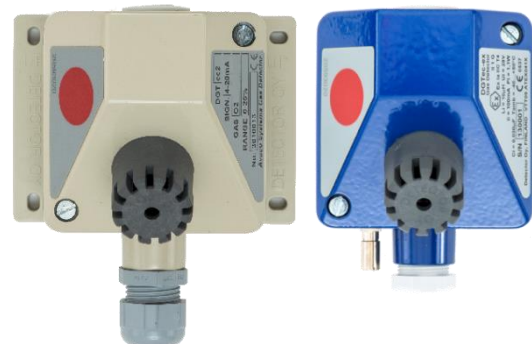


THE FINNISH SOLUTION FOR YOUR GAS DETECTION



Target Gases

- Ammonia
- Oxygen
- Carbon Monoxide
- Chlorine
- Ozone
- Sulphur Dioxide
- Hydrogen Sulphide
- Hydrogen Chloride
- Nitrogen Dioxide
- Nitric Oxide
- Hydrogen
- Other Gases, ask **Detector Oy**



DGTec2

DGTec-ex

Applications

- Process Industry
- Food Industry
- Pharmaceutical Industry
- Hospitals
- Laboratories
- Compressor Rooms
- Water Treatment Plants

Benefits

- Quality assured manufacturing, VTT (Technical Research Centre of Finland) ISO 9001
- Many different gases can be measured with different sensors
- Target gas specific sensors
- Industrial standard output signal
- Easy mounting due to the isolating/mounting plate
- Stylish and robust enclosure, impact resistant cast-aluminium
- Non-intrusive calibration



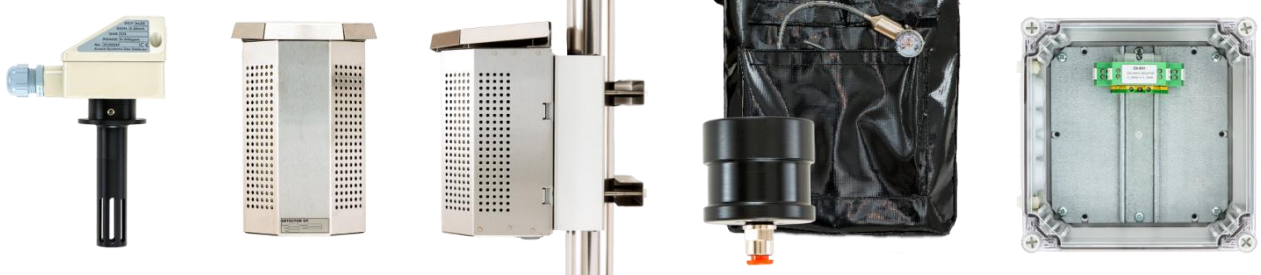
The Ex version **DGTec-ex** belongs to Equipment Group II and Equipment Category 1. The detector can be installed in Zone 0, 1 and 2 energized through a galvanic isolator.

Areas with  - sign

ISO 9001:2008



Accessories



Duct Assembly Kit

SS Protection Enclosure

Pipe Mounting Kit

Test Gas Kit

Galvanic Isolator



## Principle and Gases

Sensor Type: electrochemical

Gas	Measurement Range	Typical sensor replace frequency	Operating Temperature Range	T90 Response Time
Ammonia:				
NH <sub>3</sub>	0.....200 ppm	24 months	-20°C ... +40°C	<60s
Ammonia:				
NH <sub>3</sub>	0.....1000 ppm	24 months	-20°C ... +40°C	<90s
Oxygen:				
O <sub>2</sub>	0......25 %	24 months	-20°C ... +55°C	<15s
Carbon Monoxide:				
CO	0.....1000 ppm	24 months	-30°C ... +50°C	<40s
Chlorine:				
Cl <sub>2</sub>	0.....5 ppm	24 months	-20°C ... +50°C	<45s
Ozone:				
O <sub>3</sub>	0.....1 ppm	24 months	-20°C ... +40°C	<60s
Sulphur Dioxide:				
SO <sub>2</sub>	0.....20 ppm	24 months	-30°C ... +50°C	<30s
Hydrogen Sulphide:				
H <sub>2</sub> S	0.....50 ppm	24 months	-30°C ... +50°C	<30s
Hydrogen Chloride:				
HCl	0.....20 ppm	24 months	-20°C ... +50°C	<120s
Nitrogen Dioxide:				
NO <sub>2</sub>	0.....20 ppm	24 months	-20°C ... +50°C	<40s
Nitric Oxide:				
NO	0.....100 ppm	36 months	-20°C ... +50°C	<15s
Hydrogen:				
H <sub>2</sub>	0.....1000 ppm	24 months	-20°C ... +50°C	<50s
Hydrogen:				
H <sub>2</sub>	0.....10000 ppm	24 months	-20°C ... +50°C	<110s

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


## Electrical

Output Signal: 4-20mA linear response  
 Operating Voltage: 16...36VDC, regulated  
 Cable Requirements: two-wire connection, suggested type JAMAK 2x(2+1)x0,5mm<sup>2</sup> or equal  
 Power Consumption: 0,9W (max)

## Enclosure

Installation Possibilities: wall, ceiling, duct and pipe assembly  
 Material: cast aluminium silicate  
 Surface Treatment: epoxy painted beige/grey tone RAL7032  
 Ingress Protection Code: IP54  
 Dimensions: 89mm x 89mm x 69mm  
 Weight: 450g  
 Mounting: isolating/mounting plate with 2-4 screws and/or enclosure with 2 screws  
 Cable Penetration: STR16, for cables with diameters 6 - 12mm, body polyamide, gasket CR

## Certificate

EC-TYPE EXAMINATION CERTIFICATE: Equipment or Protective Systems Intended for use in Potentially explosives atmospheres Directive 94/9/EC, Annex II  
 Reference: VTT 09 ATEX 041X (Notified Body Number 0537)  
 Equipment: **DGTec-ex**  
 Manufactured by: **Detector Oy**  
 Compliance: Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0 (2006), EN 60079-11 (2007), EN 60079-26 (2004)  
 Ex marking:  II 1 G Ex ia IIC T4