

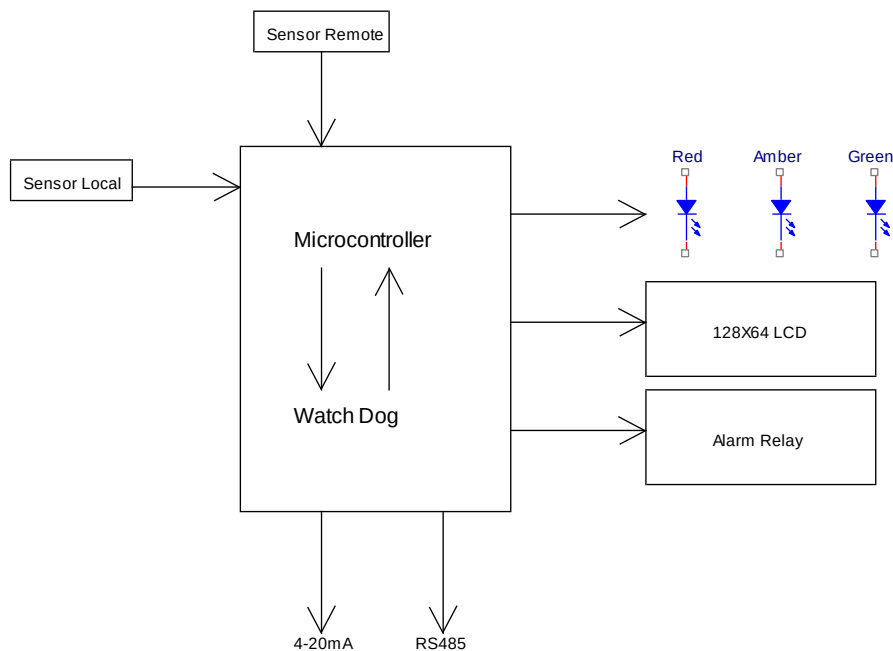
Digital Toxic Gas Detector

Model: 902

1.0 Application

Model 902 are digital gas detectors for CO-carbon-monoxide and NO₂ –nitrogen-dioxide concentration monitoring. They are widely used in large vehicle exhaust environment like in-door parking garages or municipal work facilities, warehouses, etc. to monitor concentrations of CO or NO₂.

2.0 Working Principle



Simplified Schematic

3.0 Features

- 3 color LEDs indicate communication status, concentration level and trend/numerical display (optional)
- Automatic calibration reminder
- Sensor “End of Life” warning
- Hardware watchdog for high reliability and fail safe operation

4.0 Specification

- Detectable gases: CO or NO₂
- Inputs: Two sensors maximum - one local, one remote (4-20mA input).
- Outputs: Modbus RTU, 4-20mA, relay output (standalone version)
- Wiring: 4 Wire - 2 power + 2 communication

- Connection: RS-485
- Enclosure: PVC
- Supply Voltage: 16-42 VDC, 12-32 VAC
- Dimensions: 4" x 4" x 2.25"
- Operating temperature: -20°C to 50°C (-4°F to 122°F)
- Warranty: 2 years (sensors excluded)
- Indicators: LCD for gas concentration, LEDs for sensor, transceiver operation and fault
- Coverage area: Approx. 7500 sq. ft. (50' radius)
- Recommended mounting height: 4-5' A.F.F.

4.1 Carbon Monoxide Sensor for 902-CO

- Range: 0-250ppm
- Sensor type: Electrochemical
- Accuracy: 1ppm
- Response time: Better than 30 Seconds to 90%
- Life expectancy: 6 years
- Operating humidity: 5-95% RH Non-Condensing

4.2 Nitrogen Dioxide Sensor for 902-NO2

- Range: 0-10ppm
- Sensor type: Electrochemical
- Accuracy: 0.1ppm
- Response time: Better than 25 Seconds to 90%
- Life expectancy: Better than 2 years
- Operating humidity: 5-95% RH Non-Condensing