

## **Gas & Flame Detection**

## 3M™ Simtronics DG-TT7-S

Solid-State (MOS) Gas Detector





TLU Wireless (IR) Hand-held Terminal

## **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) or by using HART protocol option..

The MultiTox DGTT7S is SIL2 certified, features on board relays, 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 controllers and PLC's. The device supports HART 7 protocol option for full configuration and diagnostics over nonproprietary interface.

- High visible display
- On board relays
- Display color is status dependent









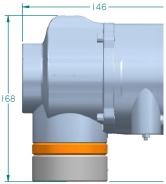
## **TECHNICAL DATA**

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 0-100 ppm H <sub>2</sub> S
PERFORMANCE	
Response time	T90 < 70 s
Accuracy	+/- 2 ppm or +/- 10% reading (whichever is greater)
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: overange  Max. load impedance 700 Ohms 2 configurable dry relay outputs, max 1A / 30V
Options	HART Protocol (7th edition) 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 - 28V DC)
Power consumption	2W normal (5W max)
Connection	0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) 3 wire shielded cable
ENVIRONMENTAL	
Storage	-35°C to +55°C (-31°F TO +131°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-K1 C-xxAE-1 A1 -00	Calibration kit 20ppm H2S
CAL-K1C-31AF-1A1-00	Calibration kit 50ppm H2S

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	





Simtronics is a world-class provider of sophisticated gas and flame detection systems. The company has more than 25 years' experience in supplying gas detection for use in applications ranging from plant boiler rooms to offshore petrochemical facilities. Simtronics' products are used worldwide to help protect life and assets.

