

D•CAN^{Gen2}

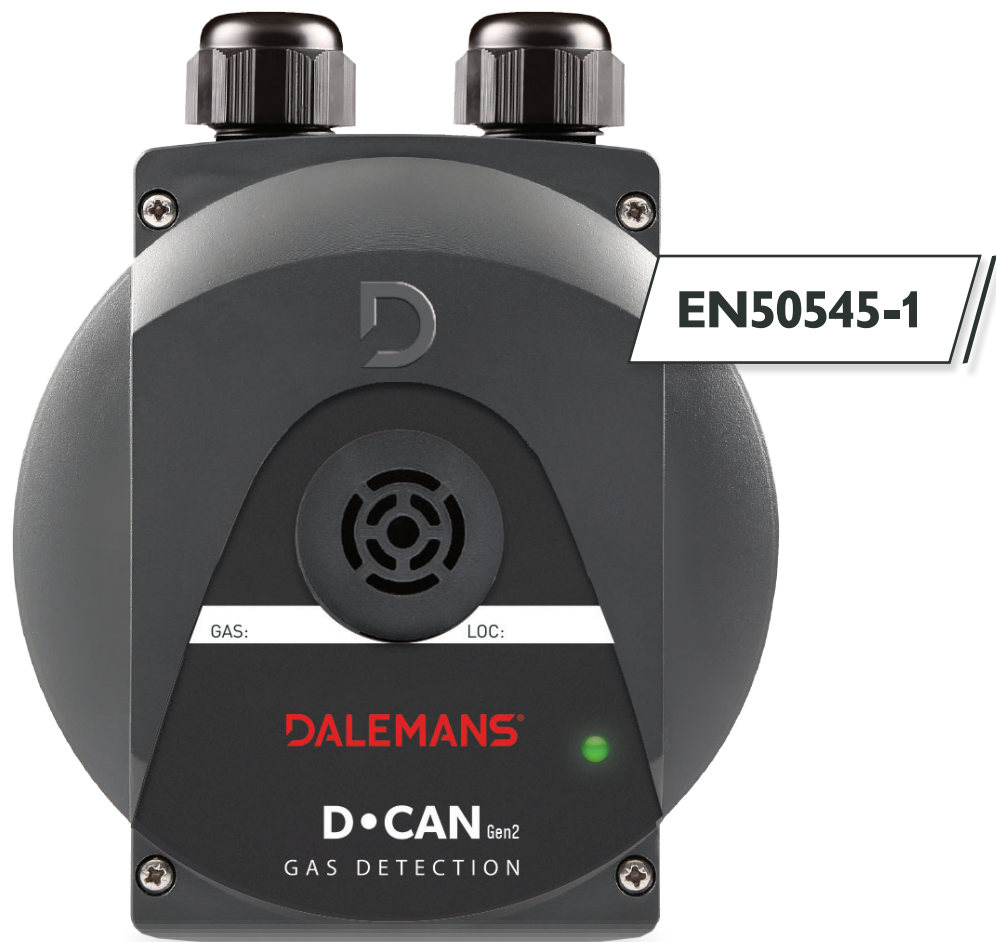
ADDRESSABLE GAS DETECTOR FOR OXYGEN, TOXIC OR FLAMMABLE GASES

- Low power

- Intuitive Multicolor LED indicator

- Addressable (CAN Bus)

- One-man one-trip calibration



DALEMANS[®]

G A S D E T E C T I O N

D•CAN^{Gen 2}

OPERATING PRINCIPLE

Each detector continuously transmits the concentration of gas it measures nearby. In the event of a gas leak or of an excessively high gas concentration, pre-configured alarm conditions will be met. In case of a malfunction, a 'fault' status will be triggered to warn the detection control unit.

Many different target gases can be detected, using many different kind of gas detection technologies.



D•CAN Gen2 range of detector is very versatile and allows many hardware configurations. Always refer to Dalemans representative to properly dimension the system to the application.



All gas detection installations must be calibrated and maintained regularly in accordance with the manufacturer's instructions to guarantee safety and performance.

CHARACTERISTICS

| | | | | |
|------------------------------|---|----------------------|-------------------------|--|
| HOUSING MATERIAL | Flame retardant (UL 94 V-0) and UV stabilized plastic | | | |
| DIMENSIONS (HxWxD) | 142 x 119 x 51 mm | | | |
| WEIGHT | 300 g | | | |
| SIGNAL | Digital (addressable CAN bus) | | | |
| OPERATING VOLTAGE | 10 - 30 VDC | | | |
| MEASUREMENT PRINCIPLE | CATALYTIC (CA) | ELECTROCHEMICAL (EC) | NON-DISPERSIVE INFRARED | MOLECULAR PROPERTY SPECTROMETER (MPS™) |
| POWER CONSUMPTION | 0,9 W | 0,14 W | 0,7W | 0,2W |
| OPERATING TEMPERATURE | -10 °C to +40 °C | -20 °C to +40 °C | -20 °C to +50 °C | -20 °C to +50 °C |
| HUMIDITY & PRESSURE | 10 to 90% RH (non-condensing) 90-110 kPa | | | |
| CABLING | CAN: 2 x 2 x 0.75mm ² twisted pairs and shielded (best choice) or Ethernet S/FTP 0.25mm ² and J-H(ST)H 2 x 2 x 0.8mm (reduced capabilities)* | | | |
| CABLE ENTRY | 2 x M16 | | | |
| ENCLOSURE INGRESS PROTECTION | IP65 | | | |
| CERTIFICATIONS | Electromagnetic compatibility (EMC) | | | EN 50270 (type 2) |
| | Construction & performance of Gas detection parkings & tunnels | | | EN 50545-1 |
| | Functional safety of digital components | | | EN 50271 |

* PRECAUTIONS FOR USE:

- For catalytic based detectors only, never connect the detector with a cable containing silicone in its composition or manufacture process. It could hinder or prevent full functionality of the detector. Please contact your supplier before installation.
- Cable types with reduced capabilities may reduce the maximum amount of detectors per bus, and reduce the maximum bus cable length. See the instructions manual.

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| GAS | TARGET GASES | | | | |
|--|-------------------|---|-----------|---------------------|--------------------------------|
| | SENSOR TECHNOLOGY | MEASUREMENT RANGE | ACCURACY | RESPONSE TIME (T90) | SENSOR EXPECTED OPERATING LIFE |
| CARBON MONOXIDE (CO) | EC | 0 - 300 ppm | ± 3% FS | < 30 s | > 2 years |
| | EC | 0 - 500 ppm | ± 3% FS | < 30 s | > 2 years |
| | EC | 0 - 500 ppm (H ₂ Resistant) | ± 3% FS | < 30 s | > 2 years |
| | EC | 0 - 1000 ppm | ± 3% FS | < 30 s | > 2 years |
| NITROGEN DIOXIDE (NO ₂) | EC | 0 - 5 ppm | ± 3% FS | < 50 s | > 2 years |
| | EC | 0 - 30 ppm | ± 3% FS | < 50 s | > 2 years |
| HYDROGEN (H ₂) | CA | 0 - 100% LEL | ± 3% FS | < 30 s | > 3 years |
| METHANE(CH ₄) | CA | 0 - 100% LEL | ± 3% FS | < 30 s | > 3 years |
| | NDIR | 0 - 100% LEL | ± 2% FS | < 30 s | > 5 years |
| PROPANE (C ₃ H ₈) | CA | 0 - 100% LEL | ± 3% FS | < 30 s | > 3 years |
| | NDIR | 0 - 100% LEL | ± 2% FS | < 30 s | > 5 years |
| BUTANE (C ₄ H ₁₀) | CA | 0 - 100% LEL | ± 3% FS | < 30 s | > 3 years |
| | NDIR | 0 - 100% LEL | ± 2% FS | < 30 s | > 5 years |
| LPG | CA | 0 - 100% LEL | ± 3% FS | < 30 s | > 3 years |
| CNG | CA | 0 - 100% LEL | ± 3% FS | < 30 s | > 3 years |
| DMC/EMC | MPS | 0 - 100% LEL | ± 3% FS | < 20 s | > 15 years |
| FLAMMABLE TRUELEL™ | MPS | 0 - 100% LEL | ± 3% FS | < 20 s | > 15 years |
| CARBON DIOXIDE (CO ₂) | NDIR | 0 - 5000 ppm | ± 2% FS | < 30 s | > 5 years |
| | NDIR | 0 - 5 %vol. | ± 2% FS | < 30 s | > 5 years |
| | NDIR | 0 - 4 %vol. | ± 2% FS | < 30 s | > 5 years |
| OXYGEN (O ₂) | EC | 0 - 25 %vol. | ± 1.5% FS | < 10 s | > 2 years |
| AMMONIA (NH ₃) | EC | 0 - 100 ppm | ± 5% FS | < 50 s | > 2 years |
| | EC | 0 - 1000 ppm | ± 5% FS | < 40 s | > 2 years |
| | EC | 0 - 5000 ppm | ± 5% FS | < 120 s | > 2 years |
| CHLORINE (CL ₂) | EC | 0 - 10 ppm | ± 2% FS | < 30 s | > 1 years |
| HYDROGEN SULFIDE (H ₂ S) | EC | 0 - 50 ppm | ± 2% FS | < 30 s | > 4 years |
| | EC | 0 - 100 ppm | ± 2% FS | < 30 s | > 4 years |
| OZONE (O ₃) | EC | 0 - 1 ppm | ± 2% FS | < 60 s | > 2 years |
| SULFUR DIOXIDE (SO ₂) | EC | 0 - 20 ppm | ± 5% FS | < 30 s | > 2 years |

Accuracy may be achieved only with calibrated apparatus. Most gas sensors' sensitivity and baseline drift over time. Sensors are consumables for which effective operating life may vary depending on environmental factors.

The information contained in this documentation is non-contractual and subject to modifications.