

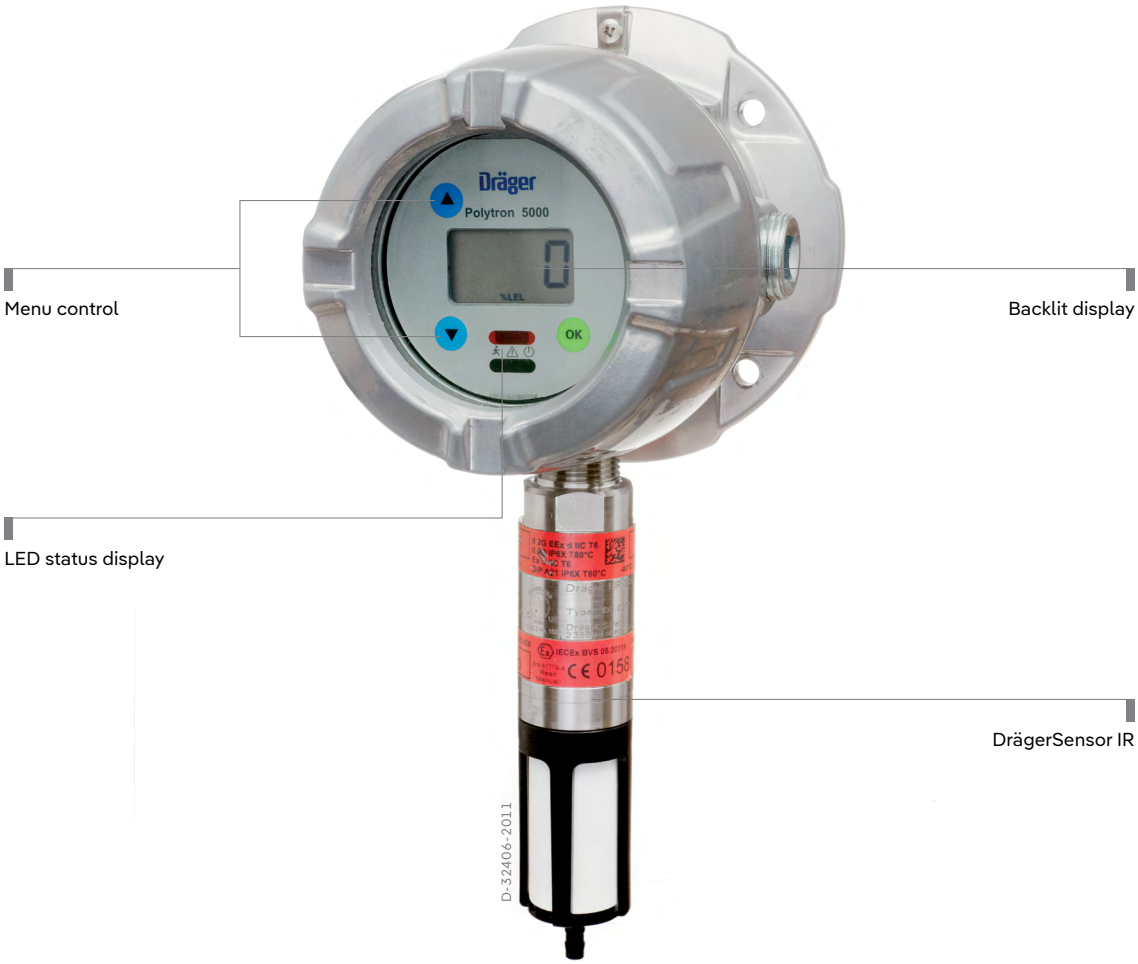
Dräger Polytron 5310 IR
Detector for flammable gases and vapours

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.

Dräger

Technology for Life

Dräger Polytron 5310 IR



Benefits

Poison-resistant and fail-safe – the DrägerSensor IR

DrägerSensor IR is a cost-effective alternative to catalytic bead sensors while offering several benefits: it is poison-resistant against chemicals that can shorten a catalytic bead sensor's life. Long life optics result in lower maintenance costs compared to pellistors used in catalytic bead sensors. IR technology is inherently fail-safe, meaning no unrevealed failures. Improved performance with excellent long-term stability and fast response times.

Same design, same operating principles

Polytron 5310 belongs to the Dräger Polytron 5000 series. All transmitters in this series have the same design and user interface. This allows for uniform operation with reduced training and maintenance requirements. The backlit display shows status information clearly with quick access to functions using a non-intrusive magnetic wand. The gas concentration and measurement unit are displayed during normal operation. Coloured LEDs (green, yellow and red) provide additional alarm and status information.

Three relays for controlling external equipment

The Dräger Polytron 5310 can also be supplied with three integrated relays upon request. This enables you to use it as an independent gas detection system with two adjustable concentration alarms and one fault alarm. Audible alarms, signal lights, or similar devices can thus be controlled locally without an additional cable between the transmitter and central controller.

Safe, robust housing for every application

The Polytron 5310 features a Class I, Div. 1 rated explosion proof enclosure made from aluminum or stainless steel, making it suitable for a wide range of environmental conditions. A protection type “e” version includes a convenient docking station that allows installation in hazardous atmospheres without running conduit (where approved) and this also facilitates pre-assembly.

Make the impossible possible with the remote sensor

The remote sensor connection housing allows you to install the sensor separately from the device electronics up to 30 metres. This 'external' installation makes it easier to use if the sensor has to be installed in a difficult to access or unfavorable position. The sensor splash guard with integrated tubing nipple enables one person to perform the full calibration of a remote mounted sensor from the transmitter.

System Components



D-1501-2022

Dräger REGARD 7000

The Dräger REGARD 7000 is a modular and therefore highly expandable control 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-3967-2025

Dräger REGARD 3000 plus

The Dräger REGARD 3000 plus is a flexible control system that reliably monitors hazardous areas in your gas detection system and triggers alarms. Its modular design adapts to different system sizes and can be configured centrally or locally. A user-friendly dashboard and clear alarms provide transparency and safety.

Accessories



ST-5665-2006

Weather guard DrägerSensor IR

Double-walled enclosure to prevent dirt deposits, e.g. salt crust. Improves resistance to extreme weather conditions.
Order No.: 6811135



ST-5685-2006

Splash guard

The splash guard protects the sensor against splashes of water and dirt.



ST-5683-2006

Calibration Adapter DrägerSensor IR

Transmitter calibration (with mounted splash guard), up to wind force 10 Bft, fitted as standard.



ST-5666-2006

Process adapter DrägerSensor IR

Sampling or process applications, with gas inlet and gas outlet.
Order No.: 6811330

Related Products



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.



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.

Technical Data

Dräger Polytron 5310 IR

Type	Explosion proof / flameproof enclosed transmitter (“d”) or combined with increased safety (“d/e”)		
Gases	Flammable gases and vapours		
Measuring range	0 to 100 % LEL		
Display	Backlit 4 digit LCD; 3 Status LEDs (green/yellow/red)		
Performance Characteristics	Accuracy/repeatability	Sensitivity	≤ ± 2 % LEL
	Response time	T90	30 seconds (with splash guard)
Electrical data	Signal output analogue	Normal operation	4 to 20-mA
		Maintenance	Constant 3.4-mA or 4-mA ±1 mA 1 Hz modulation; (adjustable)
		Fault	< 1.2 mA
		Power supply	10 to 30 V DC, 3-wire
		Relay specification (optional)	2 alarm relays and 1 fault relay, single-pole two-way contact 5 A @ 230 VAC, 5 A @ 30 VDC, resistance-bound
Environmental conditions (see sensor data sheet)	Temperature	-40 to 65 °C (-40 to 149 °F) without relay	
		-40 to 65 °C (-40 to 149 °F) with relay	
	Pressure	20.7 to 38.4 inch Hg / 700 to 1,300 mbar	
	Humidity	0 to 100 % r. h., non-condensing	
Housing	Transmitter housing	Epoxy coated copper-free aluminum or stainless steel 316 L	
	Sensor housing	Stainless steel 316 L	
	Enclosure protection type	NEMA 4X & 7, IP65/66/67	
	Cable entry point	3/4 NPT threads or M20 cable gland	
	Dimensions (H x W x D), approx.	w/o docking station	11.0" x 5.9" x 5.1" / 280 x 150 x 130 mm
		w/ docking station	11.0" x 7.1" x 7.5" / 280 x 180 x 190 mm
	Weight, approx.	Aluminium w/o docking station	4.9 lbs / 2.2 kg
		Stainless steel 316 L w/o docking station	8.8 lbs / 4.0 kg
		Aluminium w/ docking station	7.7 lbs / 3.5 kg
		Stainless steel 316 L w/ docking station	11.0 lbs / 5.4 kg

Technical Data

Approvals*	
UL	Class I, Div 1, Groups A, B, C, D;
	Class II, Div 1, Groups E, F, G;
	Class I, Zone 1, Group IIC; T-Code T6/T4
CSA	Class I, Div 1, Groups A, B, C, D;
	Class I, Zone 1, Group IIC;
	T-Code T6/T4 CSA C22.2 No. 152
IECEx	Ex db IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+65 °C; ‘d’ version
	Ex db eb IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+65 °C; ‘e’ version
	Ex tb IIIC T80/130 °C Db
ATEX	II 2G Ex db IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+65 °C; ‘d’ version
	II 2G Ex db eb IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+65 °C; ‘e’ version
	II 2D Ex tb IIIC T80/130 °C Db
INMETRO	Ex db IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+65 °C; ‘d’ version
	Ex db eb IIC T6/T4 Gb, -40 ≤ Ta ≤ +40/+65 °C; ‘e’ version
	Ex tb IIIC T80 °C/T130 °C Db
KCs	Ex db IIC T6/T4 Gb, ‘d’ version
	Ex db eb IIC T6/T4 Gb, ‘e’ version
	Ex tb IIIC T80 °C/T130 °C Db
CE markings	ATEX (Directive 2014/34/EU)
	Electromagnetic Compatibility (Directive 2014/30/EU)
	Low Voltage (Directive 2014/35/EU)
Performance approval	TÜV 19 ATEX 8435X

* All docking station versions are ATEX/IECEx approved

Ordering Information

Dräger Polytron 5310 IR	Approval Code	Order Number
Dräger Polytron 5310 IR d A	XTR 0200	8344370
Dräger Polytron 5310 IR d A relay	XTR 0201	8344371
Polytron 5xx0 Kit (Custom configuration e.g. stainless steel housing)		8344500

Accessories	Order Number
Magnetic wand	4544101
Pipe mount bracket	4544198
Duct mount kit	6812725
IR Connection Kit Polytron 5000/8000	4544197
PolySoft licence (1 year)	8328600
PolySoft licence (subscription)	8328601
Process adaptor	6811330
Splash guard (spare part)	6810796
Weather protection kit Dräger Polytron 5/6/8xxx	3702198
Weather guard	6811135

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