

Gas & Flame Detection

3M™ Simtronics DG-TX7

Intelligent Flammable Gas Detector





TLU Wireless (IR) Hand-held Terminal

PRESENTATION

The MultiXplo DG-TX7 is an intelligent catalytic sensor based flammable gas detector used to detect a wide range of gases, including hydrogen (H2). 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

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









3M[™] Simtronics DG-TX7

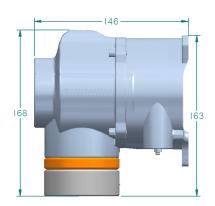
Intelligent Flammable Gas Detector

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	
	0.41/ D.O. (40, 0.01/ D.O.)
Power supply	24V DC, range (18 - 28V DC)
Power supply Power consumption	24V DC, range (18 - 28V DC) 2W normal, 5W max (backlight at max)
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Power consumption	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG)
Power consumption Connection	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG)
Power consumption Connection ENVIRONMENTAL	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended
Power consumption Connection ENVIRONMENTAL Storage	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 158°F)
Power consumption Connection ENVIRONMENTAL Storage Operation	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 1 58°F) -40°C TO +60°C (-4°F TO 1 40°F)
Power consumption Connection ENVIRONMENTAL Storage Operation Option	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 158°F) -40°C TO +60°C (-4°F TO 140°F) Sunshade, max. temp. 85°C (185°F) 99% RH (non-condensing) Atmospheric pressure +/- 10%
Power consumption Connection ENVIRONMENTAL Storage Operation Option Humidity Pressure Ingress	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 1 58°F) -40°C TO +60°C (-4°F TO 1 40°F) Sunshade, max. temp. 85°C (185°F) 99% RH (non-condensing) Atmospheric pressure +/- 10% IP66
Power consumption Connection ENVIRONMENTAL Storage Operation Option Humidity Pressure Ingress RFI /EMI	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 158°F) -40°C TO +60°C (-4°F TO 140°F) Sunshade, max. temp. 85°C (185°F) 99% RH (non-condensing) Atmospheric pressure +/- 10%
Power consumption Connection ENVIRONMENTAL Storage Operation Option Humidity Pressure Ingress RFI /EMI HOUSING	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 158°F) -40°C TO +60°C (-4°F TO 1 40°F) Sunshade, max. temp. 85°C (185°F) 99% RH (non-condensing) Atmospheric pressure +/- 10% IP66 Complies with EN50270
Power consumption Connection ENVIRONMENTAL Storage Operation Option Humidity Pressure Ingress RFI /EMI HOUSING Material	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 158°F) -40°C TO +60°C (-4°F TO 140°F) Sunshade, max. temp. 85°C (185°F) 99% RH (non-condensing) Atmospheric pressure +/- 10% IP66 Complies with EN50270
Power consumption Connection ENVIRONMENTAL Storage Operation Option Humidity Pressure Ingress RFI /EMI HOUSING Material Weight	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 158°F) -40°C TO +60°C (-4°F TO 1 40°F) Sunshade, max. temp. 85°C (185°F) 99% RH (non-condensing) Atmospheric pressure +/- 10% IP66 Complies with EN50270
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Power consumption Connection ENVIRONMENTAL Storage Operation Option Humidity Pressure Ingress RFI /EMI HOUSING Material Weight APPROVALS ATEX	2W normal, 5W max (backlight at max) 0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG) Shielded cable recommended -40°C TO +70°C (-40°F TO 158°F) -40°C TO +60°C (-4°F TO 1 40°F) Sunshade, max. temp. 85°C (185°F) 99% RH (non-condensing) Atmospheric pressure +/- 10% IP66 Complies with EN50270 316L stainless steel 4 Kg (8Lbs) II 2 G Ex d IIC T6 Gb (-40°C to +65°C) (-40°F to +149°F) Ex d IIC T6 Gb

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	





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.



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