# **VOC Gas Detectors**

# **Product Data**

Document Ref: SL-029

# International Gas Detectors

Industry leading VOC detection from International Gas Detectors.

Offering the broadest application VOC detection using breakthrough PID technology. Capable of measuring over 300 compounds with ionisation energy of 10.6eV or lower.

Available for ATEX applications and safe areas either as stand alone detectors or as part of a networked system. Detectors can be diffusion based or as sampling gas detectors to suit the application.

# **RANGE OPTIONS**

Range options to suit your application0-50ppm0-200ppm0-100ppm0-2,000ppm

# Non-Electrode UV Lamp Design

IGD PID's proprietary ultraviolet (UV) lamp technology utilises non-electrode UV lamp design. This curtails the effects of sputtering and contamination which is a major drawback of current PID technology.

# Industry Leading Long Lamp Life

Our new standard for PID technology raises the bar for VOC detection. With our non-electrode UV patent design ensures your IGD PID sensor will last in excess of 15,000+ hours. This is a 50% increase in lamp life compared to the industry standard!

# Unique Patent Electrode Stack Design

Our unique electrode stack design ensures the common issues of humidity and temperature are negated and does not affect our VOC detectors. This also eliminates false readings and drift.

IGD new range of PID Detectors are setting a new standard for VOC detection. Detectably better PID from the experts in gas detection.

# Always use latest version data sheets from IGD website

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# \* Terms and Conditions Apply







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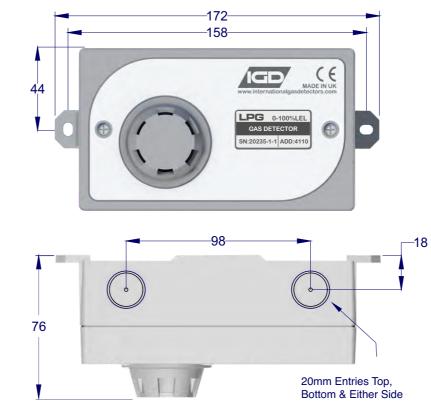
# International Gas Detectors

**TOCSIN 750 SERIES SAFE AREA** Addressable PID VOC Detector for Non-ATEX Areas

IGD's TOC-750 safe area gas detectors have been designed for light industrial and commercial environments. Providing clients with a detector suited for their application.

# DIMENSIONS





# CABLES

- > IP54 Waterproof and Dust Proof.
- > Versatile PID design for over 300 VOC gases.
- > Unique IGD labyrinth sensor design protects sensors from dust and dirt ingress.
- > Service via secure wifi pages.
- > Typically 70% cost saving on installation alone.
- > In excess of 15,000 hours runtime, 50% more than competitors.
- > Plug replaceable sensors pre-calibrated.
- > Low ppm detection levels available.
- > 10 Year warranty (terms and conditions apply)
- > Secure digital communication.
- > Not effected by humidity
- > Minimising false readings

# GENERAL SPECIFICATIONS

Power	12 to 26V DC	**Please see individual datasheets for full detector specifications These can be found on internationalgasdetectors.com/downloads
Construction	ABS	
Sensor	Direct Pellistor Interface	Or on: www.internationalgasdetectors.com/product/toc-750- addressable-safe-area-gas-detector/
	Input for IGD Toxic, Oxygen, Infra red and PID detectors	
Communication	IGD Sentinel+ Protocol, 2-Wire Connection L1,L2	
I/O Diffusion Types	1 off SPCO Relays 4A/230V AC Non-Inductive User Configurable from 650/750 Controllers 2 multifunction ports as: Digital Input Max 0.2Hz Digital Input 0-3V Max 0.2Hz 4-20mA input or Solid State Output 24V DC Max 300mA shared Across both Ports	



# ORDER CODES

## Part Number

### Description

**Diffusion Types** TOC-750-PID05 TOC-750-PID01 TOC-750-PID02 TOC-750-PID20 TOC-750-PID50

0-50ppm Isobutylene Range 0-100ppm Isobutylene Range 0-200ppm Isobutylene Range 0-2000ppm Isobutylene Range 0-5000ppm Isobutylene Range

Full information see individual data sheets for TOC-750 safe area detectors and TOC-750S series samplers.

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

Typically SWA, FP200, CY Screened or Similar



# **DIFFUSION TYPE FEATURES**

> IGD Industry Unique Sentinel+ Digital/Addressable Technology.

> 7 Input and output per TOC-750 detector node.

Product Data

Document Ref: SL-029

# **International Gas Detectors**

# **TOCSIN 750X SERIES** Addressable Photoionisation Detector

IGD's PID sensors are the most accurate and stable PID defectors available on the market. The TOC-750X series is an ATEX Addressable detector using our leading digital technology.

TOC-750X Fn <- TOC-750XD <- TOC-750X

# GENERAL SPECIFICATIONS

Power	12 to 26V DC	**Please see individual datasheets for full	
Construction	Junction Box: Aluminium Alloy, Powder Coated (Stainless Steel Option) Detector: 316 Stainless Steel	detector specifications and ATEX/IECEx approvals These can be found on internationalgasdetectors.com/downloads	
Communication	IGD Sentinel+ Protocol, 2-Wire Connection L1,L2	Or on: www.internationalgasdetectors.com/produ	
Temperature	-20 to 55 Deg C**	ct/750-atex-addressable-gas-detector/	
Humidity	0-95% RH Non-Condensing		
Sealing	Junction Box: IP66 Sensor:IP66		
Mounting	Wall Mount		
Weight ATEX/IECEx	1.35Kg Zone1 and 2 (Gas). 21 and 22 (Dust)		

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# FEATURES

> Secure digital communication.

> Not effected by humidity > Minimising false readings

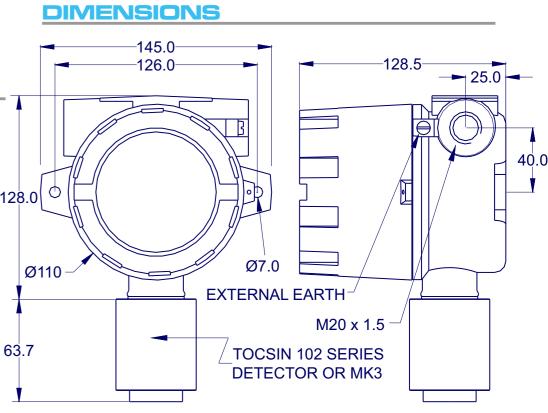


- **ORDER CODES**
- Part Number
- > TOC-750X-PID05
- > TOC-750X-PID07
- > TOC-750X-PID02
- > TOC-750X-PID20
- > TOC-750X-PID50

Please note for TOC-750XD part numbers please contact IGD

# CABLES

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





	Range	Description
5	0-50ppm	ATEX/IECEx Addressable Isobutylene Calibration
1	0-100ppm	ATEX/IECEx Addressable Isobutylene Calibration
2	0-200ppm	ATEX/IECEx Addressable Isobutylene Calibration
0	0-2,000ppm	ATEX/IECEx Addressable Isobutylene Calibration
0	0-5,000ppm	ATEX/IECEx Addressable Isobutylene Calibration





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**Product Data** 

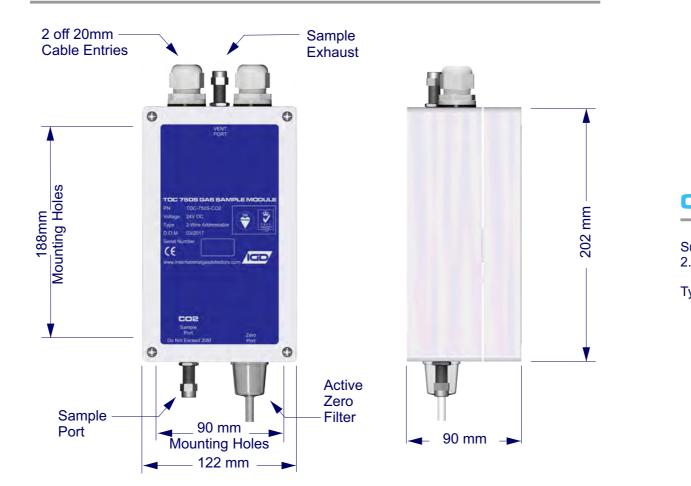
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# International Gas Detectors

# **TOCSIN 750S SERIES SAMPLER** Addressable Sampling (Aspirated) Gas Detector

The TOC-750S aspirated VOC detector is ideal for areas that are hard to access, potentially harmful for sensors or areas that need stable low level VOC alarms.

# DIMENSIONS



# GENERAL SPECIFICATIONS

Power	12 to 26V DC	**Please see individual datasheets for full	
Construction	ABS	detector specifications. These can be found on	
Sensor	Direct Pellistor Interface	internationalgasdetectors.com/downloads	
	Input for IGD Toxic,Oxygen, Infra red and PID detectors	Or on: www.internationalgasdetectors.com/produ	
Communication	IGD Sentinel+ Protocol, 2-Wire Connection L1,L2	ct/tocsin-750s-aspirated-gas-detector/	
I/O Samplers	4 off SSR outputs (switched Neg 24v DC, common 200mA load shared across all O/P's) Op1 dedicated to low flow.		
Sealing	IP54		

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TOC 7505 GAS SAMPLE MODULE TOC-750S-CO2

24V DC

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C02

Sample Port

Do Not Exe

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2-Wire Addr

/oltage

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Serial Nu

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# SAMPLER FEATURES

- > IGD Industry Unique Sentinel+ Digital/Addressable Technology.
- > Sample up to 20M away.
- > Versatile PID design for over 300 VOC gases.
- > Service via secure wifi pages.
- > Typically 70% cost saving on installation alone.
- > In excess of 15,000 hours runtime, 50% more than competitors.
- > Plug replaceable sensors pre-calibrated.
- > Low ppm detection levels available.
- > 10 Year warranty (Terms and Conditions apply)
- > Secure digital communication.
- > Not effected by humidity
- > Minimising false readings



# ORDER CODES

	Part	Number	
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### Description

Sampling Types TOC-750S-PID05 TOC-750S-PID01 TOC-750S-PID02 TOC-750S-PID20 TOC-750S-PID50

0-50ppm Isobutylene Range 0-100ppm Isobutylene Range 0-200ppm Isobutylene Range 0-2000ppm Isobutylene Range 0-5000ppm Isobutylene Range

Full information see individual data sheets for TOC-750S series samplers.

# CABLES

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

Typically SWA, FP200, CY Screened or Similar



> Non-Electrode UV Lamp design eliminating the effects of sputtering and contamination.

# **Product Data**

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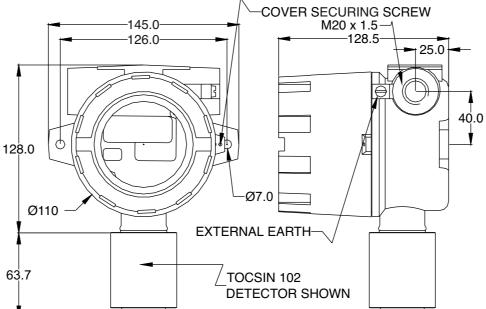
# **International Gas Detectors**

# **TOCSIN 903 SERIES** Standalone ATEX PID Gas Detector

**TOCSIN 903 Series ATEX Transmitters** can be fitted with any of the VOC range options available from IGD as well as any other detector type from our wide range.

# **ORDER CODES** 4-20mA OUTPUT

Part Number	Description
TOC-903-PID05	0-50ppm as Isobutylene
TOC-903-PID01	0-100ppm as Isobutylene
TOC-903-PID02	0-200ppm as Isobutylene
TOC-903-PID20	0-2000ppm as Isobutylene
TOC-903-PID50	0-5000 ppm as Isobutylene



# CABLES

# **TOC-903 FEATURES**

> Standalone 4-20mA and relay outputs

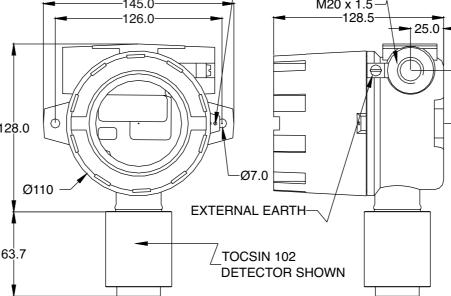
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- > IP68 Waterproof and Dust Proof.
- > Versatile PID design for over 300 VOC gases.
- > Non-Electrode UV Lamp design eliminating the effects of sputtering and contamination.

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- > In excess of 15,000 hours runtime, 50% more than competitors.
- > Plug replaceable sensors pre-calibrated.
- > ATEX/IECEx Zone 1 and 2 (Gas) and 21 and 22 (Dust)
- > 10 Year warranty (Terms and Conditions apply)
- > One-man calibrations
- > Non-intrusive magnetic wand display
- > Not effected by humidity
- > Minimising false readings



# 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	Zone 1 and 2 (gas) and 21 and 22 (Dust)
	Zone 1 and 2 (Gas) 21 and 22 (Dust)
Explosion Protection Sensor	
Housing	110 Diameter x 127 High Plus Detector Option
Dimensions (mm)	2 x M20 X1.5 , NPT Options
Cable Entry	1 x M20 X 1.5 Detector Entry



Part Number	Description
TOC-903R-PID05	0-50ppm as Isobutylene
TOC-903R-PID01	0-100ppm as Isobutylene
TOC-903R-PID02	0-200ppm as Isobutylene
TOC-903R-PID20	0-2000ppm as Isobutylene
TOC-903R-PID50	0-50000 ppm as Isobutylene



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



Typically SWA, FP200, CY Screened or Similar

**Please see individual datasheets for full
detector specifications and approvals.
These can be found on
internationalgasdetectors.com/downloads

Or on:

www.internationalgasdetectors.com/produ ct/tocsin-903-atex-standalone-gasdetector-transmitter/

# Addressable Solutions



One System, Ultimate Flexibility, No Compromises.

\*\*Please see individual datasheets for full detector specifications These can be found on internationalgasdetectors.com/downloads





# One 2-Core Cable - Everything Connected

ATEX	SAMPLER	RSI
	2	N
1	(1)	1
	N	2
2 <sup>†</sup>	N	2
<b>2</b> <sup>†</sup>	N	2
	N	2 1 2 1 1
$(2)^{\dagger}$	4	2
(1)	N	(1)
N	N	
N	N	(1)
	1	1

- In order to utilise this option a + break out junction box is required. 2 Multi-Function I/O Ports. **Option Selectable in Any** Combination tt 750B Version With Audible and Visual Alarms
- Number available per a (1) detector.