



## International Gas Detectors

### TOCSIN 635 SERIES

Advanced Addressable 2-Wire Gas Detection System

The TOC-635 system controller From IGD uses the latest Sentinel+™ digitally addressable technology. Specifically designed for gas detection systems Sentinel+™ combines fast reliable response, data security and easy to use error proof features for the system you need.



▶ **EASY TO INSTALL**

Just one **2 Core** cable minimising costs  
No cable polarity for fast & easy install  
One-click auto-setup & self check, ready to use

▶ **SIMPLE SERVICING**

▶ Hot-swap detectors for exchange without engineer cost  
Auto-detect allows simple changes with no call out costs  
Inbuilt web pages enable you to view and download Events

▶ **FLEXIBLE**

Single cable interconnection to other devices  
▶ Add or remove devices with a simple Find function to update controller  
Install ancillaries locally to the nearest detector

▶ **COST EFFECTIVE**

Low-cost system for 1-8 or 1-32 devices  
Single cable can save you 70-80% install costs  
▶ Auto setup removes commissioning costs

▶ **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: T635M V10



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# THE POWER OF 2

One 2 Core Cable - Everything Connected

## TOCSIN 635 SERIES

Advanced Addressable 2-Wire Gas Detection System

The Sentinel +™ 2-Wire technology is an advanced digitally communicating gas detection system from IGD. The system provides fast efficient error free performance specifically designed to meet the unique requirements posed by gas detection hazards. The system provides ultimate flexibility to link your gas detection system to provide alarms, interface to plant shut down hardware and communicate clearly to BMS and similar systems. 2 Core cabling for both power and communication with no polarity requirement means cabling is minimised, reducing system costs with no compromise.



### FEATURES



One Touch Set up Wizard

Automatically Detect And Install System

Clear Audible and Visual Alarms

Assignable LED's Clearly Show Where the Alarm is.



Flush or Rear Mount

Top or Bottom or Rear Cable entries

Built in Slam Switch Alarm.

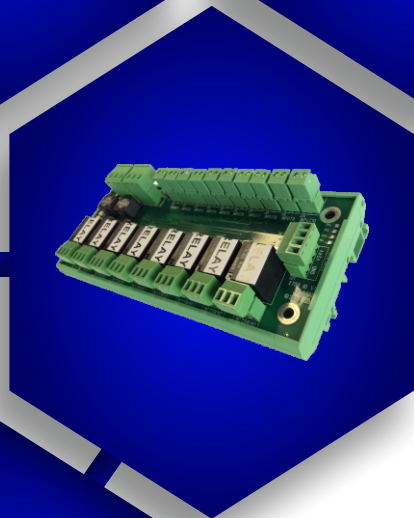
All Your Interfaces in One Place



### OPTIONS

- ATEX Detectors
- Safe Area (Non ATEX) Detectors
- I/O Cards
- Room Status Indicators
- Sampling Gas Detectors
- Audible Visual Alarms
- Illuminated Signs

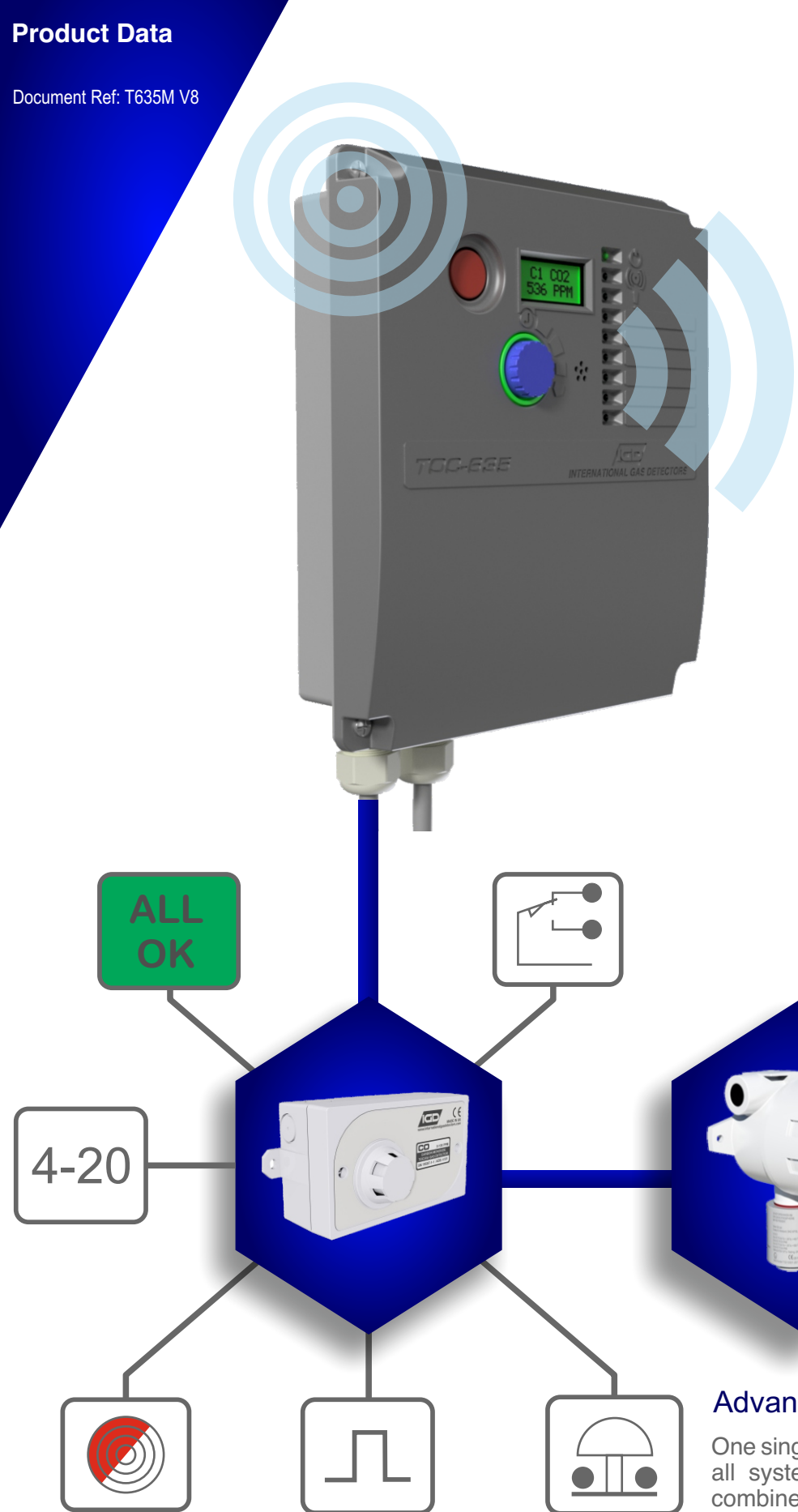
One 2-Core Cable Run Many Possibilities





# THE POWER OF

One 2 Core Cable - Everything Connected



## Advanced Addressable 2-Wire Gas Detection System

One single 2-core cable with no required connection polarity connects all system devices. Auto find, Auto configure and Auto update, combined with our downloadable status reports are just some of the key features of the system. This gives you the peace of mind that you have the right gas detection system doing the right job. Protecting both your plant and personnel.

OPTIONS	SAFE AREA	ATEX	SAMPLER	RSI
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Sensor I/P Toxic, IR, PID	①	①	②	(N)
Sensor I/P Pellistor	①	①	①	①
4-20mA I/P *	②	② †	(N)	②
Digital I/P *	②	② †	(N)	②
Counter I/P *	②	② †	(N)	②
Relay O/P *	②	② †	(N)	①
Digital O/P *	②	② †	④	②
2 x 8 Display	①	①	(N)	①
Sounder	①	(N)	(N)	①
Estop	①	(N)	(N)	①
Key Switch	①	(N)	①	①

### KEY

- Room Status Indicator
- Control Relay
- mA Input Signal
- Beacon - Sounder
- Digital Input
- E-Stop / Break Glass / Call Point

† In order to utilise this option a break out junction box is required.

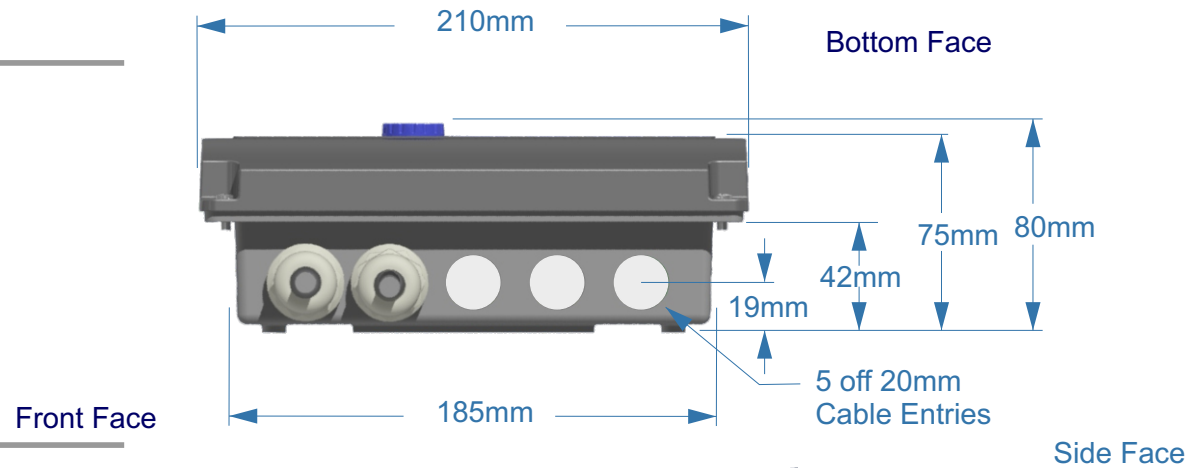
\* 2 Multi-Function I/O Ports. Option Selectable in Any Combination

① Number available per a detector.

## SPECIFICATIONS

Power	230V AC 50Hz 50W	Other I/O	Sounder 85dB @ 300mm (Mutable) 1 off RS485 Port Modbus in/out (PLUS only) 2 off Multi-Function Inputs mA or Digital (PLUS only) 6 User Defined Alarm Indication LEDs Illuminated RGB Light Ring, Alarm, Fault, Menu etc
Construction	ABS	Inputs	Up to 8 or 32 off Addressable Series Detectors or I/O Modules see feature table  Note external Booster PSU may be required
Display	2 Lines x 8 Digit LCD Display Multi-Colour Backlight (Red-Alarm, Yellow-Fault, Blue-Normal)	Temperature	-20 to +55 Deg C Full Specification. To 55 Deg C De-Rate PSU by 15%
User	IGD Jog Wheel Option Select, Alarm Reset, RGB	Humidity	20-90% RH Non-Condensing
Outputs (see table for version differences)	3 off SPCO Relays 4A Non-Inductive User Configurable 1 off Fault Relay SPCO Relays 4A Non-Inductive 1 off Solid State Beacon Sounder Output Additional Digital Inputs/Relay Outputs Can Be Added To Highways if Required see feature table for model differences	Sealing	IP54
		Mounting	Wall Mount
		Weight	1.2Kg

## DIMENSIONS

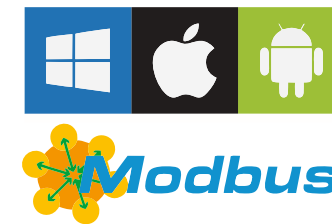


## FEATURES

	TOC-635-PLUS	TOC-635-MICRO
Detector Ports	1	1
Supported Detectors/Modules	32	8
On-Board relays	4	2
External Relays/SSR	99	20
Digital Inputs	2	0
WiFi Connectivity	YES	NO
Real Time Clock	YES	NO
RGB Display	YES	YES
Illuminated RGB Menu Wheel	YES	YES
6 Assignable Alarm LEDs	YES	YES
Sounder	YES	YES
Event Log Report	YES	NO
Beacon Sounder Output Port	YES	NO
Modbus Connectivity	YES	NO
Battery Backup Port	YES	NO
System Status Report	YES	NO
Calibration Status Report	YES	NO

## ORDER CODES

Part Number	Description
TOC-635-PLUS	230V AC Control Panel 50W PSU Standard Features including 2 x 8 RGB Display and Jog Wheel 4 Relays, 1 Highway, 32 Devices
TOC-635-MICRO	230V AC Control Panel Standard Features including 2 x 8 RGB Display and Jog Wheel 2 Relays, 1 Highway, 8 Devices
TOC-635-BAT	External Battery Module 2 x 1.2Ah Batteries 0.5M Connection Cable
TOC-750-BAT1	110/230V AC Power Module 300W PSU 5AH Battery Backup NOTE: Use with 24V DC Version Tocsin 650/750
TOC-750-BAT2	110/230V AC Power Module 300W PSU 17AH Battery Backup NOTE: Use with 24V DC Version Tocsin 650/750
TOC-750-BAT3	Booster Module With Battery Backup 5AH Battery Capacity 24V DC PSU at 150W
TOC-750-BAT4	Booster Module 24V DC PSU at 150W
TOC-750-IO2	Expansion I/O Card 8 Relay Outputs 10 Digital/Analogue Ports
FB-BX-1	Field Accessory Box Fits 2 Expansion Cards (TOC-750-IO2)



[Ex Gb] IIC

## CABLES

### Installation Cables

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

Typically SWA, MICC, FP200, SY, CY Screened or Similar



International Gas Detectors

# EC Declaration of Conformity

Declares that the product listed as:

**TOC-635-PLUS**  
**TOC-635-MICRO**

Addressable Gas Detection Control Panel

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**  
**2014/35/EU**      **Low Voltage Equipment Directive** (note not applicable to 24V DC Powered Versions)

Issuers name and address:

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

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.
- EN 50270      Electromagnetic compatibility - Electrical Equipment for the Detection and Measurement of Combustible Gases, toxic Gases or Oxygen
- IEC 60529      Degree of Protection to IP54
- 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

Technical File Reference      T650-TF9

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

Quality Assurance Certificate Number  
**16PQAN0014**

Quality Assurance Notification Number:  
**2585**



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



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  
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www.imq.it



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Report Ref AT19-0036585-01

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: T650-DEC-6



FS646773      EMS696504



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