

# Application Spotlight

## Carbon Dioxide (CO<sub>2</sub>) Sensing in Railway Cars

### Overview

Demand-based Outside Air Management is managed in railway cars in the exact same way it is managed in buildings - bring in only the necessary outside air to ventilate a space with variable occupancy, to minimize energy usage heating or cooling outside air.

Known as Demand Controlled Ventilation, or DCV, the theory of measuring Carbon Dioxide (CO<sub>2</sub>) to monitor occupancy and air quality is now applied to train carriages. Pioneered in France to improve the economy of the train, it is now specified throughout their inter-city stock, and has been taken up by many other countries in the same application.



### Telaire T3000 Series | CO<sub>2</sub> Sensors for Harsh Environments

Telaire T3000 Series is a range of Carbon Dioxide (CO<sub>2</sub>) Sensors designed to meet the specific needs of customers who require CO<sub>2</sub> measurements in harsh or difficult environments. Based on a series of modules, the casing offers a number of combinations to meet the needs of range, supply voltage and output type in various applications.

### Features

- Meets EN 50121-2-3, EN 61373 (Class B)
- Optimized for in-car use
- NFF 16102 Fire/Smoke Rated
- Operating Temperature: -20°C to +50°C
- Storage Temperature: -50°C to +70°C
- Calibrated for sensor life
- ROHS, REACH Compliant
- LVD, CE EMC

### AAS Advantage

- Global market leader in CO<sub>2</sub> detection
- 20+ years technical experience
- Backed by stable corporate structure
- Low cost production techniques
- Fast implementation-to-production

