

# Tocsin-30A

## PRODUCT DATASHEET

IGD

## TOC-30A Series Gas Detectors



TOC-30A Version Indicated

TOC-30A Series Gas Detectors provide accurate measurement of the background atmosphere to measure for a specific hazardous target gas. Clean lines and easy integration into existing or newly planned control systems make the TOC-30A the safety engineers device of choice. Using the latest microprocessor addressable technology and software TOC-30A is a reliable long term monitoring solution.

TOC-30A is supplied pre-calibrated ready to use.

Flexible options allow wall mounting, Dado mounting, Flush wall mount with adaptors for ducts, ceilings etc.

Flammable gas detector versions come in 2 styles, TOC-30A with MK7 pellistors and TOC-31A with MK6 pellistors. The latter has a seperable detector with M22 thread for easy mounting into ducting and containment.

Flammables  
Toxic's  
Oxygen

External Mountings  
Allow First Fit without  
Opening Housing

IP Rated Seals  
Effective Protection  
From Moisture and  
dust ingress

Sensor Sealed From  
Terminal Enclosure  
Preventing Gas  
Ingress

Pellistors  
Electrochemical  
Infra-Red

6 Standard 20mm  
Gland Entry Knockouts

Unique Labyrinth Seal  
Protects Sensor From  
Debris and Moisture  
Without Compromising  
Performance



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**1800 180 73776**

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### Standard Specifications

Power	18-28V DC (Loop Powered)
Construction	ABS
Output	4 Wire Addressable
General Accuracy	+/-2% of Range
Temperature	-5 to 55 Deg C
Humidity	5-95% RH Non-Condensing
Sealing	IP54
Weight	425g

### Sensor Accuracies & Response Times

Sensor Response times and accuracies are determined by the type of sensor used. The following table provides general guidance for tests carried out by IGD at standard conditions.

Type	T90 Response	Accuracy
Pellistors	<10s	+/-2% LEL
Infra Red	<15s	+/-2% of Range
Electrochemical as CO,H2S,SO2	<30s	+/-2% of Range
as O2	<15s	
as NO2,CL,NH3	<50s	

### Standard Features

4-Wire Addressable Technology  
Detector Technology to Suit the Application  
Available as:  
Infra red (Flammables and CO2)  
Pellistor (Flammables)  
Electrochemical (Toxic's and Oxygen)  
Standard 2 Gang Pattress for TOC-30A Version  
Dado Mount or Wall Mount  
Pre-calibrated  
In-Service Calibration Possible  
Replaceable Sensor  
Accessories for Duct Mounting, Sampling, bulkhead Mounting etc  
Excellent Stability and Repeatability.  
Compensated for Temperature and Drift

### Typical Applications

Commercial Kitchens  
Laboratories  
Classrooms  
Plant Rooms  
HVAC Applications  
Pipeline Monitoring  
Hotels  
Residences



TOC-31A Version



TOC-30A Version

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## EC Declaration of Conformity



Issuers name and address:

Oliver IGD Limited of  
Triton House  
Crosby St,  
Stockport,  
United Kingdom

Declares that the product listed as:

**TOC-30A & TOC-31A**

Addressable Hazardous Gas Detector

Are in conformity with the provisions of the following European Directive(s) when installed, operated, serviced and maintained in accordance with the installation and operating instructions contained in the product documentation.

**2004/108/EC**      **EMC Directive**  
**2006/95/EC**      **Low Voltage Equipment Directive** (note not applicable to 24V DC Powered Versions)

And that the standards and/or technical specifications referenced below have been applied or considered.

EN 61779-1:2000	Electrical apparatus for the detection and measurement of flammable gases, general requirements and test methods.
EN 50271:2010	Electrical apparatus for the detection and measurement of combustible gases, toxic gases or Oxygen: requirements and tests for apparatus using software and or digital technologies. <i>Excluding requirements for SIL</i>
EN 61000-6-2: 2005	EMC Generic standards. Immunity for industrial environments
EN 61000-6-4/A1: 2011	EMC Generic standards. Emission standard for industrial environments
EN 61000-3-2: 2014	EMC Limits. Limits for harmonic current emissions (equipment input current $\leq 16$ A per phase)
EN 61000-3-3: 2013	EMC Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq 16$ A per phase

Technical File Reference      T30-TF9

Oliver IGD Limited Operate and  
Independently assessed ATEX/IECEX QAN.

Oliver IGD Limited operate an independently  
assessed ISO9001:2008 Quality Management  
System.

Testing Agency:

Quality Assurance Certificate Number  
**ExVeritas 16PQAN0014**

Quality Assurance Notification Number:  
**2585**

Quality Management Certificate Number  
**FS 646773**

TUV - SUD  
Octagon House  
Concorde Way  
PO 15 5RL  
Fareham



Mehr Sicherheit.  
Mehr Wert.

ExVeritas,  
Units 16-18,  
Abenbury Way,  
Wrexham Industrial Estate,  
Wrexham, UK, LL13 9UZ

BSI Assurance UK LTD,  
Chiswick High Road,  
London  
W4 4AL  
UK

Issued on:      June 2016      At Oliver IGD Limited, Stockport, SK2 6TS, United Kingdom

Signature:

Declaration of Conformity in accordance with EN ISO/IEC 17050-1:2004

Name

Andrew J Collier M.I.O.D

Position:

Managing Director

Date:      June 2016

Declaration Ref: TOC-30A-June-3



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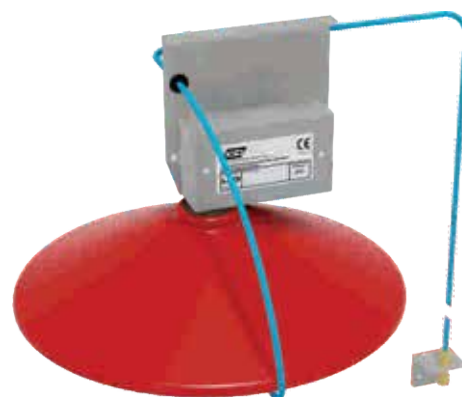
# Tocsin-30A

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**IGD**

### Order Codes

Gas	Standard Range	Order Code	Typical Cell Life
Flammable Gases external sensor	0-100% LEL	TOC-31A-PHC	>3 Years
Flammable Gases internal sensor	0-100% LEL	TOC-30A-PHC	>3 Years
Carbon Monoxide Lo	0-100ppm	TOC-30A-CO	>5 Years
Carbon Monoxide Hi	0-1000ppm	TOC-30A-HCO	>5 Years
Oxygen	0-30% Vol	TOC-30A-O2	>5 Years
Nitric Oxide	0-200ppm	TOC-30A-NO	>2 Years
Nitrogen Dioxide	0-20ppm	TOC-30A-N2O	>2 Years
Ammonia	0-100ppm	TOC-30A-NH3	>2 Years
Chlorine	0-20ppm	TOC-30A-CL2	>2 Years
Sulphur Dioxide	0-5ppm	TOC-30A-SO2	>2 Years
Boron Trichloride	0-10ppm	TOC-30A-BCL3	>2 Years
Carbon Dioxide	5000pppm	TOC-30A-LCO2	>5 Years
	0-5%	TOC-30A-HCO2	>5 Years
Hydrogen	0-1000ppm	TOC-30A-H2	>2 Years
Hydrogen Sulphide	0-50ppm	TOC-30A-H2S	>3 Years
Hydrogen Chloride	0-10ppm	TOC-30A-HCL	>2 Years
Nitrous Oxide	0-1000ppm	TOC-30A-NO	>2 Years
Silane	0-10ppm	TOC-30A-SIH4	>2 Years



Detector Fitted with gas collector cone and remote gassing facility

TOC-31A-PHC Version



TOC-31A-PHC Version uses a MK6 Flammable Gas Detector with M22 x 1.5 Threaded front. This allows easy fitting to threaded bosses, ducts, splash guards etc

### Accessory Order Codes

Gas Collector Cone	5138801
Ceiling Mount Kit (TOC-31A-PHC)	50006601
Remote Gassing Kit	5110101
Cal Gas Adaptor (TOC30A)	5925701
Cal Gas Adaptor (TOC31A)	4011109
Splashguard (TOC30A)	TOC-30-GD
Splashguard (TOC31A)	5138701

TOC-30A-Version

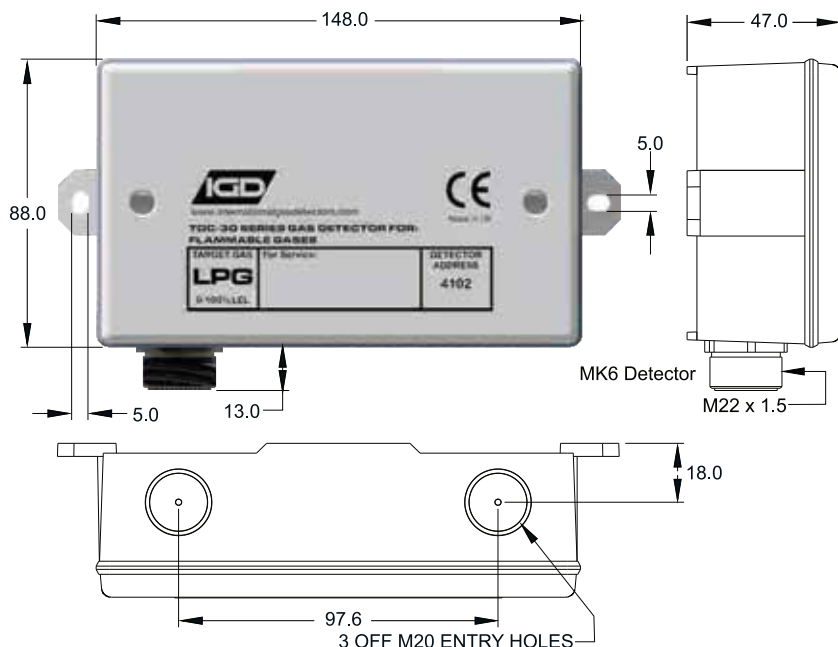


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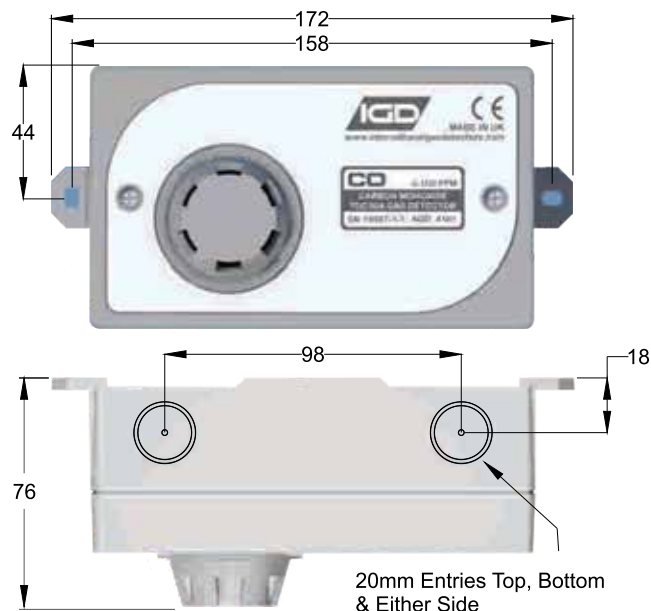
## PRODUCT DATASHEET



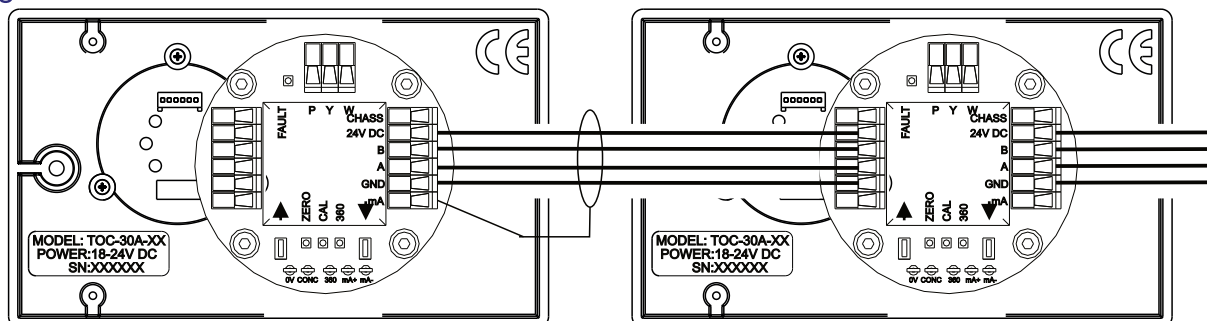
### Physical Size TOC-31A Version



### Physical Size TOC-31A Version



### Wiring Information



Detector Fitted With Gas Collector Cone

Set Alarms  
Interface to  
Beacons/sounders  
Other Systems



Controller Shown For Information Only

Use screened cable typically FP200 or CY style cable, 4 core min 1.5mmSQ. Ground cable screens to the earth studs provided.

Note typically up to 32 detectors can be accommodated on a single cable run.

Addressable detectors will require a suitable controller for further information see data sheets for TOCSIN-640 (indicated right), TOCSIN 625, Tocsin i700 or Tocsin 920 Series Controllers.