# MultiTox

Flexible configuration Easy maintenance IS Cartridges

## DMI-TT6 Toxic Gas or Oxygen deficiency Detector

The MultiTox DMI-TT6 are intelligent gas detectors employing a wide array of sensor types. The MultiTox DMI-TT6 are used to detect toxic gases or for oxygen deficiency monitoring. The detectors are designed for ease of operation and maintenance.



All DMI-TT6 are constructed from a common housing and electronics with the detection properties being determined by the type of sensor (cartridge) used. A wide range of cells are available, including hydrogen sulphide, ammonia and carbon monoxide to name a few. The cells are intrisically safe, and may be replaced with the detector powered. This versatile housing is also used for our flammable (catalytic) gas detector as well our semiconductor (MOS) detector - although these units are certified flameproof, not intrinsically safe - see separate datasheet.

The intelligent, microprocessor driven unit is fully configurable using a wireless handheld terminal (TLU) giving true flexibility to the installer. Elements such as relay operation and alarm levels are all set via the TLU; a hazardous area approved hand-held unit.

The device offers a wide range of output options as standard and is suitable for use in SIL 2 applications. The unit may be interfaced directly with a wide range of panels, controllers and PLC's etc.

The DMI-TT6 may be used in refineries, offshore driling and production platforms, processing and storage plants as well as chemical plants.

#### **Benefits Features**

Standard detector platform Wide range of cells

Auto heating of EC cell Suitable for low temperature

Hot change of cells Minimises system down time

Wireless, non intrusive testing by as single Reduced site personnel costs technician

Hand-held maintenance terminal Reduced service costs

Detector can be replaced without Hot swap field cabling disassembling the cable glands

Relays and 4-20mA output as standard, Wide range of detector outputs HART(R) output option



TLU600 Wireless (IR) Handheld Terminal







#### **Technical Data**

#### **GENERAL**

Electrochemical cell Technology See table below Detects See table below Range

#### **PERFORMANCES**

See table below

#### **OUTPUT SIGNAL**

4-20mA or 0-22mA (configurable by user) Standard

max. load impedance  $700\Omega$  (Std.)

HART<sup>(R)</sup> Protocol (7th edition) Option

Lonworks (Syntel)

2 x configurable Relays max 1A/30V Relay

#### **ELECTRICAL**

Power supply 24V DC, range (18 - 32V DC)

Power consumption 30 mA normal; 180 mA when heating  $0.3 \text{ mm}^2 (22 \text{ AWG}) - 1.5 \text{ mm}^2 (16 \text{ AWG})$ Connection

Shielded cable recommended

#### **ENVIRONMENTAL**

Storage -40°C to +70°C (-40°F to +158°F)

Transmitter

0°C to +20°C (0°F to +68°F) Cartridge /

Operation See table below

Humidity 99% RH (non-condensing) Pressure Atmospheric pressure +/- 10%

Ingress

RFI/EMI Complies with EN50081-1, EN50081-2,

EN50082-1 and EN50082-2.

### HOUSING

Material Epoxy coated aluminium (standard)

1.8 Kg (4 Lbs) Weight

**Dimensions** 175 x 165 x 184 mm (l, h, w)

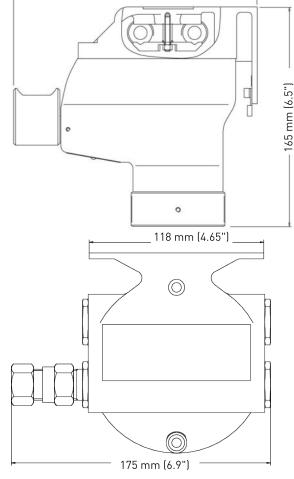
### **APPROVALS**

EXII 2 G / Ex d ia IIC T6 Gb **ATEX** 

Temperature range Certificate number

**IECE**x

-20°C to +60°C LCIF 03 ATEX6262X IECEx LCIE 12.0012X



184 mm (7.3")

#### **ACCESSORIES**

**TLU600** Infrared remote control unit

AS056-250 Sun shade AS005 Calibration cup Sample flow housing AS011 AS019 Splash guard CAL-K1C-XXX Calibration kits

#### OTHER PRODUCTS (ALUMINIUM RANGE)

DM-TX6 MultiXplo, Flammable Gas Detector DM-TT6 MultiTox, Solid-State (MOS) Gas Detector DM-TV6 MultiFlame, Flame detector

GAS	<b>02</b> "M" Type	02 "G" type	H <sub>2</sub> S	NH <sub>3</sub>	CO	NO	N0 <sub>2</sub>	H <sub>2</sub>	s0 <sub>2</sub>	CL <sub>2</sub>	HCI	HCN
Range (ppm)	0-5	0-5	0-20	0-50	0-100	0-100	0-20	0-1000	0-20	0-10	0-50	0-50
(except 02 %vol.)	0-25	0-25	0-50	0-100	0-200			0-2000	0-100	0-20	0-100	
			0-100	0-1000	0-500			0-10000		0-50		
			0-200		0-1000							
Zero drift	< 0.1	< 0.1	+/- 1	+/- 2	+/- 4	+/- 3	+/- 0.5	+/- 40	+/- 0.5	+/- 0.5	+/- 3	+/- 1
(ppm, except 02 %vol.)			+/- 2	+/- 20	+/- 10			+/- 200				
T 90 (seconds)	< 25	< 25	< 60	< 120	< 35	< 20	< 45	< 70	< 30	< 30	< 150	< 60
Cell lifetime (months)	12 to 18	60	24	24	36	36	24	24	24	24	24	18
Temperature °C	-10 / +40	+5 / +40	-20 / +50	-20 / +40	-20 / +50	-20 / +50	-20 / +50	-20 / +50	-20 / +50	-20 / +40	-20 / +50	-20 / +40
Temperature °F	+14 / +104	+41 / +104	-4 / +122	-4 / +104	-4 / +122	-4 / +122	-4 / +122	-4 / +122	-4 / +122	-4 / +104	-4 / +122	-4/ +104



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