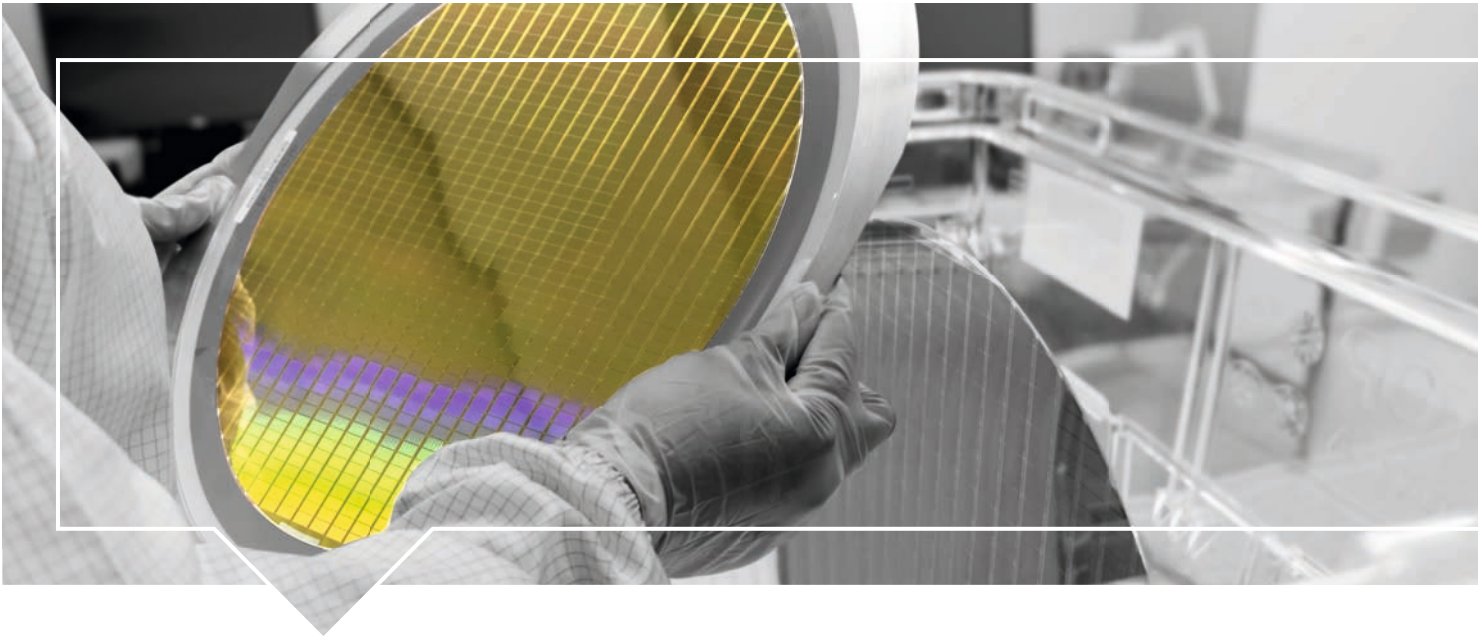


# Discover a New Level of Versatility in Gas Detection





# D-ReX

## Designed to be Versatile

The D-ReX system is a perfect solution for a variety of different applications. Whether you need to monitor ambient air directly at a Point of Use (PoU), want to detect gases in a range of 30 meters around the Point of Installation (PoI) or sample gases at a Point of Sampling (PoS) via a state-of-the-art extraction module – the D-ReX is up to the challenge!

There are numerous requirements for industrial grade gas monitoring solutions with or without extraction capability. This makes it all the more important to have a versatile and adaptable solution, so you are not forced to use different system each time a new requirement arises. The D-ReX gas monitor was designed to meet them all by offering unique adaptability and several features new to this type of device.

### A new Level of Versatility - A new Level of Safety

Select the most suitable monitoring method for your requirements.

- The D-ReX can either operate
  - » in **D**iffusion mode
  - » with **R**emote sensors
  - » or using an **eX**traction module

Additionally, it is the first industrial grade gas monitor featuring:

- » Bluetooth®, access and control all relevant information using a portable device and our app
- » A high-resolution, full-color display
- » Plain text information instead of cryptic code
- » Line Integrity Monitoring for the sampling system (optional)

It also offers unmatched versatility when it comes to communication, including Power over Ethernet (PoE) communication, the option to use LonWorks and the aforementioned Bluetooth interface. Smart, high-quality and long-life sensors are available for more than 30 gases already and new sensors for additional gases are under development.

### A Future-proof Device Designed to Meet SIL 2 Requirements

The D-ReX is a state-of-the-art gas detection system developed with both current standards and possible future requirements in mind. One requirement that is becoming increasingly important in terms of plant safety and is being demanded more and more frequently by plant operators is SIL.

The Safety Integrity Level (SIL) verification confirms that the target SIL (as derived from SIL determination) for each Safety Instrumented Function (SIF) has been met in accordance with the requirements of IEC 61508 / IEC 61511. These criteria were taken into account during development of both the hardware and software components. The D-ReX will be tested by a certified body.





**The D-ReX gas monitoring series allows you to detect gases in a way that is custom-tailored to your plant.**

**Diffusion Mode**

In its default operating mode, for example when monitoring ambient air at the Point of Use for toxic and corrosive gases at TLV (Threshold Limit Value) levels or for combustible gases, the D-ReX uses diffusion to measure gas concentrations.

**Remote Sensor**

The remote sensor also operates in diffusion mode. However, it is attached to the connector cartridge of the D-ReX by a flexible cable (up to 30 meters / 100 feet). This enables you to remotely monitor locations that would be hard or impossible to reach otherwise. Using an appropriate pipe flange saddle will also enable the D-ReX to take in-situ measurements. A state-of-the-art GfG sensor cartridge can cover distances of up to 30 meters (100 feet).

**eXtraction Module**

Equipped with an integrated pump and the corresponding cover plate, the D-ReX will operate in extraction mode, allowing you to monitor gases up to a distance of 30 meters (100 feet). When the pump reaches the end of its service life, you will only have to replace the module containing the mechanical components and none of the electronic elements, thus reducing maintenance time and minimizing waste. The integrity of the hose can also be monitored (“line integrity monitoring”).

**Py-ReX (option)**

Add the pyrolyzer module D-ReX Pyro for an even wider range of detectable gases. More information on the pyrolyzer module will be available soon.

- 1 Ethernet cable with PoE (option)
- 2 IP-Protection sticker (option)
- 3 Sensor cartridge with detachable pipe flange adapter (up to 30 meters / 100 feet)
- 4 Connector cartridge for remote sensors
- 5 Sensor cartridge with detachable diffusion mode adapter

- 6 Integrated pump (up to 30 meters / 100 feet)
- 7 Mounting bracket
- 8 Pipe flange saddle



**Lower Housing Covers**

- 9 external sensors / diffusion mode
- 10 extraction module

**D-ReX versions and options**

D-ReX Version	Diffusion Mode	Remote Sensor	eXtraction Module	Py-ReX*	Internal Relays	LonWorks®
Point of Use (PoU)	yes				5 (option)	(option)
Point of Installation (PoI)		yes			5 (option)	(option)
Point of Sampling (PoS)			yes	yes	5 (option)	(option)

\* available soon (option)

# Technical Specification: D-ReX Series

<b>Gases and Measuring Ranges:</b>	See gas list
<b>Measuring Principle:</b>	Sensor dependent; available options: EC = electrochemical CC = catalytic combustion IR = infrared
<b>Sampling Method:</b>	Depending on configuration » Diffusion » Remote sensor » Extraction with pump
<b>Display and Interface:</b>	Display: 2.4" full color TFT (320 x 240 pixels) Interface: 5 push buttons
<b>Selectable Languages:</b>	German, English, more to come (up to 6)
<b>Communication:</b>	» Analog: 4–20 mA output » Digital: RS-485 (Modbus/RTU) » 10/100 Mbit Ethernet (Modbus/TCP) » Bluetooth® » Interface for external pyrolyzer (D-ReX PoS only) » LonWorks® (option)  Relays: 5x internal (programmable) form C relays (option) 16x external relays (option) Max. 2 A / 30 V DC Min. 10 mA / 5 V
<b>Response Time:</b>	Sensor dependent (see sensor data sheet)
<b>Expected Average Life of the Sensor:</b>	Sensor dependent (see sensor data sheet)
<b>Operating Temperature:</b>	-10 to +40 °C 14 to 104 °F
<b>Operating Humidity:</b>	5 to 90 % RH*
<b>Operating Pressure:</b>	70 to 130 kPa
<b>Power Supply:</b>	12 to 30 V DC SELV/PELV PoE = 48 V DC
<b>Housing:</b>	Plastic
<b>Protection Class:</b>	IP54 (IP20 with Ethernet)
<b>Mounting:</b>	(DIN) rail IEC/EN
<b>Weight:</b>	650 g up to 850 g
<b>Dimensions:</b> (W x H x D)	145 x 105 x 78 mm 5.7 x 4.1 x 3.0 in
<b>Labelling:</b>	CE and UL certification
<b>Approvals / Certifications:</b>	
Functional Safety (SIL):	DIN EN 61508-2 (pending)

\* sensor dependent

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