#### **Product Data**

Document Ref: T635M V10



# **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.



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 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





**OPTIONS** 

**ATEX Detectors** 

**Room Status Indicators** 

Sampling Gas Detectors

**Audible Visual Alarms** 

**Illuminated Signs** 

I/O Cards



One 2 Core Cable - Everything Connected





# 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



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.

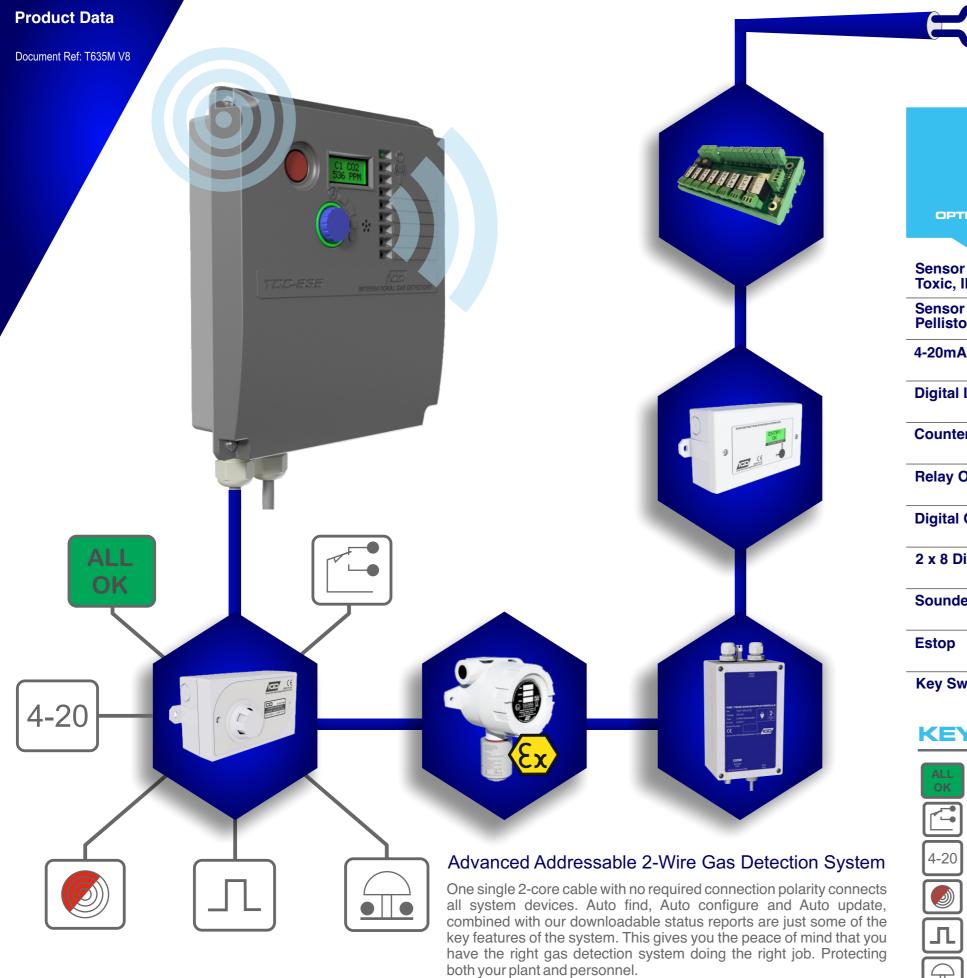
All Your Interfaces in One Place





Modbus







One 2 Core Cable - Everything Connected

OPTIONS	SAFE AREA	ATEX	SAMPLER	RSI
Sensor I/P Toxic, IR, PID	1	1	2	N
Sensor I/P Pellistor	1	1	1	1
4-20mA I/P *	2	<b>2</b> <sup>†</sup>	N	2
Digital I/P *	2	<b>2</b> <sup>†</sup>	N	2
Counter I/P *	2	<b>2</b> <sup>†</sup>	N	2
Relay O/P *	2	<b>2</b> <sup>†</sup>	N	1
Digital O/P *	2	<b>2</b> <sup>†</sup>	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
- Number available per a detector.

#### **Product Data**

Document Ref: T635M V8



## **SPECIFICATIONS**

Power	230V AC 50Hz 50W	Other I/O	Sounder 85dB @ 300mm (Mutable)
Construction	ABS		1 off RS485 Port Modbus in/out (PLUS only) 2 off Multi-Function Inputs mA or Digital (PLUS only)
Display	2 Lines x 8 Digit LCD Display Multi-Colour Backlight (Red-Alarm, Yellow-Fault,		6 User Defined Alarm Indication LEDs Illuminated RGB Light Ring, Alarm, Fault, Menu etc
	Blue-Normal)	Inputs	Up to 8 or 32 off Addressable Series Detectors or I/O Modules see feature table
User	IGD Jog Wheel Option Select, Alarm Reset, RGB		ood router o table
0 1 1	0 (000000 ) 4444   4 (0 )		Note external Booster PSU may be required
Outputs	3 off SPCO Relays 4A Non-Inductive User		
(see table for	Configurable	Temperature	-20 to +55 Deg C Full Specification. To 55 Deg C De-Rate PSU
version	1 off Fault Relay SPCO Relays 4A Non-Inductive	•	by 15%
differences)	1 off Solid State Beacon Sounder Output		• • • • • • • • • • • • • • • • • • • •
,	Additional Digital Inputs/Relay Outputs Can Be	Humidity	20-90% RH Non-Condensing

Sealing

Mounting

Weight

## 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

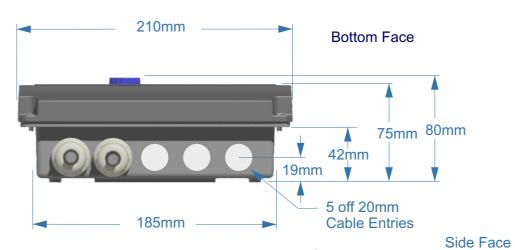
10 Digital/Analogue Ports

FB-BX-1 Field Accessory Box

Fits 2 Expansion Cards (TOC-750-IO2)

# DIMENSIONS

model differences



IP54

1.2Kg

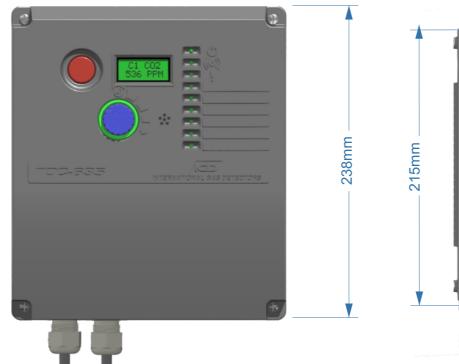
Wall Mount

# **FEATURES**

Front Face

Added To Highways if Required see feature table for

	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







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

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





# **EC Declaration of Conformity**

Declares that the product listed as:

Issuers name and address:

# TOC-635-PLUS

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.

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.

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

Electrical Safety

Technical File Reference

EN 60335:2012+A11:2014

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 T650-TF9

bsi.

ISO
9001
Quality
Management
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 IMQ

IMQ S.p.A con Socio Unico Via Quintiliano 43 Italia 20138 Milano www.imq.it

[Ex Gb] IIC

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

Position: Managing Director Date: 17 Feb 2020 Declaration Ref: T650-DEC-6



