

THE FINNISH SOLUTION FOR YOUR GAS DETECTION



Target Gases

- Ammonia
- Oxygen
- Carbon Monoxide
- Hydrogen Sulphide
- Hydrogen
- Other Gases, ask **Detector Oy**



Applications

- Food Industry
- Water Treatment Plants
- Chemical Industry
- Engine Rooms
- Laboratories
- Process Industry
- Wood Pellet and Coal Stores
- Pharmaceutical Industry
- Hospitals
- Oil Refineries

Benefits

- Quality assured manufacturing, Eurofins ISO 9001 and ISO 14001
- Many different gases can be measured with different sensors
- Target gas specific sensors
- Industrial standard output signal
- Stylish and robust enclosure, impact resistant cast-aluminium or stainless steel (option)
- Non-intrusive calibration



DGTeex belongs to equipment group II and to equipment category 2G (Gas) The detector can be installed in to zones 1 and 2. (II 2G Ex db IIC T6 Gb)

With a separately installed filter DGTeex can be installed in to zones 1,2 and 21,22. (II 2G Ex db IIC T6 Gb, II 2D Ex tb IIIC T85°C Db)



Accessories



SS Rain Cover
Ceiling Mounting Kit



SS Protection Enclosure
Pipe Mounting Kit



Test Gas Kit



Analyser Adaptor



Principle and Gases

Sensor Type: electrochemical

Gas	Measurement Range	Typical sensor replace frequency	Operating Temperature Range (temp in brackets for Zone 21 and 22 detectors)	T90 Response Time
Ammonia:	NH ₃ 0.....200 ppm	24 months	-30°C ... +40°C	<65s
Ammonia:	NH ₃ 0.....1000 ppm	24 months	-30°C ... +40°C	<95s
Oxygen:	O ₂ 0.....25 %	24 months	-20°C ... +55°C	<20s
Carbon Monoxide:	CO 0.....1000 ppm	24 months	-30°C (-20°C) ... +50°C	<30s
Hydrogen Sulphide:	H ₂ S 0.....50 ppm	24 months	-30°C (-20°C) ... +50°C	<45s
Hydrogen:	H ₂ 0.....10000ppm	24 months	-20°C ... +50°C	<115s

Other Target Gases: ask **Detector Oy**

Calibration: The detectors are delivered factory calibrated to the measuring range. After installation it is recommended to calibrate the detector at least once per year. It is also recommended to do functional tests to the detector 4-6 times a year. According to the ATEX directive only **Detector Oy** and personnel authorized by **Detector Oy** can carry out the calibration and maintenance work.

Environmental

Operating Humidity: 15...90 % RH, non-condensing (momentary 0...99 % RH for Oxygen)
 Operating Air Pressure: normal air pressure ±10 %

Electrical

Output Signal: 4...20 mA linear response
 Operating Voltage: 24 VDC ±20 %, regulated
 Cable Requirements: Safe zone: 3-wire connection, JAMAK 2x(2+1)x0,5 mm² or equal
 Ex zone: cable must be in accordance with 60079-14 standard
 Power Consumption: 3 W (max)

Enclosure

Installation Possibilities: wall, ceiling and pipe assembly
 Material: aluminium (standard) or AISI 316L (special enclosure)
 Surface Treatment: epoxy paint
 Ingress Protection Code: IP66
 Dimensions: DGTkex 185 mm x 129 mm (height x depth)
 Weight: 1.8 kg
 Cable Penetration: body: nickel-plated brass (standard) or AISI 316L (for AISI 316L enclosure)
 gasket: CMP SOLO LSF thermoplastic elastomer

Certificate

EC-TYPE EXAMINATION CERTIFICATE: Equipment or Protective Systems Intended for use in Potentially explosives atmospheres Directive 2014/34/EU
 Reference: VTT 09 ATEX 063X (Notified Body Number 0537)
 Equipment: **DGTeex**
 Manufactured by: **Detector Oy**

Ex markings:  II 2 G Ex d IIC T6
 II 2 D Ex tD A21 T85°C IP65