

# MultiXplo

Flexible configuration  
Reduced maintenance  
Over-range LEL sensor protection

## DG-TX7 Intelligent Flammable Gas Detector

The MultiXplo DG-TX7 intelligent catalytic sensor based flammable gas detector used to detect a wide range of gases, including hydrogen (H<sub>2</sub>). The device has been designed for ease of installation, operation and maintenance in testing environments.



### Description

The DM-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 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, hazardous area approved handheld 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.

User 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 drilling and production platforms
- Processing and storage plants
- Chemical plants.

### Features

Detects virtually all flammable gases

Computer matched poison resistant catalytic sensors

Over-range LEL sensor protection

Wireless, non intrusive testing by a single technician using TLU

Hand held maintenance terminal

"No-touch" field cabling

HART(R) output option available

### Benefits

Detects Hydrogen, unlike IR detectors

Excellent stability over a wide operating temperature range

Reduced service and maintenance costs

Reduced service costs

End to end loop testing

Detector can be replaced without disassembling the cable glands

Full configuration and diagnostics over non-proprietary interface



TLU Wireless (IR)  
Handheld Terminal



## 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) (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	4W normal
Connection	0.14 mm <sup>2</sup> (28 AWG) - 1.5 mm <sup>2</sup> (16 AWG) Shielded cable recommended.

### ENVIRONMENTAL

Storage	-40°C to +70°C
Operation	-20°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

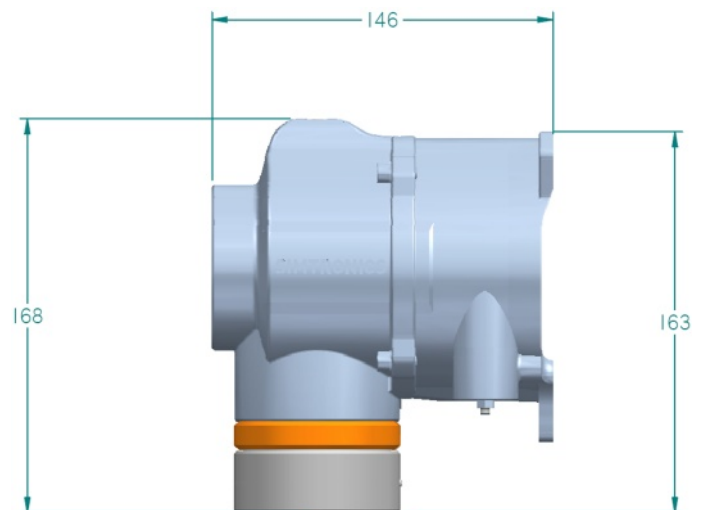
Material	316 L stainless steel
Weight	4Kg (8Lbs)

### APPROVALS

ATEX	⊕ 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

### CONFORMITIES

EN60079-29-1 (performance)
EN50271 (software)



### ACCESSORIES

TLU600	Infrared remote control unit
AS008	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