



# Dräger Fixed Gas Detection Portfolio

**Dräger**

Technology for Life



## Superior performance with tradition

We have been developing gas measuring technology products for over 80 years, repeatedly setting new standards for measuring accuracy, durability and options for customer-specific adaptation.

Our measuring technology monitors your production locations, warehouses and workplaces to warn you of imminent gas hazards and flames.

# Fixed gas detectors put safety first

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In an industrial facility, hazardous substances are part of the daily routine. Dräger's comprehensive range of fixed gas detectors and controllers includes a broad spectrum of Dräger sensors for measuring toxic and flammable gases and vapours as well as oxygen.

We don't stop there:

Our consultative approach means that we can help assess, define and implement complete and individualised fixed gas detection systems for every workplace. When you have the right gas detection system in place, your employees stay safe and work continues smoothly.





# Gas Detectors for Toxic Gases and Oxygen

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Toxic gases and vapours or oxygen displacement pose a risk in different industrial facilities. We offer various detectors for toxic gases, which operate on tried-and-tested electrochemical, infrared or open-path detection principles and can detect more than 140 substances.

D-2947-2018



### Dräger Polytron® 8100 EC

The Polytron® 8100 EC is Dräger's top of the line explosion-proof transmitter for the detection of toxic gases or oxygen. It uses a high performance plug and play electrochemical DrägerSensor to detect a specific gas. Besides having a 3-wire 4 to 20 mA analog output with relays, it also offers HART®, Modbus and Fieldbus protocol, making it compatible with most control systems.

dgt-67-2015



### Dräger Polytron® 7000

The Dräger Polytron® 7000 gas detector can satisfy many toxic and oxygen gas measurement applications on a single platform. With its innovative modular concept, the Dräger Polytron® 7000 offers the flexibility to configure the transmitter to fit your exact application.

D-46490-2012



### Dräger Polytron® 8720 IR

The Dräger Polytron® 8720 IR is an advanced explosion proof transmitter for the detection of carbon dioxide in percent volume or ppm. It uses a high performance infrared Dräger PIR 7200 sensor, which can be submerged in water without damage. Besides a 3 wire 4 to 20 mA analogue output with relays, it also offers HART®, Modbus and Fieldbus making it compatible with most control systems.

D-7353-2016



### Dräger PointGard 2100

The Dräger PointGard 2100 series is a self-contained gas detection system for the continuous area monitoring of toxic gases in ambient air. PointGard 2100's rugged, water-resistant housing comes complete with a horn and strobes, a built-in power supply, and reliable DrägerSensor®.

D-4653-2019



### Dräger Polytron® 6100 EC WL

The Dräger Polytron 6100 EC WL is a wireless transmitter for continuous monitoring of toxic gases and oxygen. The intrinsically safe and SIL2-rated transmitter features completely wireless signal transmission and power supply. The internal battery pack allows the transmitter to operate continually for up to 24 month. This makes the Polytron a flexible and cost efficient solution for plant expansions, upgrades or new installations.

9103412-en-us



### Dräger Polytron® 3000

The Dräger Polytron® 3000 is an intrinsically safe gas detector for the continuous monitoring of toxic gases and oxygen in ambient air. It is the part of a new generation of gas detectors developed on a modular platform. Communication to the central control system is done via a 4 to 20 mA signal.

D-15319-2023



### Dräger VarioGard® 2320 IR

In many fields of work, quick and reliable gas detection is a must. This is why we offer the Dräger VarioGard® stationary gas detector range. Dräger VarioGard® 2320 IR monitors possible gas leaks or work place exposure limits of carbon dioxide.

dgt-67-2015



### Dräger Polytron® 5100 EC

The Dräger Polytron® 5100 EC is a cost-effective explosion-proof transmitter for the detection of toxic gases or oxygen in standard applications. It uses a high performance plug-and-play electrochemical DrägerSensor® to detect a specific gas. A 2- or 3-wire 4 to 20 mA output with relays makes it compatible with most control systems.

D-39563-2011



### Dräger Polytron® 5720 IR

The Dräger Polytron® 5720 IR is a cost-effective explosion proof transmitter for the detection of carbon dioxide in volume percentage or ppm. It uses a high-performance infrared Dräger PIR 7200 sensor that can be submerged in water without damage. A 3-wire 4-to-20 mA analogue output with relays makes it compatible with most control systems.

ST-11660-2007



### Dräger PIR 7200

The Dräger PIR 7200 is an explosion proof point infrared gas detector for continuous monitoring of carbon dioxide. Designed for the industrial use, the transmitter offers drift-free optics. And due to its robust product design the PIR 7200 can be operated even in harsh environments.

D-38264-2015



### SafEye™ Quasar 950/960

The highly specialised open-path UV gas detection systems Quasar SafEye™ 950 and 960 provide reliable gas leak monitoring: The Quasar 950 model detects the toxic gases hydrogen sulphide and sulphur dioxide. The Quasar 960 model warns of toxic ammonia.

9110468



### Dräger PointGard 2720

The Dräger PointGard 2720 is a self-contained gas detection system for the continuous area monitoring of carbon dioxide (CO<sub>2</sub>) in ambient air. PointGard 2720's rugged, water-resistant housing comes complete with a horn and strobes, a built-in power supply, and is compatible with a remotely mounted Dräger PIR 7200 infrared CO<sub>2</sub> sensor.





### Dräger VarioGard 3000 EC Transmitter

The Dräger VarioGard 3000 EC is a digital transmitter with an integrated electrochemical sensor. It detects oxygen and toxic gases in the ambient air. This affordable system component makes it easier for you to configure a gas warning system.

Toxic Measurement	Display	Intrinsic safety	Flameproof	Increased safety	4-20 mA	Bus	HART*	Wifi
PIR 7200			■	■	■		□	
PointGard® 3100	■				■			
PointGard® 3720	■				■			
Polytron® 2000	■				■			
Polytron® 3000	■	■			■			
Polytron® 5100	■		■	□	■			
Polytron® 5720	■		■	□	■			
Polytron® 6100 EC WL	■						□	■
Polytron® 7000	■	■			■	□	□	
Polytron® 8100	■		■	□	■		■	
Polytron® 8720	■		■	□	■		■	
VarioGard® 2320					■			
VarioGard® 3000						■		
VarioGard® 3320						■		





# Gas Detectors for Flammable Gases and Vapours

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Flammable gases and vapours can become sources of ignition when mixed with air. We offer different transmitters for flammable gases, which operate on recognised infrared, catalytic-bead or open-path detection principles so you can take appropriate action in time.



D-0982-2020



### Dräger PointGard 2700

The Dräger PointGard 2700 is a self-contained gas detection system for the continuous area monitoring of flammable hydrocarbon gases and vapors in ambient air. PointGard 2700's rugged, water-resistant housing comes complete with a horn and strobes, a built-in power supply, and external relays. It is compatible with a remotely mounted Dräger PIR 7000 Type 334 or Type 340 infrared gas sensor.

ST-8822-2005



### Dräger PIR 3000

The Dräger PIR 3000 is an explosion proof infrared gas detector for continuous monitoring of combustible gases and vapors. Based on a stainless steel SS 316 enclosure as well as on a good measuring performance, this transmitter offers an excellent price-performance-ratio.

D-1923-2022



### Dräger Polytron® SE Ex

The Dräger Polytron® SE Ex ... DQ sensing heads are gas detectors for the continuous monitoring of flammable gases and vapours in the ambient air. Measurement is based on the heat of reaction principle where a chemical reaction takes place in a catalytic bead (also known as a pellistor) inside the sensor.

D-32408-2011



### Dräger Polytron® 5700 IR

The Dräger Polytron® 5700 IR is a cost effective explosion-proof transmitter for the detection of flammable gases in the lower explosive limit (LEL). It uses a high performance infrared Dräger PIR 7000 sensor that will quickly detect most common hydrocarbon gases. A 3-wire 4 to 20-mA analogue output with relays makes it compatible with most control systems.

D-797-2016



### Dräger Polytron® 8200 CAT

The Dräger Polytron® 8200 CAT is an advanced explosion-proof transmitter for the detection of flammable gases in the lower explosion limit (LEL). It uses a catalytic bead DrägerSensor® Ex that will detect most flammable gases and vapours. In addition to a 3-wire 4 to 20-mA analogue output with relays it also offers HART®, Modbus and Fieldbus protocols, making it compatible with most control systems.

D-5570-2018



### Dräger Pulsar 7000 Series

The Dräger Pulsar 7000 Series are stationary open path gas detectors for the detection of explosive hydrocarbons in gases and vapours. The robust design and the extremely rapid response time make the Dräger Pulsar 7000 Series a dependable solution for your requirements in the oil and gas industry, as well as the chemical industry.

D-15318-2023



### Dräger VarioGard® 3300 IR Transmitter

The Dräger VarioGard® 3300 IR is a digital transmitter with an integrated infrared optical DrägerSensor®. It detects the flammable gases methane and LPG in the ambient air. This affordable system component makes it easier for you to configure a gas warning system.

ST-8822-2005



### Dräger PEX 3000

The transmitter Dräger PEX 3000 detects flammable gases and vapours in concentrations below their lower explosive limit (100 %LEL). It increases the explosion protection of your plant. Its catalytic bead sensor provides a long-term stable measuring signal and responds to gas within a few seconds.

D-11705-2022



### Dräger VarioGard® 2300 IR

In many fields of work, quick and reliable gas detection is a must. This is why we offer the Dräger VarioGard® stationary gas detector range. The Dräger VarioGard® 2300 IR monitors possible gas leaks of methane or LPG.

D-32406-2011



### Dräger Polytron® 5310 IR

The Dräger Polytron® 5310 IR is a cost effective explosion-proof transmitter for the detection of flammable gases in the lower explosion limit (LEL). It uses an infrared DrägerSensor® IR that can be configured for methane, propane, or ethylene. A 3-wire 4 to 20-mA analogue output with relays makes it compatible with most control systems.

D-797-2016



### Dräger Polytron® 5200 CAT

The Dräger Polytron® 5200 CAT is a cost-effective explosion-proof transmitter for the detection of flammable gases in the lower explosion limit (LEL). It uses a catalytic bead DrägerSensor® Ex that will detect most flammable gases and vapours. A 3-wire 4 to 20 mA analogue output with relays makes it compatible with most control systems.

D-14983-2010\_8DA



### Dräger Polytron® 8700 IR

The Dräger Polytron® 8700 IR is an advanced explosion proof transmitter for the detection of combustible gases in the lower explosion limit (LEL). It uses a high performance infrared Dräger PIR 7000 sensor, which will quickly detect most common hydrocarbon gases. Besides a 3 wire 4 to 20 mA analogue output with relays, it also offers HART®, Modbus and Fieldbus making it compatible with most control systems.

D-15318-2023



### Dräger PointGard 2200

The Dräger PointGard 2200 is a self-contained gas detection system for the continuous area monitoring of flammable gases and vapours in ambient air. PointGard 2200's rugged, water-resistant housing comes complete with a horn and strobes, a built-in power supply, and reliable DrägerSensor®.

D-21374-2020



### GS01 (wireless)

The GS01 is a wireless infrared gas transmitter for continuous monitoring of flammable hydrocarbon gases and vapours in the oil and gas industry. The intrinsically safe and SIL-rated transmitter features completely wireless signal transmission and power supply.

D-11705-2022



### Dräger VarioGard 3200 CAT Transmitter

The Dräger VarioGard® 3200 CAT is a digital transmitter with an integrated catalytic DrägerSensor®. It detects the flammable gases methane and LPG in the ambient air. This affordable system component makes it easier for you to configure a gas warning system.

ST-11660-2007



### Dräger PIR 7000

The Dräger PIR 7000 is an explosion proof point infrared gas detector for continuous monitoring of flammable gases and vapours. With its stainless steel SS 316L enclosure and drift-free optics this detector is built for the harshest industrial environments, e.g. offshore installations.

D-15018-2010



### Dräger Polytron® 8310 IR

The Dräger Polytron® 8310 IR is an advanced explosion proof transmitter for the detection of combustible gases in the lower explosion limit (LEL). It uses an infrared DrägerSensor® IR that can be configured for methane, propane or ethylene. Besides a 3 wire 4 to 20 mA analogue output with relays, it also offers HART®, Modbus and Fieldbus protocols making it compatible with most control systems.





## Flame detection

■ Standard □ Option

Flame detection	Detection technology	Flameproof	4-20 mA	HART*	RS-485	Relay
Flame 1350	UV/IR	■	■	■	■	■
Flame 1500	IR3	■	■	■	■	■
Flame 1750 H2	IR	■	■	■	■	■
Flame 3000	Visual	■	■	■	■	■
Flame 5000	Visual	■	■	■	■	■

## Area monitoring

Area monitoring	Measuring gas	Flameproof	Response time	4-20 mA	HART*	RS-485	Giga Ethernet	Wifi
MetCam	Methane	■	< 10 sec.	■	■	■	■	□

## Ultrasonic leak detection

Ultrasonic leak detection	Flameproof	Increased safety	Response time	4-20 mA	HART*	Frequency range	Relay
Polytron® 8900 UGLD	■	■	< 3 sec.	■	■	18-80 kHz	■



# Controller What happens during a safety risk or false alarm?

In a gas detection system, everything comes together in the hands of the controller. What happens during a safety risk or false alarm? The gas control unit rates the signal and activates the alarm, which can have consequences ranging from production stop to evacuating the facility. Our gas control panels set new standards in matters of reliability and ease of use. We offer controllers different sizes as well as in different complexities to complete your tailormade gas control system.

100424



### Dräger REGARD® 7000

The Dräger REGARD® 7000 is a modular and therefore highly expandable analysis system for monitoring various gases and vapours. Suitable for gas warning systems with various levels of complexity and numbers of transmitters, the Dräger REGARD® 7000 also features exceptional reliability and efficiency. An additional benefit is the backward compatibility with the REGARD®.

D-5931-2016



### Dräger REGARD® 2400 and REGARD® 2410

Dräger REGARD® 2400 and 2410 are flexible small control units for detection of toxic gases and oxygen as well as combustible gases and vapours. Combined with the Dräger transmitters or sensing heads Dräger REGARD® 2400 or 2410 forms a low-maintenance gas detection system for reliable protection.

D-1130-2011



### Dräger REGARD® 3900 Series

The devices of the Dräger REGARD® 3900 series can be used as standalone controllers. You can configure up to 16 measuring channels. In addition, the modular setup enables you to customise the control units to the demands of your plant. You can also embed further features to existing alarms.

ST-9754-2007



### Dräger VarioGard® Central Unit

The Dräger VarioGard® Central Unit is at the center of a cost-efficient, modular gas detection system. A digital Bus makes it possible to connect and manage up to 100 transmitters for various gases.





## Control units

■ Standard □ Option

Control units	Channels	mA	mV	Digital communication	Surface mount	DIN rail mount	Docking station
REGARD® 2400/2410	4	■	□		■	■	
REGARD® 3000	4	■		■	■	■	■
REGARD® 3900 Series	16	■	□	■	■	□	
REGARD® 7000	1536	■		□		■	■
VarioGard® Controller	100			■	■	□	

## Open-path detection

Open-path detection	Type of gas	Flameproof	Increased safety	4-20 mA	Bus	HART®
Pulsar 7000 Series	flammable	■		■	■	■
SafEye 900 / 950 / 960	toxic or flammable	■	■	■	RS485	■

# Sensors for fixed gas detectors

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The sensor is the most important component inside a gas detector. The gas detector sensor converts the measured variable, e.g. a gas concentration, into an electrical signal. Depending on the gas sensor type, this is achieved by either chemical or physical processes. Dräger offers a wide range of different gas detector sensors for fixed gas warning systems.

D-10088-2018



## Catalytic Bead DrägerSensor®

The DrägerSensor® ... DQ detects flammable gases and vapours such as hydrogen. Due to the double-detector compensation method, the catalytic sensor is particularly long-term stable. The wire mesh at the gas inlet serves as a flame barrier. So it ensures explosion protection at the same time short response time.

90 45 596



## Electrochemical DrägerSensor®

Fast response, high accuracy, great stability, long life. Electrochemical DrägerSensors offer all these benefits. You can use the robust and long-life sensors for the selective measurement of the smallest concentrations of toxic gases and oxygen in ambient air.

ST-8821-2005



## DrägerSensor® IR

Upgrade from Catalytic bead to infrared technology with ease using the DrägerSensor IR. The Sensor IR can replace catalytic ex-sensors (pellistors) from the majority of manufacturers without replacing controllers, cables, junction boxes or control systems.

# System-Components

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The sensor is the most important component inside a gas detector. The gas detector sensor converts the measured variable, e.g. a gas concentration, into an electrical signal. Depending on the gas sensor type, this is achieved by either chemical or physical processes. Dräger offers a wide range of different gas detector sensors for fixed gas warning systems.

ST-8006-2008



## Dräger FS-5000

The Dräger FS-5000 is used to simulate the presence of fire or flames to test the correct operation of the Dräger Flame 5000 CCTV Detector.

ST-748-2006



## Dräger PSD 3000

The Dräger PSD 3000 is a sampling unit for continuous sampling of gas and air mixtures. Combined with Dräger Gas Detectors, the Dräger PSD 3000 serves as a sampling system for gas monitoring purposes. The internal vibrating diaphragm pump has a superior life expectancy, due to the lack of rotating parts.

D-20582-2015



## Dräger VVP 1000

The Dräger VVP 1000 is a 10" touch panel that provides a clear and simple display of all data from your Dräger VarioGard® gas detector. The touch panel visualises all relevant information such as measurement values and status messages in a way that is well organised and easy to understand.



## Advanced options for your challenges

Dräger fixed gas detection systems offer a wide range of special system components and transmitters make your work more efficient. We continuously invest in sensor technology to increase safety on your plant.

D-5909-2022



### Optical-area monitoring

Gas cameras continuously monitoring large areas for possible methane leaks. It makes the source and the intensity of the leaks visible.

D-5541-2018



### Ultrasonic leak detection

Ultrasonic gas leak detectors are early warning area monitors for detecting high-pressure gas leaks in outdoor industrial process environments.

D-7448-2016



### Refrigerant Gas Transmitters

The infrared technology of the refrigerant gas sensors detects, with high accuracy both environmental leakage limit values in ppm range



## We offer the highest standards

- Our gas measuring systems are of modular design, making your safety design future-proof and your investment worthwhile for years to come.
- Our products are strictly tested, meeting worldwide approvals and standards, such as ATEX and IECEx.
- With our approach to a safe system and the correct combination of components, you can also meet the functional safety requirements in accordance with SIL 2.
- We integrate all third-party products into the system, such as horns, warning lights and fans.



## Installations and Maintenance

### Commissioning

We ensure that your system is fully installed and working correctly. In addition, our commissioning technicians will instruct you in your gas detection system upon handover.

### Training

Our product and user training courses teach you the correct way to use your gas detection system – at your site or at one of our many training locations.

### Customer support

Dräger provides timely support for your project or application. This includes any technical queries, along with guidance on all aspects of our product and service portfolios, such as onsite after-sales service to maintain or repair your gas detection system





**More than the Sum  
of their Components**

**Dräger**

Technology for Life