inside the aircraft**
- **Fibre optic cable** carries the laser light from the analyzer to the measurement cell
- The **measurement cell is mounted underneath the aircraft**
- The laser makes 3 passes across the measurement cell to form the **active measurement path**
- **The laser does not leave the measurement cell**
- The laser light is then collected and the signal is carried back to the analyzer via **coaxial cable**
- The analyzer then **outputs a serial data string**

### DATA STRING & MAP OVERLAY

HHMSS, Latitude, Longitude, KM/H, PPM, R2, # of Satellites, Status Code



### USES AND FUNCTIONS

- PPM concentrations available to the pilot in **real-time**
- The system is **autonomous** so the pilot can focus on flying safely
- Display/Alarm Module will **sound audible alarm** when ppm concentration hits alarm limit so pilot can turn around to investigate
- Boreal can provide analytical reports with **map overlays**

### SPECIFICATIONS

- **Max Altitude:** 65m (200ft)
- **Max Speed:** 185 km/h (115 mph)
- **Response Time (Scan Rate):** 3 readings/sample per second
- **Ground Resolution:** 5-10m (16-33ft)
- **Sensitivity:** specification varies depending on gas and application
- **Accuracy:** 2% of reading
- **Uncertainty:** 5% of accuracy
- **Dynamic Range:** 4 orders of magnitude
- **Measurement Path Length:** 6m (20ft) w/ 3 passes
- **Light Source:** Semiconductor Diode Laser
- **Typical Laser Output:** ~10mW
- **Eye Safety:** Class I or Class IIIa (ANSI) & FDA/CDRH approved
- **Analyzer Weight:** 5.0 kg (11.0 lbs)
- **Measurement Cell Weight:** 14.8 kg (32.5 lbs)
- **Analyzer Dimensions:** (LxWxH): 260 x 200 x 160mm (10.2 x 7.9 x 6.3in)
- **Measurement Cell Dim:** 1300 x 300 x 20mm (51.2 x 11.8 x 9.1in)
- **Data Output:** Serial Communication (RS-232)
- **Power Requirement:** 1A @ 12VDC
- **Ambient Temperature:** -30°C to +40°C (-22°F to 104°F)

### SYSTEM COMPONENTS



GASFINDER2-AB



AIRBORNE CELL



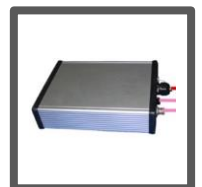
DISPLAY/ALARM



GPS DONGLE



DATA LOGGER



POWER SUPPLY