



Description

The MultiTox DG-TT7-S intelligent solid-state (MOS) hydrogen sulfide gas detector has been designed for ease of installation, operation and maintenance in hot and dry environments.

The DG-TT7-S is a solid-state metal oxide semiconductor (MOS) gas detector used mainly for the detection of hydrogen sulfide in arid locations having air present. The DG-TT7-S can also be configured for other gases, such as refrigerants (e.g. R22). The unit employs a robust sensing element that needs recalibration just once a year. In addition the device does not need a high gas concentration dose to reactive the active sensing material.

The intelligent, microprocessor driven unit is fully configurable using a wireless handheld terminal (TLU) or by using the hard wired HART option giving true flexibility to the installer. Elements such as relay operation and alarm levels are all set via the TLU, hazardous area approved handheld unit.

The unit may be interfaced directly with a wide range of panels, controllers and PLC's etc. The device offers HART Protocol 7th edition output as an option.



Flexible Configuration
Reduced Maintenance
Local Display



TLU Wireless (IR)
Handheld Terminal



Applications

- ▶ Refineries
- ▶ Offshore Drilling and Production Platforms
- ▶ Processing and Storage Plants
- ▶ Chemical Plants

Features

- ▶ Recalibration just once a year
- ▶ Non-consumptive technology
- ▶ Resistant to high gas concentrations
- ▶ Daylight readable LED display integrated in the detector housing
- ▶ Hand held maintenance terminal
- ▶ "No-touch" field cabling
- ▶ HART® output option available

Benefits

- Reduced maintenance & service costs
- Long service life
- Suitable for extreme conditions
- Local status and alarm level indication
- End to end loop testing
- Detector can be replaced without disassembling the cable glands
- Full configuration and diagnostics over non-proprietary interface

Technical Data

General

Technology: Solid-state Metal Oxide Semiconductor

Detects: Hydrogen Sulfide (other gas available on request)

Range: 0 to 50 ppm H₂S; 0-100 ppm H₂S

Performance

Response Time: T₅₀ < 30 s; T₉₀ < 120 s

Accuracy: ±10% of calibration range

Sensor Life: Better than 5 years

Output Signal

Standard: 4-20 mA, max load impedance 700 Ohm (Std.)
2 x configurable Relays max 1A / 30V

Option HART®: HART Protocol (7th edition) (pending)

Option: 0-22mA (User configurable)

Option: Lonworks (Syntel)

Local Display: 4 digit LED display and backlight color status with automatic intensity adjustment

Electrical

Power Supply: 24V DC, range (18-28V DC)

Power Consumption: 5W normal

Connection: 0.14 mm² (28 AWG) - 1.5mm² (16 AWG)
Shielded cable recommended.

Environmental

Storage: -40°C to +70°C (-40°F to +158°F)

Operating: -40°C to +65°C (-40°F to +149°F)

Option: Sunshade, max. temp. 85°C (185°F)

Humidity: 0-95% RH (non-condensing)

Pressure: Atmospheric pressure +/- 10%

Ingress: IP66

RFI/EMI: Complies with EN50270

Housing

Material: 316 L stainless steel

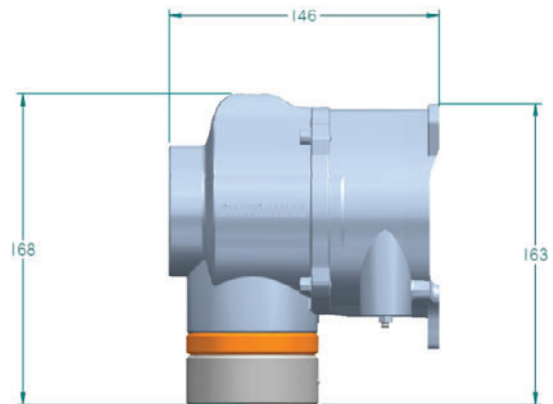
Weight: 4kg (8 lbs)

Approvals

ATEX: II 2 G Ex d IIC T6 Gb (-40°C to +65°C)

Certificate Number: LCIE 11 ATEX 3081 X

IECEX: Ex d IIC T6 Gb
IECEX LCI 11.0060X



Accessories

TLU600: Infrared remote control unit

AS008: Sun shade

AS005: Calibration cup

AS051: Calibration cup for breakable ampoules

AS011-2: Sample flow housing

AS019: Splash guard

CAL-K1C-31AE-1A1-00: Calibration kit 20 ppm H₂S

CAL-K1C-31AF-1A1-00: Calibration kit 50 ppm H₂S

CAL-A00-31AF-000-00: Box of 10 breakable gas ampoules
50 ppm H₂S. For use with AS051 cup

AS047: Display protection

Other Products (Stainless Steel Range)

DGI-TT7: MultiTox, (EC Cell) Gas Detector

DF-TV7-T: MultiFlame, Flame Detector

DG-TX7: MultiXplo, Flammable Gas Detector

Specifications subject to change without notice



Tel: 713-559-9200
Toll Free: 888-367-4286
Fax: 281-292-2860
Email: sales@detcon.com
Web: www.detcon.com

ISO 9001: 2008
Certified