TLU Wireless (IR)
Hand-held Terminal

3M™ Simtronics™ DG-TX7

Intelligent Flammable Gas Detector

Presentation

The MultiXplo DG-TX7 is an intelligent catalytic sensor based flammable gas detector used to detect a wide range of gases, including hydrogen (H_2) . The device has been designed for ease of installation, operation and maintenance in testing environments.

The MultiXplo DG-TX7 employs a pair of OXYCOL catalytic sensors in a compensated circuitry in order to provide reliable flammable gas detection in harsh environments, as long as oxygen is present.

The intelligent microprocessor driven unit is fully configurable using a wireless handheld terminal (TLU) or optionally via HART giving true flexibility to the installer. Parameters such as relay operation and alarm levels are all set via the TLU; a hazardous area approved hand-held unit. In addition, the sensor element is protected by the onboard electronics to prevent exposure to over-range LEL gas concentrations. This helps reduce on-going maintenance and service costs.

Users can select between 4-20 and 0-22mA depending on system requirements. The unit may be interfaced directly with a wide range of panels, controllers and PLC's etc.

Device status, including measured gas level is indicated on a colour coded 4 digit LED display.

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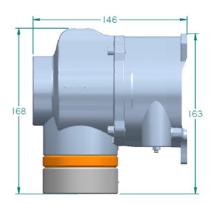- Display color is status dependent

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General

Technology	Low temperature oxidation process, Oxycol
Detects	Flammable Gases
Range	0 to 100% LEL
Calibration	with calibration gas

Performance

Response time	T90 < 15 s (Methane)
Zero drift	+/- 3% Full scale deflection
Accuracy	+/- 5% Full scale deflection
Repeatability	+/- 1% Full scale deflection
Sensor life	Better than 5 years

Output signal

Standard	4-20mA, max. load impedance 700M (Std.) 2 x configurable Relays max 1 A / 30V
option HART (R)	HART Protocol (7th edition)
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	2W normal, 5W max (backlight at max)
Connection	0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended

Environmental

Storage	-40°C TO +70°C (-40°F TO 1 58°F)
Operation	-40°C TO +60°C (-4°F TO 1 40°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 (-40°C to +65°C) (-40°F to +149°F)
IECEx	Ex d IIC T6 Gb IECEx LCI 11.0060X

Conformities

EN60079-29-1

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-xxDF-1 A1 -00	Calibration kit 20ppm H2S

Other products (stainless steel range)

DGi-TT7-E	MultiTox, Toxic (EC Cell) Gas Detector
DG-TT7-S	MultiTox, Solid-State (MOS) Gas Detector
DG-TV7	MultiFlame, Flame Detector