



# Gas Detection For Life

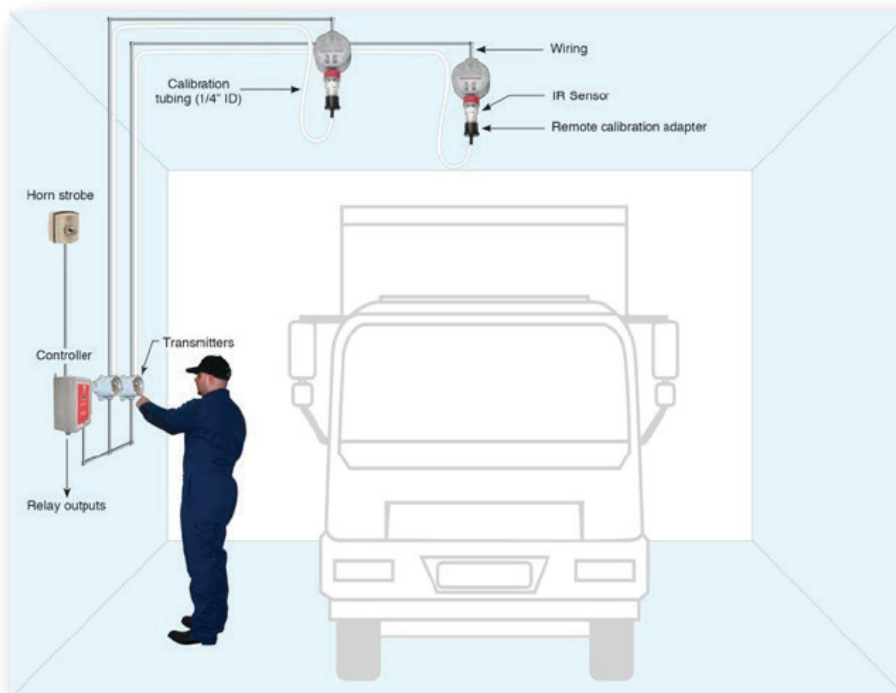
## Application Brief

August 10, 2021

### Vehicle Maintenance Gas Detection



In the interest of reducing cost and meeting more stringent environmental regulations, public and private fleet operators are shifting their fleets from gasoline/diesel fuel to alternative fuels such as natural gas, propane and hydrogen. With the introduction of these new fuels, the fueling stations and maintenance facilities usually need to be modernized to include gas detection. At the maintenance facilities, the potential risk lies with the vehicles containing the fuel, but at the fueling stations, the potential risk is with the vehicles, storage areas, and fueling equipment. Leaks that reach over 100% of the gas' lower explosive limit become ignitable.



**Maintenance facilities** require gas detectors in areas where the alternative-fuel vehicle could be located, such as the work bay, paint shop, chassis wash, tire shop, fueling area, dynamometer building or the gas compressor area.

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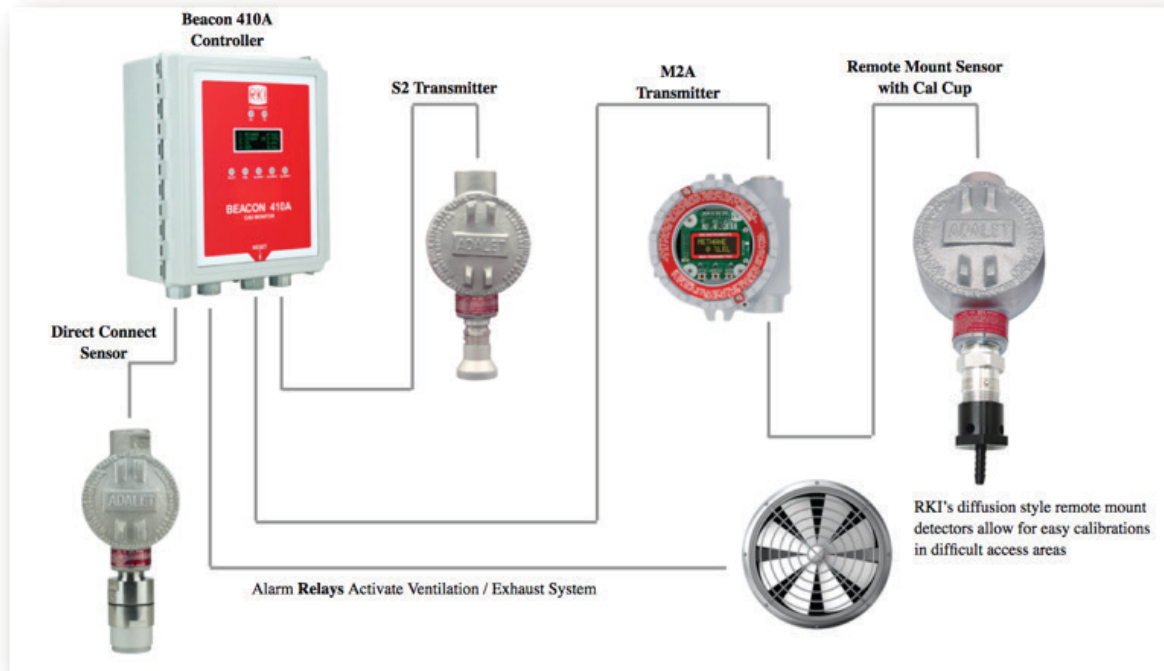
# Vehicle Maintenance Gas Detection

In addition to needing to comply with The International Fire Code, numerous National Fire Protection Association (NFPA) codes, and local fire codes, most facilities require various agency approvals for the installed gas detection system.

## Typical Facilities Needing Gas Detection

- School bus maintenance bay
- Solid waste disposal vehicle maintenance bay
- Fleet vehicle maintenance bay
- CNG long-haul vehicle maintenance bay
- Transit authority maintenance bays
- Distribution centers: UPS / FedEx / DHL

## RKI Solution



A Beacon controller mounted on the wall and connected to our flammable transmitters with remote mount sensors does the trick. Propane is heavier than air, so it collects near the floor, Natural gas and Hydrogen are lighter than air, so they collect near the ceiling. Our remote sensors can be located near the ceiling or floor, depending on which gas needs to be detected.

Our Beacon controllers have relays that can control lights, horns, bay doors, etc. when there is gas present. The same controllers have outputs that can be tied into a local PLC or SCADA system if needed. At RKI and select channel partners we can provide designing, start-up, full turn-key installations, and training on-site.

## Resources:

[RKI Controllers](#)

[RKI Detector Heads](#)