



ST-4584-2005

# Fire and Gas Detection Systems

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**Dräger**

Technology for Life

Dräger solutions provide accurate operation for long periods of time often without calibration or maintenance – even in harsh environments They offer easy upgrades, plant-wide view of safety systems and real-time view of individual sensors in control room and remote locations. Our portfolio can detect 400+ gases and vapors and offers visual and optical fire detection.

## Combustible Gas Detection Transmitters



**Dräger Polytron® 5200 CAT**  
Low-cost explosion proof transmitter with optional relays uses a high performance catalytic bead DQ sensor Hydrogen LEL detection.



**Dräger Polytron® 5310 IR**  
Low-cost explosion proof infrared transmitter with optional relays uses a DrägerSensor IR.



**Dräger Polytron® 5700 IR**  
Explosion-proof transmitter with optional relays uses the high performance PIR 7000 sensor.



**Dräger Polytron® 5720 IR**  
Explosion-proof transmitter with optional relays uses a high performance Dräger PIR 7200 CO<sub>2</sub> sensor.



**Dräger Polytron® 8200 CAT**  
Explosion-proof transmitter with optional relays and bus communication uses a high performance catalytic bead DQ sensor.



**Dräger Polytron® 8310 IR**  
Explosion-proof transmitter with optional relays and bus communication uses a DrägerSensor IR.



**Dräger Polytron® 8700 IR**  
Explosion-proof transmitter with optional relays and bus communication uses a high performance Dräger PIR 7000 IR sensor for hydrocarbon detection.



**Dräger PIR 7000**  
Explosion-proof non-display infrared transmitter with HART uses an advanced 4 beam optical system .



**Dräger GS01 (wireless)**  
Wireless hydrocarbon gas detector that combines triple-wavelength infrared technology with extremely low power consumption, and calibration-free design.



**Dräger Pointgard® 3200**  
Self-contained gas detection system for general purpose areas uses an integrated or remotely mounted catalytic bead DQ sensor.



**Dräger Pointgard® 3700**  
Self-contained gas detection system for general purpose areas uses a remotely mounted explosion proof Dräger PIR 7000 IR sensor.



**Dräger VarioGard® 2300 IR Ex**  
Cost effective analog output transmitter for general purpose areas with an integrated infrared sensor for detecting methane or LPG from 0-100% LEL in ambient air.

# Toxic Gas Detection Transmitters



D-2947-2018

**Dräger Polytron® 8100 EC**  
Explosion-proof transmitter with advanced diagnostics and bus communication uses a high performance DrägerSensor® EC.



D-158-2016

**Dräger Polytron® 5100 EC**  
Low-cost explosion-proof transmitter with optional relays uses a high performance DrägerSensor® EC.



ST-2448-2003

**Dräger Polytron® 7000**  
Intrinsically safe transmitter with advanced diagnostics and optional relays and sampling pump uses a DrägerSensor® EC.



D-4649-2019

**Dräger Polytron® 6100 EC WL**  
Wireless ISA100 transmitter with a 2 year battery life monitors toxic gases and oxygen using one of 30 available DrägerSensor® EC.



D-7152-2023

**Dräger Pointgard® 3100**  
Self-contained gas detection system for general purpose areas uses an integrated or remotely mounted DrägerSensor EC.



D-21366-2020

**Dräger Pointgard 3720**  
Self-contained gas detection system for general purpose areas uses a remotely mounted explosion proof Dräger PIR 7200 IR CO<sub>2</sub> sensor.



D-1049-2020

**Dräger PIR 7200**  
Explosion-proof non-display infrared transmitter for monitoring carbon dioxide (CO<sub>2</sub>) for harsh environments.



D-2945-2018

**Dräger Polytron® 8720 IR**  
Explosion-proof transmitter with optional relays and bus communication uses a high performance Dräger PIR 7200 CO<sub>2</sub> sensor.



D-1049-2020

**ION Science Falco PID**  
Explosion proof transmitter with a photoionization (PID) sensor for detecting VOCs such as benzene in ppm below the detection limits of IR and EC sensors.



D-28573-2015

**smartGAS Refrigerant Transmitter**  
Infrared sensor based analog transmitter available for common refrigerants such as R134a with a measuring range of 0-2000 ppm and detection limit of 50 ppm.



D-28573-2015

**Dräger VarioGard® 2320 IR CO<sub>2</sub>**  
Cost effective analog output transmitter for general purpose areas with an integrated infrared sensor for detecting carbon dioxide from 0-5% Vol. in ambient air.



D-6551-2023

**Dräger X-node Wireless System**  
LoRaWAN® based battery powered IoT monitors toxic gas, temperature, and humidity with analysis and recording via Bluetooth® and the X-node Hub mobile cloud.



## Area Monitoring



**Dräger Polytron® 8900 UGLD**  
An early warning area monitor for detecting pressurized gas leaks in outdoor industrial process environments for hydrocarbon detection in ppm and %LEL.



**MetCam Gas Camera**  
A revolutionary new detector for monitoring large areas for fugitive emissions and dangerous leaks of methane / natural gas.



**Dräger Polytron Pulsar 7000**  
The Dräger Pulsar 7000 Series are stationary open path gas detectors.

## Flame Detection



**Dräger Flame 1350 (UV/IR)**  
Combines both UV and IR sensors to detect hydrocarbon-based fires. Both sensors need to see flame radiation simultaneously before it alarms.



**Dräger Flame 1500 IR<sub>3</sub> & 1750 H<sub>2</sub>**  
Triple IR flame detector designed for hydrocarbon and hydrogen (DF 1750) based fire events with exceptional sensitivity.



**Dräger Flame 3000**  
An imaging-based visual flame detector using digital signal processing and advanced algorithms to identify flame characteristics. Extreme immunity to false alarms.



**Dräger Flame 5000**  
An explosion-proof visual flame detector based on advanced color imaging technology with real time video recording of events.

## Controllers



**Dräger REGARD® 3000**  
This compact and modular 4 channel controller with touch screen is based on the advanced Regard 7000. Features a halo ring alarm light and audible horn. Up to 8 relays and Modbus output available.



**Dräger REGARD® 3920**  
A general purpose box controller with a capacity of 4 to 16 analog input channels and 8 to 16 discrete relays plus common relays. Optional analog output for each channel and Modbus.



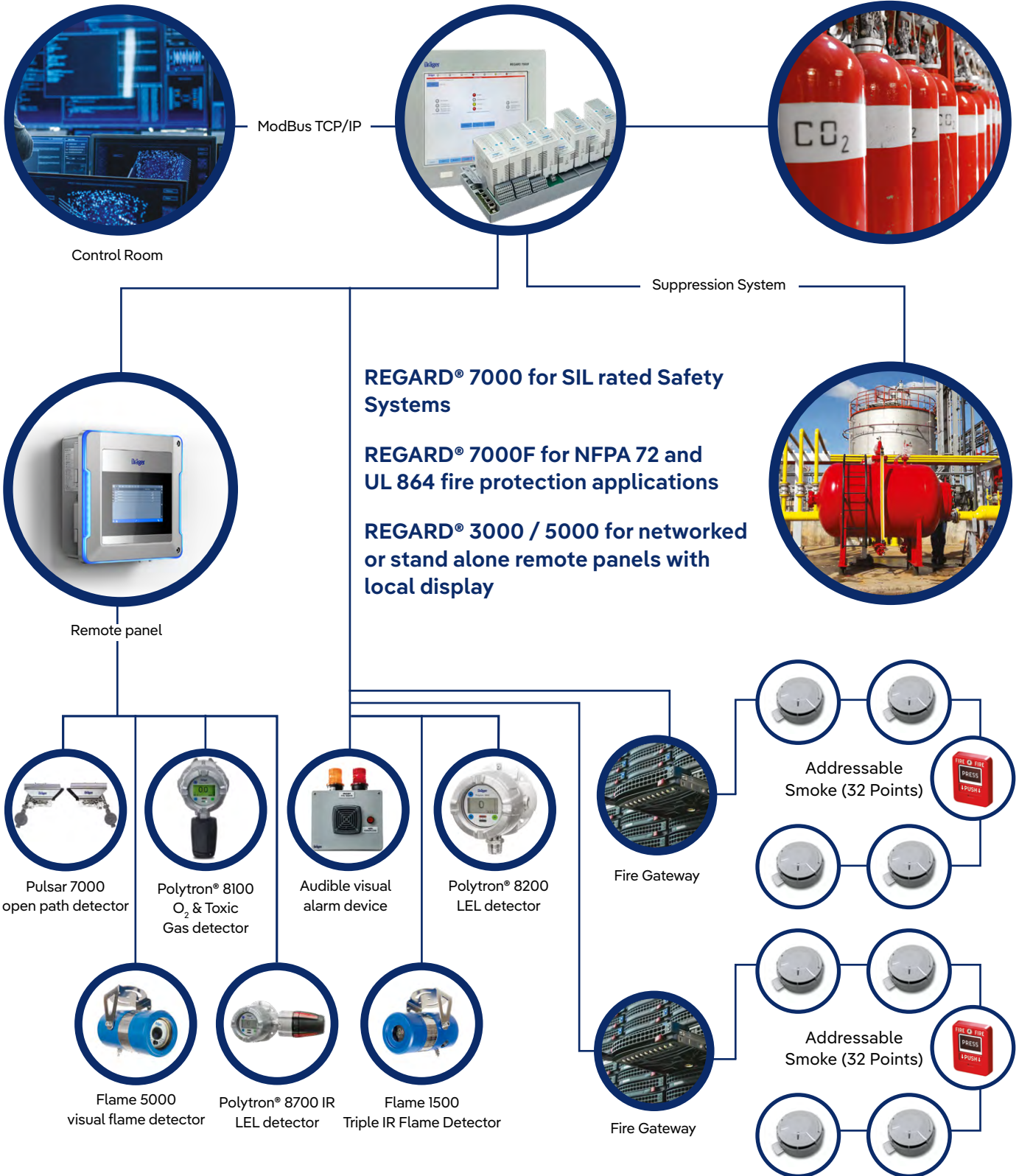
**Dräger REGARD® 7000**  
A modular and highly expandable analysis tool that's suitable for gas warning systems with various levels of complexity and numbers of transmitters.



**Dräger REGARD® 7000F**  
A truly integrated, performance approved NFPA 72 fire signaling & gas detection system with all the functionality of both traditional fire panels & process safety PLCs.

# Dräger Integrated System - REGARD® Family Controllers

## REGARD® 7000 (F)



# Accessories



**Bias Box for 4 Sensors**  
Maintains up to 4 EC sensors in operational state to reduce warm up time after installation in transmitter to just a few minutes.



**Remote Alarm Station**  
Dräger provides various audio & visual notifications.



**Calibration Adapter**  
FKM rubber calibration adapter for all CatEx and EC DrägerSensors®.



**Remote Calibration Adapter**  
Allows calibration of sensors in hard to reach places.



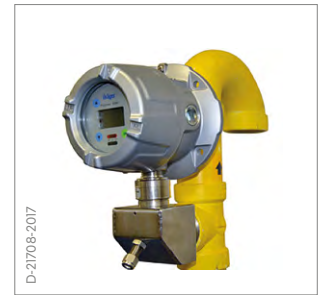
**Process Sampling Adapter**  
Analyze process streams with a PIR 7000 sample draw systems.



**EC Sensing Head Remote**  
Mount EC sensor up to 30 meters away from Polytron® 5100/8100.



**Splashguard**  
An accessory to prevent dust and water from collecting on the toxic and combustible sensor.



**Vent Monitoring**  
A custom 2" vent line monitoring system to detect and record gas releases.



**Remote Sensor Junction Box**  
The explosion-proof junction box allows remote mounting of an IR or CatEx sensor up to 30 meters.



**Flow Cell for IR Sensor**  
Remotely calibrate Polytron 5700/8700 sensor inside a duct or remote location with tubing.



**Duct Mounting Kit**  
Monitor inside ventilation ducts. Rail system allows for easy sensor removal for preventive maintenance.



**Pole Mounting Kit**  
Attach Polytron 5000/8000 series to a pole or pipe using clamps (not included).



**Dräger Polysoft Software**  
Windows software for managing all Dräger gas detection transmitters via HART®, IR® or Bluetooth®



**Polytron Calibration Kit**  
Basic calibration kit with zero gas cylinder and space for a span gas cylinder. Includes all the needed accessories in a convenient carrying case.



**Calibration Gases**  
Select from a large variety of certified cal gases designed for calibrating every sensor type.

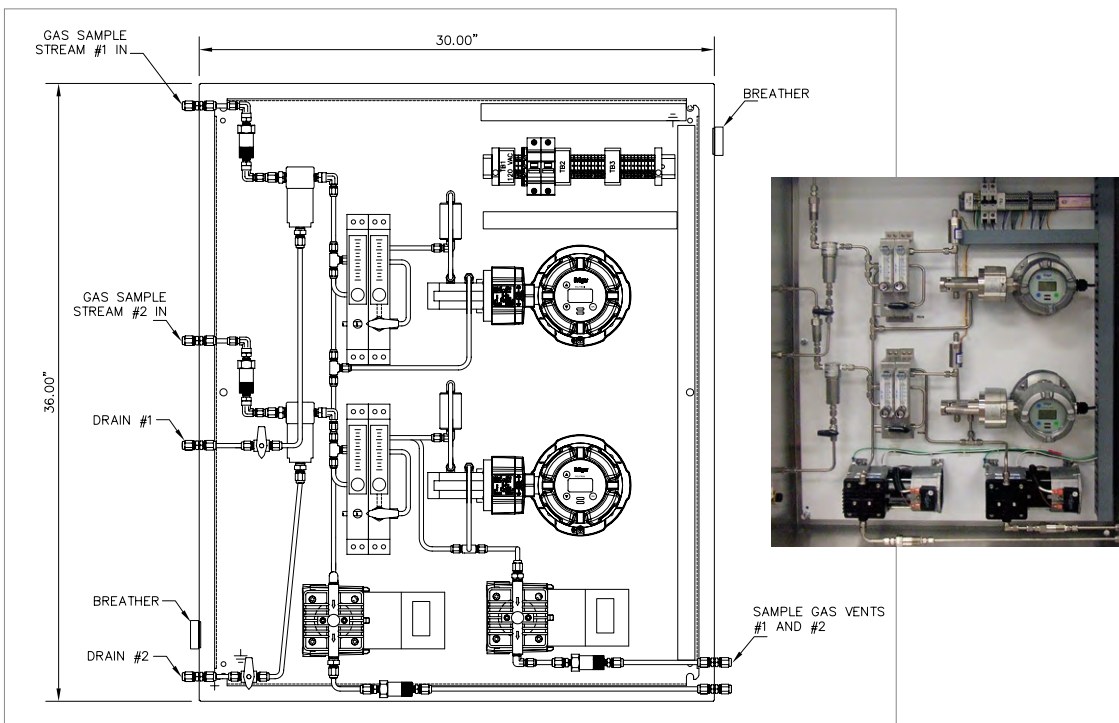


**PSD 3000 Sampling Unit**  
Sampling pump for non-hazardous areas. Adjustable flow rate with a flow switch and LEDs.

# Custom Systems

At Dräger, we create technology that fits your needs. Our Application Engineering Group takes your concept and makes it a reality. Our team of engineers are capable, timely and have a passion to see your project from the drawing board to your hands; combined, they have their CFSE (Certified Functional Safety Engineer), CFSP (Certified Fire Safety Professional), and PMP (Project Management Professional) certifications, and represent all relevant engineering disciplines (mechanical, electrical, software, chemical).

## Example of customized system: Two stream LEL Gas Sampling System



STAINLESS STEEL ENCLOSURE WITH WINDOW AND BACK PANEL (SHOWN WITHOUT DOOR)

**NOTES:**

1. ALL BULKHEAD FITTINGS ARE 1/4" STAINLESS STEEL TUBING FITTINGS (SWAGelok).
2. THE ENCLOSURE IS STAINLESS STEEL, NEMA 4X.
3. ALL DIMENSIONS ARE NOMINAL.
4. THE GAS DETECTORS (2) REQUIRE 24VDC. TERMINALS PROVIDED.
5. THE SAMPLE PUMPS (2) REQUIRE 120VAC. TERMINALS PROVIDED.

REV	REVISION DESCRIPTION	CADD	CHK'D	APPR.	DATE	PO #
1	MOVED POSITION OF DRAIN VALVES	UM		TS	06/29/17	
0	AS BUILT	NDF	RLC		04/07/17	

<b>Dräger</b>		DRAEGER, INC. 7256 S. SAM HOUSTON W. PARKWAY, SUITE 100 HOUSTON, TX 77058 PHONE: 1-800-437-2437	
		[GAS DETECTION SYSTEMS]	
EQUIPMENT TAG	PROJECT	DRAEGER SAFETY	
	P17054	DUAL STREAM PIR S700 SAMPLE SYSTEM	
DESCRIPTION	SCALE	PANEL LAYOUT	
	NTS	FILE	MD21611
		DWG #	MD21611-CL01
		REV	1

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