IGD
International Gas Detectors

TOCSIN 903 SERIES
Advanced Gas Detection Transmitter

Our TOCSIN 903 gas detector transmitter is a standalone detector approved for zone 1 and 2 ATEX environments. The TOCSIN 903 is approved to both European and UK ATEX and international IECEx standards. The transmitter features a non-intrusive calibration, analogue communication, and relays for integration into third-party controllers. There are sensor options for over 400 gases and vapours covering: explosive, toxic, oxygen and VOC's. TOCSIN 903 is truly one of the most versatile gas detector transmitters on the market. Simple to Install, Simple to use and reliable in operation.

▶ **SIMPLE SERVICING**
Easy, one man calibration.

▶ **CERTIFIED**
Exd, ATEX and IECEX Certified. Built to withstand zone 1 and 2 hazardous areas.

▶ **EASY TO NAVIGATE**
Digital Display, Concentration, Alarms and Fault Status.

▶ **REASSURINGLY COMPETENT**
Designed and manufactured in the UK by IGD
Backup by 10-year Warranty*
All compliance supported by a third-party certification
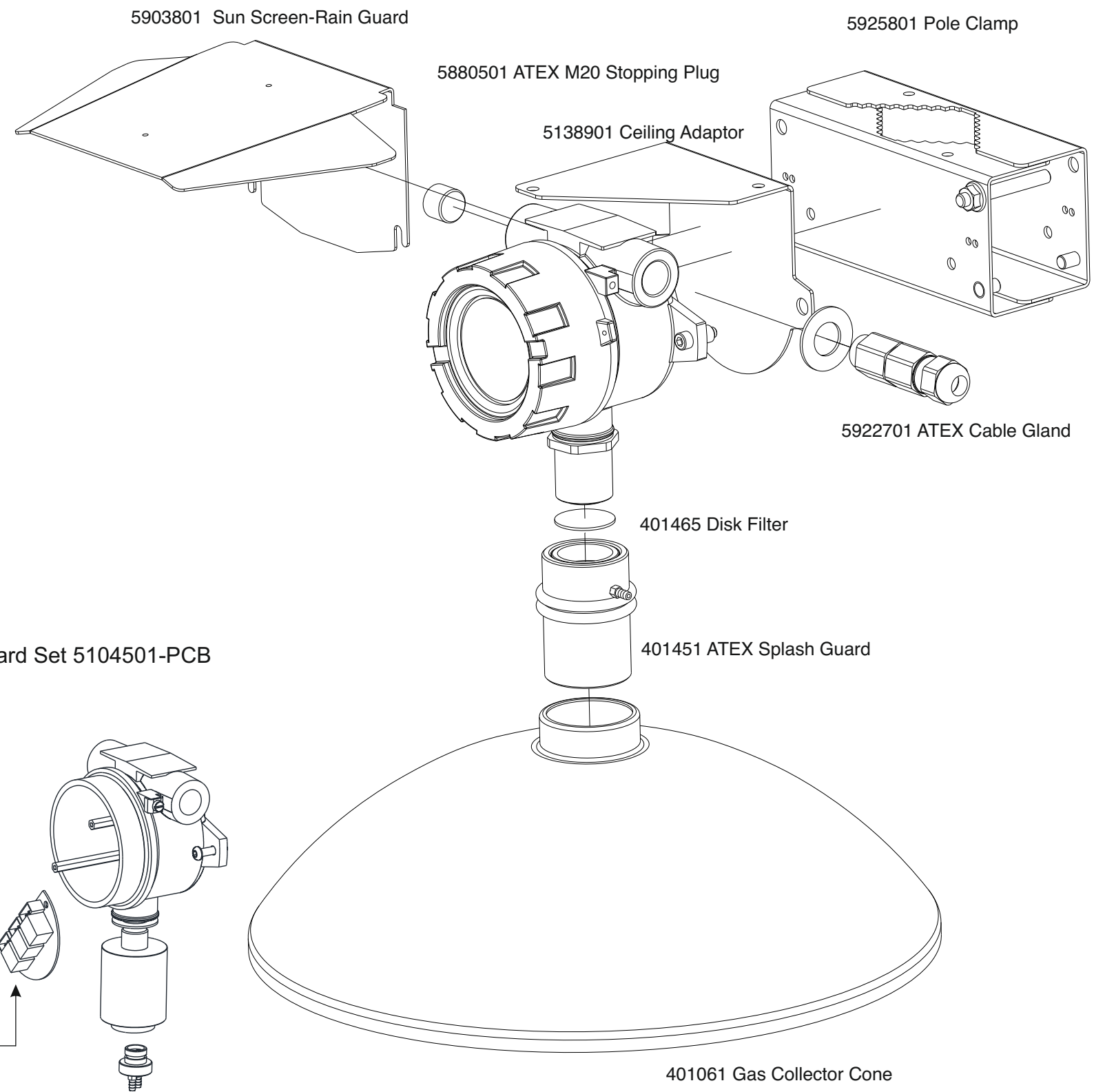
* Terms and Conditions Apply

Document Ref: T903 V15

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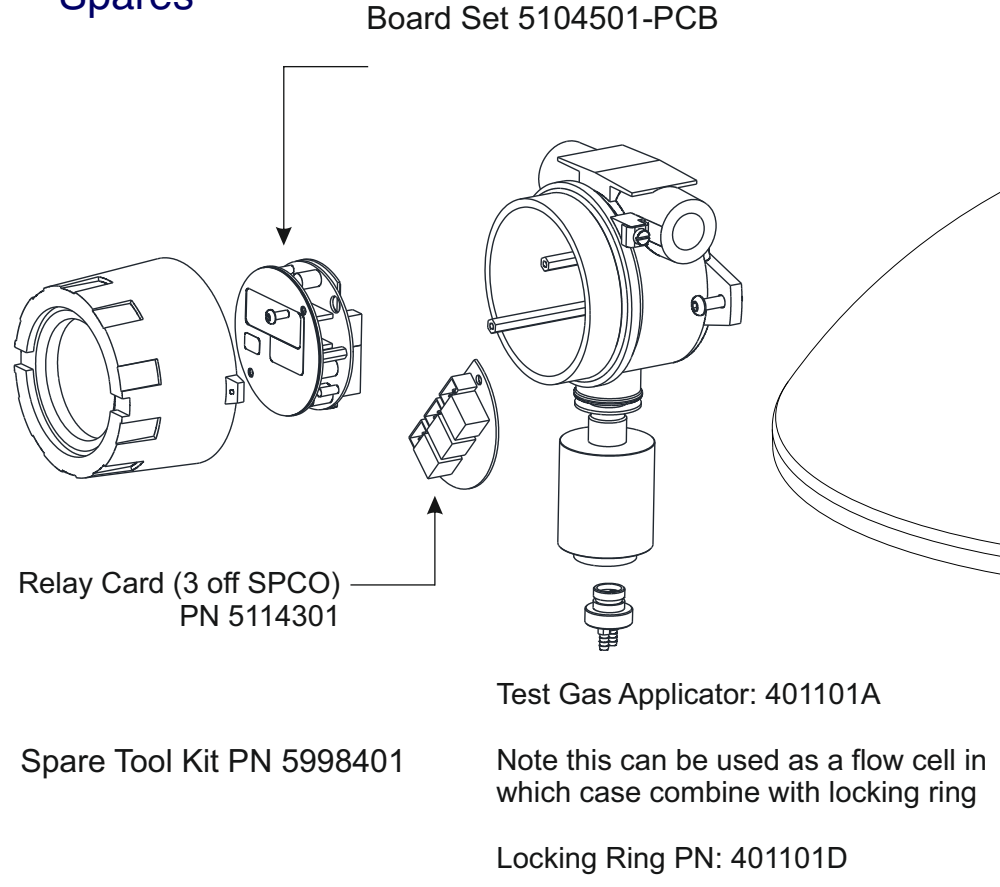in /international-gas-detectors-ltd

Triton House
Crosby Street
Stockport
SK2 6SH

Accessories

5903801 Sun Screen-Rain Guard

5880501 ATEX M20 Stopping Plug

5138901 Ceiling Adaptor

5925801 Pole Clamp

5922701 ATEX Cable Gland

401465 Disk Filter

401451 ATEX Splash Guard

401061 Gas Collector Cone

Spares

Board Set 5104501-PCB

Relay Card (3 off SPCO)
PN 5114301

Spare Tool Kit PN 5998401

Test Gas Applicator: 401101A

Note this can be used as a flow cell in which case combine with locking ring

Locking Ring PN: 401101D

TOCSIN 903 SERIES
Advanced Gas Detection Transmitter

TOCSIN 903 gas detector transmitter is one of the most versatile standalone ATEX transmitters available on the market. The detector features our non-intrusive calibration method using our magnetic "wand" to perform one-man calibrations while in an ATEX zoned area, no need for expensive complicated ATEX rated interfaces. Simple and efficient whilst reducing downtime.

In addition to this our 903 ATEX gas detector transmitter is approved to both ATEX and IECEx standards for zone 1 and 2 flammable environments and zone 21 and 22 dust environments. When ordered online the sensors are supplied with ATEX rated cable gland and stopping plug.

The TOCSIN 903 gas detector transmitter are incredibly flexible, versatile and easy to deploy. Using both analogue signals and relay outputs, allowing simple integration into any third-party controller, site BMS, control cabinets, fire systems and other gas detection systems.

Detectors utilise our industry leading long-life sensor technology. With sensor options for a wide variety of gases including toxic gases, 5-year Oxygen and Ammonia sensors, leading PID technology, 5-year IR sensors and our patented, long life poison resistant Pellistor sensors for flammable gases. When you install an IGD ATEX 903 gas detector transmitter you are maximising safety and minimising on-going costs using IGD's extended sensor life.
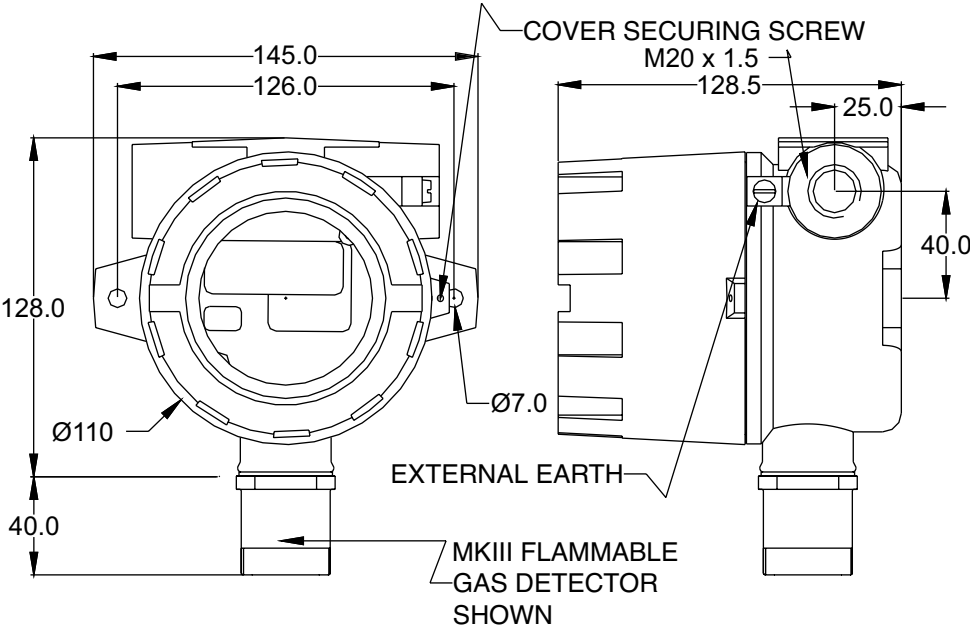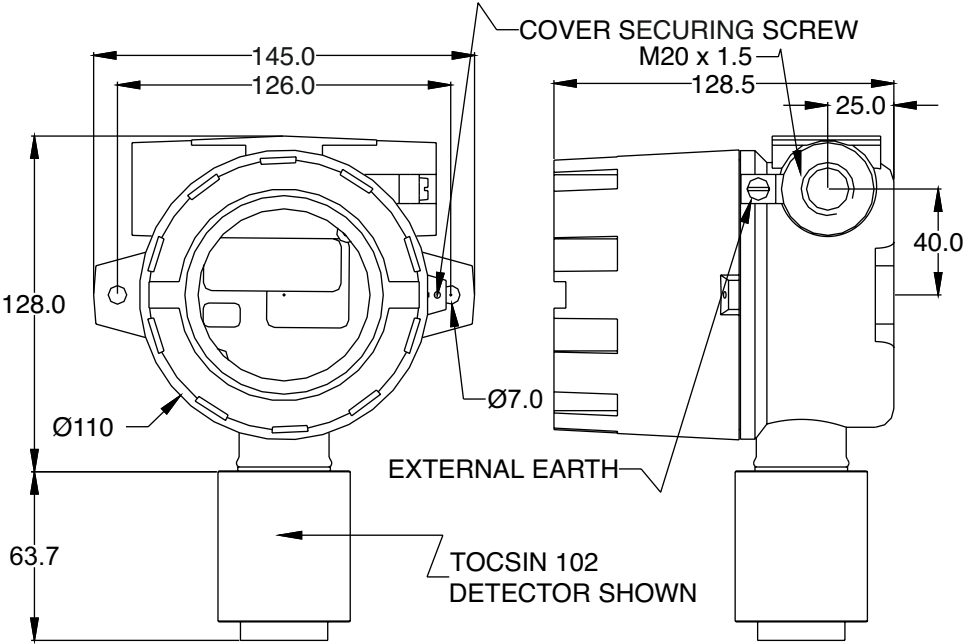
Key Features

▶ Zone 1 and 2 ATEX/IECEx/UKEX approval

▶ Non-Intrusive calibration via magnetic wand

▶ IGD leading long-life sensor technology

▶ One-man calibration

▶ 4-20mA output and relay outputs

▶ Sensor options for over 200 gases including: toxic, oxygen, flammable, refrigerant, VOC.

▶ Illuminated display for at a glance status

▶ Simple operation and easy maintenance

▶ Easy to use sensor replacements – plug replaceable

▶ IP 66

▶ At a glance display showing live gas concentration, alarm and fault status.

▶ Remote sensor options for lighter than air gases

SPECIFICATIONS

Power	18 TO 32V DC with Relay Option. Typically 4W 12 to 32V DC without Relay Option.
Electrical Outputs	3 Wire 4-20mA (4-Wire Addressable Capability)
JB Housing Material	Junction Box, Copper Free Aluminium Alloy Epoxy Coated Option for 316 Stainless Steel and Marine Paint Finishes
Sensor Housing Material	Sensor, Stainless Steel 316 S16
Explosion Protection	Junction Box, EEx d IIC T6 I I2 D G
Explosion Protection Sensor	EEx d IIC T6 I I2 D G
Housing Dimensions (mm)	110 Diameter x 127 High Plus Detector Option
Cable Entry	2 x M20, NPT Options 1 x M20 Detector Entry

Temperature	-10 Deg Celsius to +55 Deg Celsius
Humidity	20-90% RH Non-Condensing
Sealing	IP66
Mounting	Wall Mount
Weight	1.5Kg

CABLES

Installation Cables

Supported Installation Cables 2 Core 1.5mmSQ or 2.5mmSQ See IGD Cable System Calculator

Typically SWA, MICC, FP200, CY Screened or Similar

APPROVALS

CE   UK CA
2804   2585

Ex IECEx

JB3/903

II 2G Ex db IIC T6/T5 Gb
II 2D Ex tb IIIC T85ºC/ T100ºC Db
Ta = -20ºC to +40ºC/+55ºC
IECEx EXV 16.0002X
ExVeritas 16 ATEX 0140X
ExVeritas 21UKEX0913X
IP66   M20 x 1.5 Entries 12-32V DC
Compliant to IEC 60079-29-1

Ex IECEx

102 Series Detector

II 2G Ex db IIC T6 Gb
II 2D Ex tb IIIC T85°C Db
Ta = -20°C to +40°C
II 2G Ex db IIC T5 Gb
II 2D Ex tb IIIC T100°C Db
Ta = -20°C to +55°C
Rating 12-32VDC 2W
IECEx EXV16.0003X
ExVeritas 16ATEX0141X
ExVeritas 21UKEX0914X

DIMENSIONS

145.0
126.0
COVER SECURING SCREW
M20 x 1.5
128.5
25.0
40.0
Ø7.0
128.0
Ø110
63.7
EXTERNAL EARTH
TOCSIN 102 DETECTOR SHOWN

145.0
126.0
COVER SECURING SCREW
M20 x 1.5
128.5
25.0
40.0
Ø7.0
128.0
Ø110
40.0
EXTERNAL EARTH
MKIII FLAMMABLE GAS DETECTOR SHOWN

MOUNTING DETAILS AND DIMENSIONS FOR COMBINED TOCSIN 903 AND MKIII DETECTOR

IGD

The Tocsin 903 Gas Detector Transmitter can be fitted with a splash guard as pictured above. The splash guard is fitted when the Tocsin 903 is placed in locations where it is liable to come into contact with water. Protecting your detector from water splashes that will interfere with the performance of your detector.

ORDER CODES
4-20mA OUTPUT

Part Number	Description
TOC-903-BCL3	Boron Tri-Chloride 0-10ppm
TOC-903-CO	Carbon Monoxide 0-100ppm
TOC-903-HCO	Carbon Monoxide 0-2000ppm
TOC-903-CO2	Carbon Dioxide 0-5% VOL
TOC-903-HCO2	Cardon Dioxide 0-100% VOL
TOC-903-H2	Hydrogen 0-1000ppm
TOC-903-H2S	Hydrogen Sulphide 0-50ppm
TOC-903-HCL	Hydrogen Chloride 0-10ppm
TOC-903-HIRF	Methane 0-100% VOL
TOC-903-IRF	Flammable (IR) 0-100% LEL
TOC-903-NH3	Ammonia 0-5000ppm
TOC-903-NO	Nitrous Oxide 0-100ppm
TOC-903-NO2	Nitrogen Dioxide 0-20ppm
TOC-903-O2	Oxygen 0-25% VOL
TOC-903-PHC	Flammable (PEL) 0-100% LEL
TOC-903-PIDH	VOC 0-6000ppm
TOC-903-PIDL	VOC 0-50ppm
TOC-903-SIH4	Silane 0-10ppm
TOC-903-SO2	Sulphur Dioxide 0-5ppm
TOC-903A-PIDH	ATEX Controller & PID Addressable I/O 0-6000ppm

** Above controllers include ATEX Detector, ATEX Display and Relay O/P
** For marine and 316 SS versions, contact IGD for part numbers and pricing

ORDER CODES
RELAY & 4-20mA OUTPUT

Part Number	Description
TOC-903R-BCL3	Boron Tri-Chloride 0-10ppm
TOC-903R-CO	Carbon Monoxide 0-100ppm
TOC-903R-HCO	Carbon Monoxide 0-2000ppm
TOC-903R-CO2	Carbon Dioxide 0-5% VOL
TOC-903R-HCO2	Cardon Dioxide 0-100% VOL
TOC-903R-H2	Hydrogen 0-1000ppm
TOC-903R-H2S	Hydrogen Sulphide 0-50ppm
TOC-903R-HCL	Hydrogen Chloride 0-10ppm
TOC-903R-HIRF	Methane 0-100% VOL
TOC-903R-IRF	Flammable (IR) 0-100% LEL
TOC-903R-NH3	Ammonia 0-5000ppm
TOC-903R-NO	Nitrous Oxide 0-100ppm
TOC-903R-NO2	Nitrogen Dioxide 0-20ppm
TOC-903R-O2	Oxygen 0-25% VOL
TOC-903R-PHC	Flammable (PEL) 0-100% LEL
TOC-903R-PIDH	VOC 0-6000ppm
TOC-903R-PIDL	VOC 0-50ppm
TOC-903R-SIH4	Silane 0-10ppm
TOC-903R-SO2	Sulphur Dioxide 0-5ppm

ACCESSORIES

Part Number	Description
5903801	Sun Screen-Rain Guard
5880501	ATEX M20 Stopping Ring
5138901	Ceiling Adaptor
5925801	Pole Clamp
5922701	ATEX Cable Gland
401061	Gas Collector Cone
401465	Disk Filter
401451	ATEX Splash Guard

EC Declaration of Conformity

Declares that the product listed as:

TOCSIN 903

Single channel gas detector controller with display certified for use in potentially explosive atmospheres Can be combined with 102 or MK3 series detectors. Interfaces for alarm relay outputs, 4-20mA signal.

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.

Issuers name and address:

Oliver IGD Limited of
Triton House
Crosby St,
Stockport,
SK2 6SH
United Kingdom

2004/108/EC	**EMC Directive**	
2014/35/EU	**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.

IEC 60079-0:2017 7th Ed	Explosive Atmospheres Equipment General Requirements
IEC 60079-29-1:2016 2nd Ed	Explosive Atmospheres. Gas Detectors. Performance Requirements of Defectors for Flammable Gases.
IEC 60079-1	Equipment protection by flameproof enclosures 'd'
EN 50270	Electromagnetic compatibility - Electrical Equipment for the Detection and Measurement of Combustible Gases, toxic Gases or Oxygen
IEC 60529	Degree of Protection to IP66
EN 60068-2-6	Vibration
EN 50271	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
EN 60335:2012+A11:2014	Electrical Safety
IEC 61010-1:2010 +A1:2016 EN 61010-1: 2010 +A1:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use
Technical File Reference	T750-TF9

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

Quality Assurance Certificate Number
16PQAN0014
Quality Assurance Notification Number:
2585

ExVeritas

Units 16-18 Abenbury Way,
Wrexham Industrial Estate,
Wrexham, LL13 9UZ
United Kingdom

bsi. ISO 9001 Quality Management / ISO 14001 Environmental Management

FS646773   EMS696504

Oliver IGD Limited operate an independently assessed ISO9001:2015 Quality Management and ISO14001:2015 Environmental Management System
Certificate Numbers
FS0646773 & EMS696504

BSI Assurance UK LTD,
London, W4 4AL
United Kingdom

Testing Agency:

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

TÜV SÜD
Mehr Sicherheit.
Mehr Wert.

IECEX Certificate can be checked on-line at
http://iecex.iec.ch/iecex/iecexweb.nsf/421ce8815c53a3afc1257a1e00576486/edf48860d8d8c16fc1257f480050cb78?OpenDocument
TUV Certificates and reports can be checked on-line at https://www.tuev-sued.de/industry_and_consumer_products/certificates

Issued by: Oliver IGD Limited, Stockport, SK2 6SH , United Kingdom

Signature:

Declaration of Conformity in accordance with EN ISO/IEC 17050-1:2010

Name: Andrew J Collier M.I.O.D
Position: Managing Director   Date: 17 Feb 2020   Declaration Ref: T903-DEC-10

INVESTORS IN PEOPLE

bsi. ISO 9001 Quality Management / ISO 14001 Environmental Management
FS646773   EMS696504

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