COMPLIANCE SOLUTIONS

PARKSENSE-VAN™ PARKING GARAGE GAS DETECTION

PURPOSE-BUILT FOR THE VANCOUVER CITY BY-LAW 12511

CET's ParkSense-VAN™ gas detecion solution complies with the stringent requirements of Vancouver, BC including detecting CO and NO_2 gases, and the required operation and airflow rates.

Stay compliant, reduce risk, and safeguard parking facilities. Trust the gas detection experts to keep your critical environment safe.

ParkSense-VAN, the complete solution

COMPLIANT, COMPLETE, SAFE

- **FCS**: Multi Channel Controller with Modbus® RS-485 or BACnet® WAN output to BAS
- **CGAS-D-CO-NO2:** Digital Transmitter with CO and NO_2 sensors
- **RSH-24V-R:** Remote Strobe/Horn Combo

Talk to one of our gas detection experts today to learn about compliant gas detection solutions.

Critical Environment Technologies

THE GAS DETECTION EXPERTS.

WWW.CETCI.COM
(877) 940 8741
SALES@CETCI.COM

PARKSENSE-VAN: MEETING SPEC

- Dual channel CO + NO_2 installed 3–5 ft above floor
- Limit gas concentration and control the ventilation system
- FCS or cGas-SC can automate fan cycling between two modes
- RSH can be used for audio/visual alarm to enhance safety

FCS Multi Channel System Controller

- Four 5A relays, audible alarm, touch LCD display with menu, zoning, logic control, and data logging
- Modbus® RS-485 or BACnet® MS/TP output for BAS integration
- 90–240V AC power supply
- Options: 4-20mA or 0-10 voltage outputs for VFD control, Strobe, Door Lock, Internal Heater

cGas Detector Digital Transmitter (CO + NO_2)

- 0-200 ppm CO sensor range, 0-10 ppm NO_2 sensor range
- Modbus® RS-485 or BACnet® MS/TP output, 4-wire VAC/VDC
- Options: Relay, Low Temp Operation, Splash Guard

Remote Strobe / Horn Combo

- Multiple alarm features in one device
- Independent settings for horn, strobe or horn and strobe together
- Three lens colours to choose from

Alternative: cGas-SC Self Contained Controller

- 0-200 ppm CO sensor range, 0-10 ppm NO_2 sensor range
- Two 5A relays, audible alarm, LCD display with menu, pre-calibrated plug & play sensors
- Modbus® RS-485 or BACnet® MS/TP output for BAS integration
- 24 VAC/VDC or optional 90–240V AC power supply
- Options: 4-20mA or 0-10 voltage outputs for VFD control, Side Mounted Strobe, Splash Guard, Low Temp Operation

CRITICAL ENVIRONMENT TECHNOLOGIES

Flexible Control System (FCS)

cGas Detector (CO+NO_2)

Strobe/Horn (RSH-24V-R)

cGas-SC Controller (CO+NO_2)

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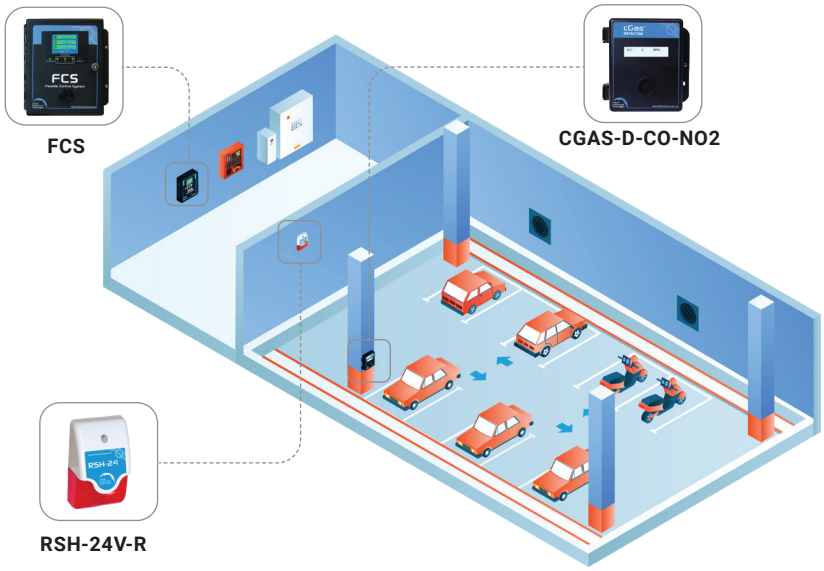
COMPLETE SYSTEM INTEGRATION BUILT TO MEET SPEC

- **FCS** Controller (central panel system)
- **CGAS-D-CO-NO2** Digital Transmitters
- **RSH-24V-R** Remote Strobe & Horn
- For a standalone system, install the **CGAS-SC-CO-NO2** in the same location as the transmitter is shown.
- **CGAS-D Combustible** Digital Transmitter is recommended for monitoring propane (C_3H_8) or natural gas (CH_4) powered vehicles use the parking garage



VANCOUVER BUILDING BY-LAW 12511, SECTION 6.3.1.3

Except for open-air storeys and specific mechanical parking scenarios, enclosed garages must have mechanical ventilation systems that:

- Limit carbon monoxide (CO) to ≤100 ppm.
- Limit nitrogen dioxide (NO_2) to ≤3 ppm if most vehicles are diesel-powered.
- Alternatively, supply outdoor air continuously at ≥3.9 L/s per m² of floor area during operating hours.

The mechanical ventilation system must be controlled by appropriate monitoring devices—carbon monoxide detectors for CO based systems and nitrogen dioxide or other approved detectors for NO_2 based systems.

Additionally, the garage must be maintained at a lower air pressure than adjacent occupied spaces to prevent exhaust fumes from migrating.

Where vehicles are parked by mechanical means, ventilation requirements may be reduced by half.

Ticket and attendant booths within these garages must be pressurized with clean air, unless located in open-air storeys, which are exempt from all these ventilation requirements.

Car dealership showrooms are not considered storage garages under these provisions.

Storage garages are ventilated to protect occupants from exposure to carbon monoxide and other vehicular exhaust fumes. In certain cases, such as small two- or three-bay storage garages that are used for occasional vehicle storage, and where occupants are not present, carbon monoxide or nitrogen dioxide monitoring devices may be omitted if the ventilation system is interlocked with a local light switch or other controls to ensure continuous system operation whenever the area is occupied. In any event, the ventilation system capacity must be designed to limit the concentrations of carbon monoxide or nitrogen dioxide at or below the prescribed values.