



# AS3100 Sensors

**CO, O<sub>2</sub>, CH<sub>4</sub> (Methane)  
& Airflow**



- **High-accuracy atmospheric monitoring sensors**
- **Low-power methane sensor**
- **Wi-Fi version coming soon!**

Matrix AS3100 sensors provide the most advanced atmospheric monitoring technology for coal mine ventilation management. AS3100 sensors can detect everything from quick-changing, hazardous conditions requiring immediate action to subtle, slower-changing ones. This accurate, real-time information allows mine personnel to manage potentially unsafe conditions while avoiding costly downtime.

The AS3100 sensor package includes high-accuracy CO, O<sub>2</sub> and airflow sensors, plus a low-power CH<sub>4</sub> (methane) sensor. Each sensor is Intrinsically Safe with MSHA approval.

**[www.matrixteam.com](http://www.matrixteam.com)** 

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# AS3100 Sensors

Dynamic on-screen instructions for step-through calibration

## Airflow Sensor (AS3100-AF):

- MSHA approved Intrinsically Safe
- Uses custom Matrix low-power consumption sensing element – much more accurate than other sensors currently in use
- Sensor element is easy to clean with compressed air and is independently replaceable
- High-visibility backlit graphic LCD display and simple four-button keypad user interface
- Sensor is accurate from -2000 to 2000 FPM (can measure airflow in both directions)
- Sensor is able to detect airflow at less than 100 fpm

## CO Sensor (AS3100-CO):

- MSHA approved Intrinsically Safe
- Uses electro-chemical sensor element, with advanced Matrix PCB, accurate from 0-200 PPM
- Reports temperature
- Simple on-screen calibration – no complex instructions
- High-visibility backlit graphic LCD display and simple four-button keypad user interface
- Stable in areas with ambient CO
- The successor to the proven Matrix S1000 CO sensor, the first MSHA-approved wireless, battery-powered CO sensor

## O2 Sensor (AS3100-O2):

- MSHA approved Intrinsically Safe
- Uses electro-chemical sensor element, with advanced Matrix PCB, accurate from 1-25% volume
- Reports temperature
- Simple on-screen calibration – no complex instructions
- High-visibility backlit graphic LCD display and simple four-button keypad user interface

## Methane Sensor (AS3100-CH4):

- MSHA approved Intrinsically Safe
- Uses an advanced infrared element, capable of high-resolution measurements in permissible environments (0.01 % for 0-10% methane and 0.1% for 10-100% volume)
- Low-power usage
- Reports temperature
- Simple on-screen calibration – no complex instructions
- High-visibility backlit graphic LCD display and simple four-button keypad user interface

  
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