

# RLD7



## Automotive-Grade R744 (CO<sub>2</sub>) Refrigerant Leak Detector

- Driver alert - detect critical levels of CO<sub>2</sub> in cabin air
- Proven and selective NDIR technology
- OEM customizable automotive grade module with optional altitude compensation

## Automotive-Grade R744 (CO<sub>2</sub>) Refrigerant Leak Detector

**Automotive-Grade R744 Refrigerant Leak Detector with configurable LIN I/O, wake-up capabilities and low power park mode.**

The RLD7 (Refrigerant Leak Detector for R744) is an automotive-grade sensor designed to reliably detect critical concentrations of R744 - a natural refrigerant - in a vehicle's cabin. Utilizing selective NDIR sensing technology, the RLD7 covers the full range of critical R744 concentrations up to

40,000ppm of CO<sub>2</sub>. It supports customer-specific alarm thresholds and features low-power sleep and park modes with LIN-based wake-up functionality.

The RLD7's broadband CO<sub>2</sub> range also supports applications such as Cabin Air Quality control (CAQ) and Rear Occupant Alert (ROA). Moreover, an optional barometric pressure sensor enables effective altitude compensation.

### Features

- Covers full CO<sub>2</sub> range: 0 – 40,000ppm CO<sub>2</sub>
- Proven and selective NDIR sensing technology
- Configurable alarm thresholds and LIN wake-up
- Optional pressure and dewpoint sensor
- Microphone-free technology

### Benefits

- 2-in-1 R744- and CO<sub>2</sub> air-quality-applications
- No cross-sensitivity to other gases
- OEM customizable
- Optional altitude compensation
- Cannot be used for audio monitoring

### Typical Applications

- CO<sub>2</sub> driver alert / R744 CO<sub>2</sub> monitoring in automotive HVAC air conditioning systems and heat pumps
- Cabin Air Quality control (CAQ)
- Rear Occupant Alert (ROA)

### Properties

- AEC-Q100· ISO/IATF16949:2016 conformant design
- Temperature range: -40 – 85°C
- Humidity range: 0 – 95%
- Voltage range: 7 - 27V
- Low power park mode down to 200µA
- LIN 2.x communication
- Tool-free integration

### Dimensions

