



## DGi-TT7-E

Electrochemical Toxic Gas Detector



TLU Wireless (IR)  
Hand-held Terminal

### Presentation

The MultiTox DGi-TT7-E is an intelligent gas detector employing an array of sensor types. The device has been designed for ease of operation and maintenance.

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, these cells are intrinsically safe protected, and may be replaced with the detector powered which minimises the system down time.

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

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

Its integral daylight readable alphanumeric display indicates local status and alarm level.

Thanks to the hot swat field cabling technology, the sensor can be changed in a hazardous area without requiring area declassification. The device offers HART Protocol 7th edition output as an option which allows full configuration and diagnostics over nonproprietary interface.

### Features

- High visible display
- On board relays
- Display color is status dependent

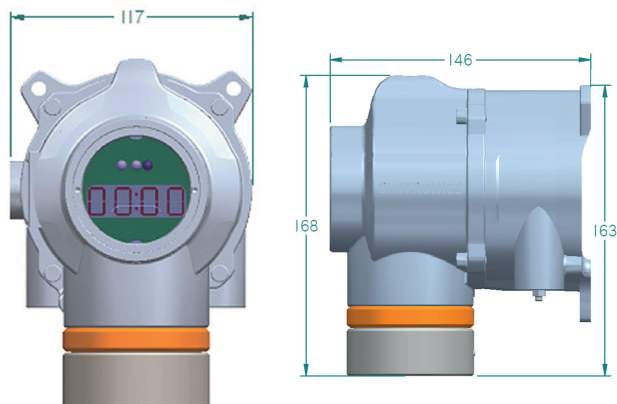


# DGi-TT7-E

## Electrochemical Toxic Gas Detector

GAZ	O2	H2S	NH3	CO	NO	NO2	H2	SO2	CL2	HCl	HCN
Range (ppm)	0-5	0-20	0-50	0-100	0-100	0-20		0-20	0-10	0-50	0-50
(except O <sub>2</sub> % vol.)*	0-25	0-50 0-100 0-200	0-100 0-1000	0-200 0-500 0-1000			0-2000	0-100	0-20 0-50	0-100	
Zero drift (ppm, except O <sub>2</sub> % vol.)	<0.1	+/- 1 +/-2	+/-2 +/- 20	+/- 4 +/-10	+/- 3	+/-0.5	+/- 40 +/-200	+/-0.5	+/-0.5	+/- 3	+/- 1
T 90 (seconds)	<25	<60	<120	<35	<20	<45	<70	<30	<30	<150	<60
Cell lifetime (months)	12 to 18	24	24	36	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/+50	-20/+50	-20/+40
Temperature °F	+14/+104	-4/+122	-4/+104	-4/+122	-4/+122	-4/+122	-4/+122	-4/+122	-4/+122	-4/+122	-4/+104

\* The concentration depends directly on the pressure



### Accessories

TLU600	Infrared remote control unit
AS056-250	Sun shade
AS005	Calibration cup
AS051	Calibration cup for breakable ampoules
AS011 -2	Sample flow housing
AS019	Splash guard
CAL-K1 C-xxAE-1 A1 -00	Calibration kit (xx = gas to be specified)
CAL-A00-xxAF-000-00	Box of 10 breakable gas ampoule (xx = 31 for 100ppm NH3, 39 for 50ppm H2S) For use with AS051 cup
AS047	Display protection

### Other products (stainless steel range)

DG-TT7-S	MultiTox, Solid-State (MOS) Gas Detector
DF-TV7	MultiFlame, Flame Detector
DG-TX7	MultiXplo, Flammable Gas Detector

## Technical data:

### General

Technology	Auto heating of electrochemical cell
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### Output signal

Standard	4-20mA, max. load impedance 700 (Std. ) 2 x configurable Relays max 1 A / 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 - 28V DC)
Power consumption	2W NOMINAL, 7.8W MAX. HEATING
Connection	0.3 mm <sup>2</sup> (22 AWG) - 1.5 mm <sup>2</sup> (16 AWG) 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 / Cell
Operation	See above table of gases
Humidity	99% 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 d ia I IC T6 Gb (-20°C to +60°C)
Certificate number	LCIE 13 ATEX 3024 X
IECEX	Ex d ia I IC T6 Gb - IECEx LCIE 13.001 X

Teledyne Gas & Flame Detection quality assurance programmes demand the continuous assessment and improvement of all our products. Information in this leaflet could thus change without notification and does not constitute a product specification.



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