MultiXplo

Flexible configuration
Reduced maintenance
Over-range LEL sensor protection

DG-TX7 Intelligent Flammable Gas Detector

The Simtronics 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.

HART
COMMUNICATION PROTOCOL

Description

The MultiXplo DG-TX7 employs a pair of Simtronics 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 hand-held 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.

Applications

- Refineries
- Offshore driling and production platforms
- Processing and storage plants
- Chemical plants

Features

Features	Benefits
Detects virtually all flammable gases	Detects Hydrogen, unlike IR detectors
Computer compensed proprietary catalytic elements	Excellent stability over a wide operating temperature range
Over-range LEL sensor protection	Reduced service and maintenance costs
Wireless, non intrusive testing by a single technician using TLU	Easy setup and maintenance
Integrated daylight readable backlit LED display	Device status visible from long distance
Hot swap field cabling	Detector (unpowered) can be changed in hazardous area without area declassification
HART(R) output option available	Full configuration and diagnostics over non-proprietary interface

TLU Wireless (IR)
Hand-held Terminal

SIMTRONICS
Fire & Gas

DG-TX7

Technical Data

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 700Ω (Std.)
	2 x configurable Relays max 1A / 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 mm^2 (22 AWG) - 1.5 mm^2 (16 AWG) Shielded cable recommended

ENVIRONMENTAL

Storage	-40°C to +70°C (-40°F to 158°F)
Operation	-40°C to +60°C (-4°F to 140°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	316 L stainless steel
Weight	4Kg (8Lbs)

APPROVALS

ATEX	(Ex) II 2 G Ex d IIC T6 Gb (-40°C to +65°C) (-40°F to +149°F)
Certificate number	LCIE 11 ATEX 3081 X
IECEx	Ex d IIC T6 Gb
	IECEx LCI 11.0060X

CONFORMITIES

EN60079-29-1
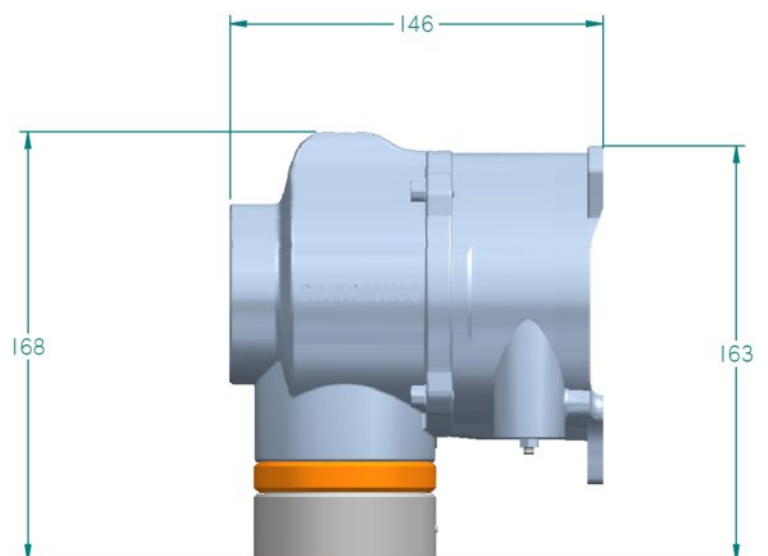
ACCESSORIES

TLU600	Infrared remote control unit
AS056-250	Sun shade
AS005	Calibration cup
AS011-2	Sample flow housing
AS019	Splash guard
CAL-K1C-xxDF-1A1-00	Calibration kit
AS047	Display protection

OTHER PRODUCTS (STAINLESS STEEL RANGE)

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

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