



## DG-TT7-S

Solid-State (MOS) Gas Detector



### Presentation

The MultiTox DG-TT7-S is a solid state (MOS) based smart gas detector for the detection of Hydrogen Sulphide. The device has been designed to withstand harsh environment and provide easy operation

The unit is fully configurable using a wireless hand-held terminal TLU, using a magnet or by using HART protocol option.

The configuration of the outputs is adjustable using the TLU or the magnet that can be used in areas classified as potentially explosive.

The MultiTox DG-TT7-S is SIL2 certified, 3 on board relays in option, plug and play sensors and a high visible display that changes colour depending on the status mode.

The unit may be interfaced directly with a wide range of centrals and PLC's. The device supports HART 7 protocol option for full configuration and diagnostics over non-proprietary interface.

This new version also offers automatic calibration, **TELECAPTEUR Calibration Management Software**. It allows loading, comparison and logging of the last calibrations carried out and this can be done by one person only. (one man calibration)



TLU Wireless (IR)  
Hand-held Terminal

### Features

- High visible display
- Display color is status dependent
- Ideal for Desert & Artic Environments



# DG-TT7-S

## Solid-State (MOS) Gas Detector

### Technical data

#### General

Technology	Solid-state Metal Oxide Semiconductor
Detects	Hydrogen Sulphide
Range	0-20 ppm H <sub>2</sub> S 0-50 ppm H <sub>2</sub> S

#### Performance

Accuracy	+/- 2 ppm or +/- 10% reading
Zero drift	<1 ppm
Sensor life	Better than 5 years (environment dependant)

#### Output signal

Standard	0-22mA encoded: * 0-4mA: fault mode, calibration, inhibit (current values are user configurable) * 4-20 mA: measurement * 22mA: overrange Max. load impedance 700 Ohms
Options	HART Protocol (Version 7) 3 configurable dry contact relay outputs, max 1A / 30V Lonworks (Syntel)

Local display	4 digit, ultrabright LED display, color change background according to the status (green=normal operation, amber=Fault mode, red=Gas Alarm, purple=Inhibit/Warm-Up mode), self adjust backlight depending on luminosity
---------------	---

#### Electrical

Power supply	24V DC, range (18 - 35V DC)
Power consumption	2W normal (5W max)
Connection	0.3 mm <sup>2</sup> (22 AWG) - 2.5 mm <sup>2</sup> (14 AWG) 3 wire shielded cable

#### Environmental

Storage	-40°C to +65°C (-40°F to +149°F)
Operation	-40°C to +65°C (-40°F to +149°F)
Option	Sunshade, max. temp. 85°C (185°F)
Humidity	99% RH (non-condensing)
Pressure	Atmospheric pressure +/- 10%
Ingress	IP66
RFI /EMI	Complies with EN50270

#### Housing

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

#### Approvals

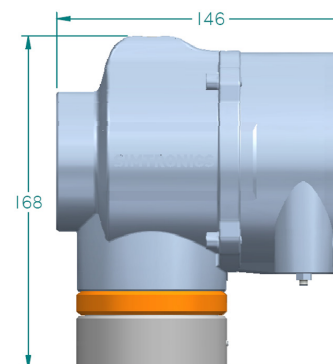
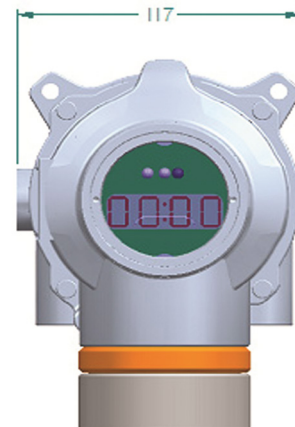
ATEX	II 2 G Ex d IIC T6 Gb or Ex db IIC T6 (-40°C to +65°C / -40°F to +149°F)
IECEX	Ex d IIC T6 Gb or Ex db IIC T6
SIL	SIL2 approved by 3rd party

#### Accessories

TLU600	Infrared remote control unit
AS056-250	Sun shade
AS005	Calibration cup
AS047	Display protection
AS011-2	Sample flow housing
AS019	Splash guard
CAL-K1C-xxAE-1 A1 -00	Calibration kit 20ppm H2S
CAL-K1C-31AF-1A1-00	Calibration kit 50ppm H2S
CAL-TUBE-H2S-MOS	In-line humidifying tube for calibration

#### Other products (stainless steel range)

DG-TT7-E	MultiTox, Toxic Gas Detector
DF-TV7 or -V	MultiFlame, Flame Detector
DG-TX7-X	MultiXplo, Flammable Gas Detector



Teledyne Gas & Flame Detection quality assurance programmes demand the continuous assessment and improvement of all our products. Information in this leaflet could thus change without notification and does not constitute a product specification.