

MultiTox

Flexible configuration
Reduced maintenance
Local display

DG-TT7-S Solid-State (MOS) Gas Detector

The MultiTox DG-TT7-S intelligent solid-state (MOS) hydrogen sulphide (H₂S) gas detector. The device has been designed for ease of operation and maintenance in hot and dry environments.



Description

The DG-TT7-S is a solid-state metal oxide semiconductor (MOS) gas detector used mainly for the detection of hydrogen sulphide 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.

Applications

- Refineries
- 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(R) output option available

Benefits

Reduced maintenance & service costs

Long service life

Suitable for extreme conditions

Local status and alarm level indication

Reduced service costs

Detector can be replace without disassembling the cable glands

Full configuration and diagnostics over non-proprietary interface



TLU Wireless (IR)
Handheld Terminal

Technical Data

GENERAL

Technology	Solid-state Metal Oxide Semiconductor
Detects	Hydrogen Sulphide others gas available on request
Range	0 - 50 ppm H ₂ S 0 - 100 ppm H ₂ S

PERFORMANCE

Response time	T50 < 30 s T90 < 120 s
Accuracy	+/- 10% of calibrated range
Sensor life	Better than 5 years

OUTPUT SIGNAL

Standard	4-20mA, max. load impedance 700Ω (Std.) 2 x configurable Relays max 1A / 30V
option HART(R)	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 nominal
Connection	0.14 mm ² (28 AWG) - 1.5 mm ² (16 AWG) Shielded cable recommended.

ENVIRONMENTAL

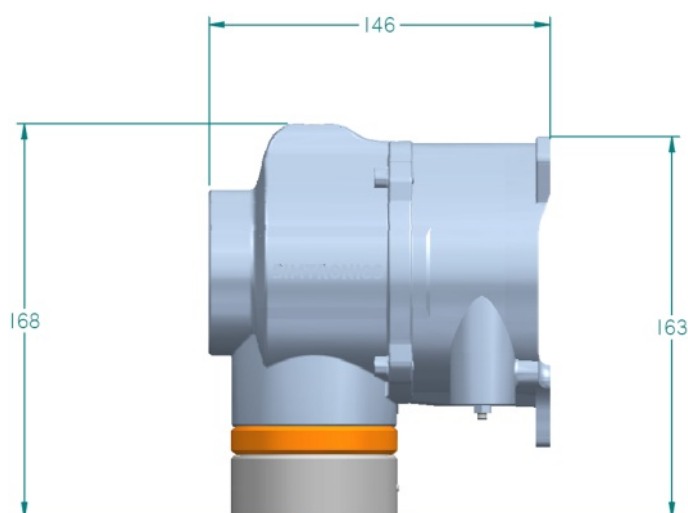
Storage	-40°C to +70°C
Operation	-40°C to +65°C
Option	Sunshade, max. temp. 85°C (185°F)
Humidity	0 to 95% RH (non-condensing)
Pressure	Atmospheric pressure +/- 10%
Ingress	IP66
RFI/EMI	Complies with EN50270.

HOUSING

Material	316 L stainless steel
Weight	4 Kg (8Lbs)

APPROVALS

ATEX	Ex 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 20ppm H ₂ S
CAL-K1C-31AF-1A1-00	Calibration kit 50ppm H ₂ S
CAL-A00-31AF-000-00	Box of 10 breakable gas ampoule 50ppm H ₂ S. For use with AS051 cup
AS047	Display protection

OTHER PRODUCTS (STAINLESS STEEL RANGE)

DGI-TT7	MultiTox, (EC Cell) Gas Detector
DF-TV6	MultiFlame, Flame Detector
DG-TX	MultiXplo, Flammable Gas Detector