

MultiTox

Flexible configuration
IS Cartridges
Local display

DGI-TT7 Electrochemical Gas Detector

The MultiTox DGI-TT7-E intelligent gas detectors employing a wide array of sensor types. The DGI-TT7-E is used for Toxic gases or Oxygen monitoring. The device has been designed for ease of operation and maintenance.



Description

All DGI-TT7-E 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 intrinsically safe protected, and may be replaced with the detector powered

The intelligent, microprocessor driven unit is fully configurable using a wireless handheld terminal (TLU) or by using the hard wired HART option giving true flexibility to the installer. Elements such as relay operation and alarm levels are all set via the TLU, hazardous area approved handheld unit.

The unit may be interfaced directly with a wide range of panels, controllers and PLC's etc.

The device offers HART Protocol 7th edition output as an option.

Application

- Refineries
- Offshore drilling and production platforms
- Processing and storage plants
- Chemical plants.

Features

Standard detector platform

Auto heating of EC cell

Hot change of cells

Integral day light readable alphanumeric display

Hand held maintenance terminal

"No-touch" field cabling

HART(R) output option available

Benefits

Wide range of cells

Suitable for low temperature

Minimises system down time

Local status and alarm level indication

Reduced service costs

Detector can be replace without disassembling the cable glands

Full configuration and diagnostics over non-proprietary interface



TLU Wireless (IR) Handheld Terminal



Technical Data

GENERAL

Technology	Electrochemical cell
Detects	See table below
Range	See table below

PERFORMANCES

See table below

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 with automatic intensity adjustment

ELECTRICAL

Power supply	24V DC, range (18 - 32V DC)
Power consumption	0.7W nominal 4,5W when heating
Connection	0.14 mm ² (28 AWG) - 1.5 mm ² (16 AWG) Shielded cable recommended.


ENVIRONMENTAL

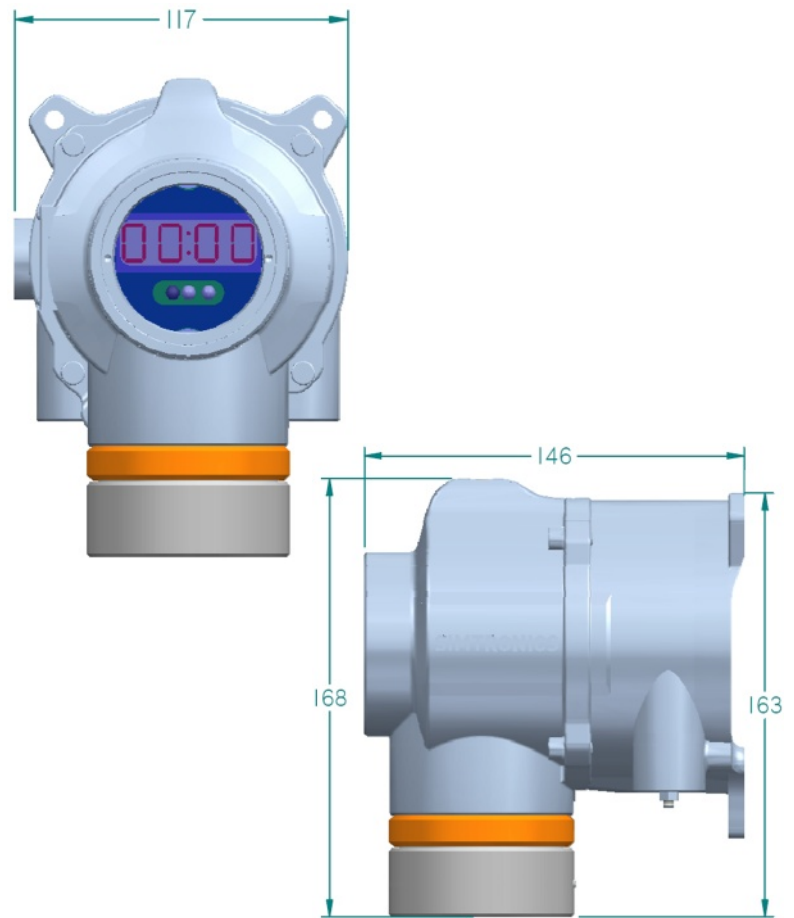
Storage	-40°C to +70°C Transmitter 0°C to +20°C (Cartridge / Cell)
Operation	See table below
Humidity	0 to 95% RH (non-condensing)
Pressure	Atmospheric pressure +/- 10%
Ingress	IP66
RFI/EMI	Complies with EN50270.

HOUSING

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

APPROVALS

ATEX	 II 2 G Ex dia IIC T6 Gb [-40°C to +65°C]
Certificate number	LCIE 12 ATEX xxxxxxxxxxxx
IECEX	Ex dia IIC T6 Gb IECEX LCI 12.xxxxxxxxxxxx



ACCESSORIES

TLU600	Infrared remote control unit
AS008	Sun shade
AS005	Calibration cup
AS051	Calibration cup for breakable ampoules
AS011-2	Sample flow housing
AS019	Splash guard
CAL-K1C-xxAE-1A1-00	Calibration kit (xx = gas to be specified)
CAL-A00-xxAF-000-00	Box of 10 breakable gas ampoule (xx = 31 for 100ppm NH ₃ , 39 for 50ppm H ₂ S)
	For use with AS051 cup
AS047	Display protection

OTHER PRODUCTS (STAINLESS STEEL RANGE)

DG-TT7-S	MultiTox, Solid-State (MOS) Gas Detector
DF-TV6	MultiFlame, Flame Detector
DG-TX	MultiXplo, Flammable Gas Detector

GAS	O ₂	H ₂ S	NH ₃	CO	NO	NO ₂	H ₂	SO ₂	Cl ₂	HCl	HCN
Range (ppm) (except O ₂ % Vol.)	0-5 0-25	0-20 0-50 0-100 0-200	0-50 0-100 0-1000	0-100 0-200 0-500 0-1000	0-100	0-20	0-1000 0-2000 0-10000*	0-20 0-100	0-10 0-20 0-50	0-50 0-100	0-50
Zero drift in % scale	< 0.1	< 1	< 3	< 2	< 3	< 0.5	< 1.5	< 1	< 0.5	< 3	< 1
T 90 (seconds)	< 20	< 60	< 120	< 35	< 20	< 45	< 50 * < 70	< 30	< 30	< 160	< 40
Cell lifetime (months)	12 to 18	24	18	18	36	24	24	24	24	24	18
Temperature °C	-10 / +40	-20 / +50	-20 / +40	-20 / +50	-20 / +50	-20 / +50	-20 / +50	-20 / +50	-20 / +40	-20 / +50	-20 / +40