APPLICATION DATA SHEET

OLIVER IGD

TOCSIN 625
Fast, Effective Gas Detection System Controller

TOC-625 is a multi-channel detector controller in an easily installed and implemented small format package. The system can be used with any of the Tocsin Addressable range detectors or I/O modules providing maximum flexibility. The controller can be wall mounted or panel mounted and has a pump and duct mount options. The controller has two SPCO relays as standard with three

4-20mA outputs and an RS485 Modbus interface.

Features

- Flexible Power Supply Options
- Wall or Panel Mounting
- Relay Outputs as Standard
- 4-20mA Outputs as Standard
- RS485 Modbus as Standard
- Control up to 8 Devices as Gas Detectors or I/O Modules
- LCD Display With Multi Colour Backlight, Flashes Red on Alarm, Flashes Yellow on Fault etc
- Battery Backup Option

Standard Specifications

Power	110/230V AC 50/60Hz 25W Standard 24V DC Option
Construction	ABS
Display	2 Lines x 8 Digit LCD Display Multi-Colour Backlight (Red-Alarm, Yellow-Fault, Blue-Normal)
Outputs	2 off SPCO Relays 4A Non-Inductive User Configurable 3 off 4-20mA Linear Outputs User Configurable
Other I/O	Sounder 80dB @ 100mm (Mutable) RS485 Port Modbus
Inputs	8 off Addressable Series Detectors or I/O Modules
Temperature	-5 to 55 Deg C
Humidity	0-95% RH Non-Condensing
Sealing	IP54
Mounting	Wall Mount, Panel Mount Kit Option, Duct Mount Kit Option
Weight	840g

IGD
International Gas Detectors
CH4 H2S CO2 NO2 SO2 NO CO

OLIVER IGD

ISO 9001 : 2000
sira
UKAS
023827
Ref ROS625C

EC Declaration of Conformity

CE

Issuers name and address:

Oliver IGD Limited of
4a Pepper Rd
Stockport, SK7 5BW
United Kingdom

Declares that the product listed as:

TOC-625

Single or Multi-Channel Detector 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**
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 50271:2001 — 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. *Excluding requirements for SIL*

Technical File Reference — T625-TF9

Notified Body For ATEX and/or QAN:

Sira Test & Certification Ltd
Hazardous Area Centre,
Rake Lane
Eccleston,
Chester,
CH4 9JN.
United Kingdom

Oliver IGD Limited operate an independently assessed ISO9001:2008 Quality Assurance System and ATEX QAN.

Quality Assurance Certificate Number

023827

Quality Assurance Notification Number

SIRA 02ATEX M174

Testing Agency:

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

TUV SUD

Mehr Sicherheit.
Mehr Wert.

Issued on: At Oliver IGD Limited, Stockport, SK7 5BW , United Kingdom

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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: 5.October 2013   Declaration Ref: TOC-625-DEC-1

IGD
International Gas Detectors
CH4 H2S CO2 NO SO2 NO CO

OLIVER IGD
Pepper Road
Bramhall Technology Park
Stockport
SK7 5BW
England

Tel: +44 (0)161 483 1415
Fax: +44 (0) 161 484 2345
Email: sales@internationalgasdetectors.com
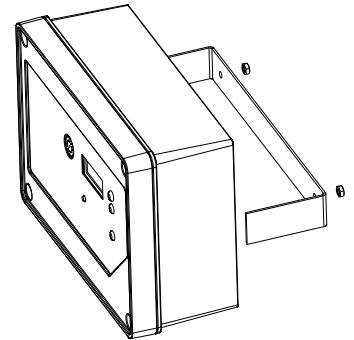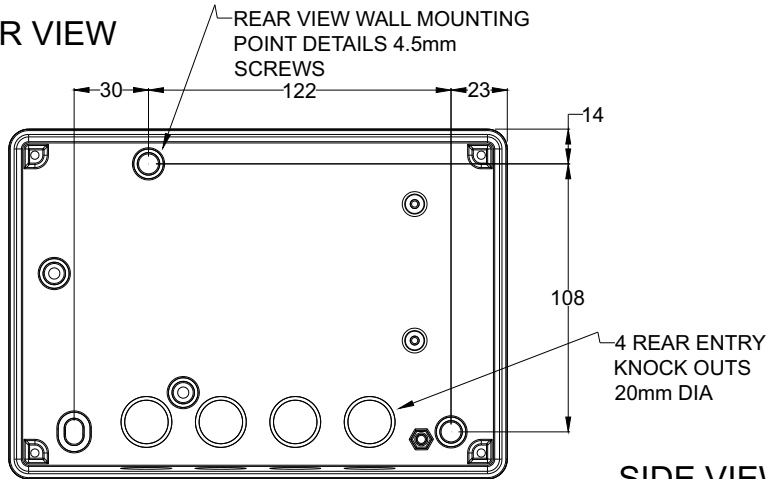Website: www.internationalgasdetectors.com

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REAR VIEW

REAR VIEW WALL MOUNTING POINT DETAILS 4.5mm SCREWS

30   122   23

14

108

4 REAR ENTRY KNOCK OUTS 20mm DIA

SIDE VIEW

PANEL MOUNT VERSION (CLAMP)

84

79

18

PANEL CUT OUT

FRONT VIEW

TOCSIN 625
ADVANCED GAS DETECTION

II   CO
90   PPM

FAULT

Function

POWER

CE

141 136

201

BOTTOM VIEW

4 HOLES DIA 20mm

24

30   30   30   50

196

PANEL CUT OUT

Optional Panel Mounting Kit
PN 5686401
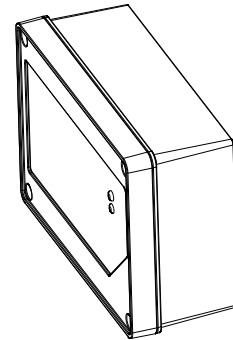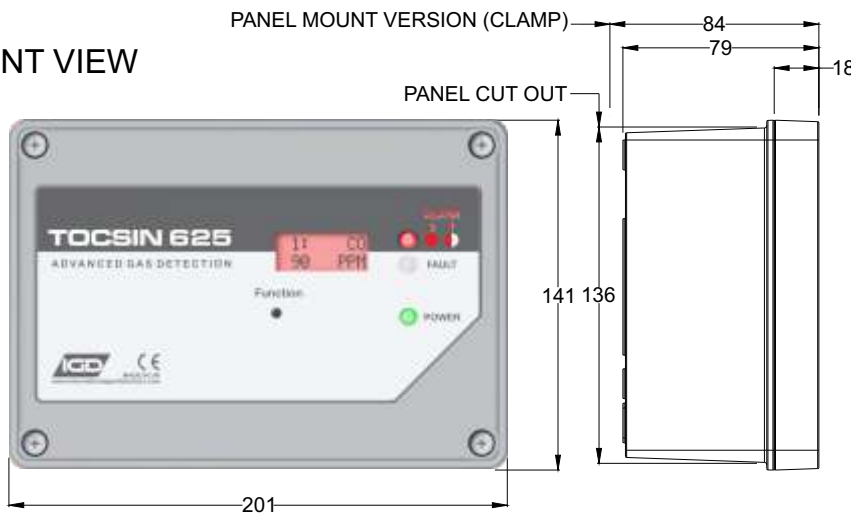
Optional Battery Backup Kit
PN 5686601
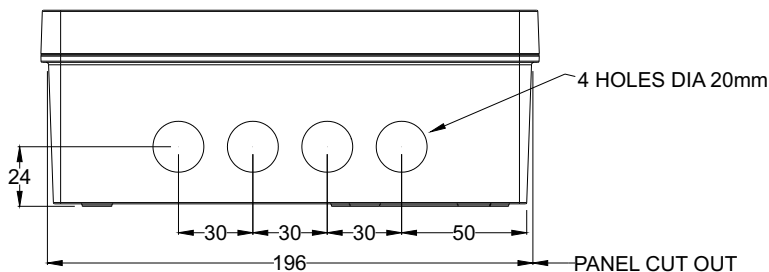
Note this module uses the same style enclosure as the TOC-625 and houses batteries and charge control. It is usually mounted below the TOC-625 and is supplied with all required connectors.

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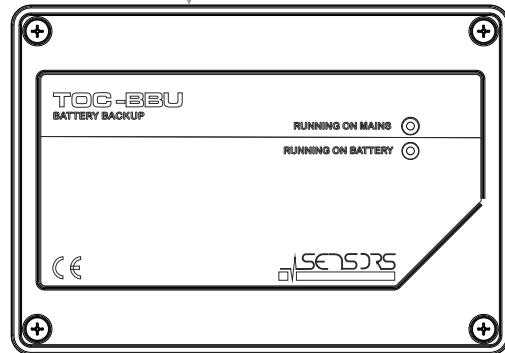**Control Systems** | Transmitters | Sensors | Accessories

Flammable Gas Detection
Toxic Gas Detection
Oxygen Depletion

Protecting People Since 1917

Combine Controllers With Detectors and I/O Nodes as Required

Use with TOC-30 Series Detectors and I/O modules. ABS housed detectors sealed up to IP65 rating.

This detector series is standard 2 gang mount for surface, flush mounting or mounting to dado rail.

Interface to TOC-30 Series annunciators for additional I/O functions. The smart alternative to beacons, sounders and slam switches.

Interface to TOC-20 Series Infra Red CO2 Sensors. Reliable accurate CO2 monitoring with humidity and temperature readings.

TOC-625 Controller 110/230V AC	5685401
TOC-625 Controller 24V DC	5686501
TOC-625 Controller Panel Mount Kit	5686401
TOC-625 Battery Backup Module	5686601

International Gas Detectors

CH4 H2S CO2 NO SO2 NO CO

OLIVER IGD

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023827
Ref ROS625C

Control Systems   Transmitters   Sensors   Accessories
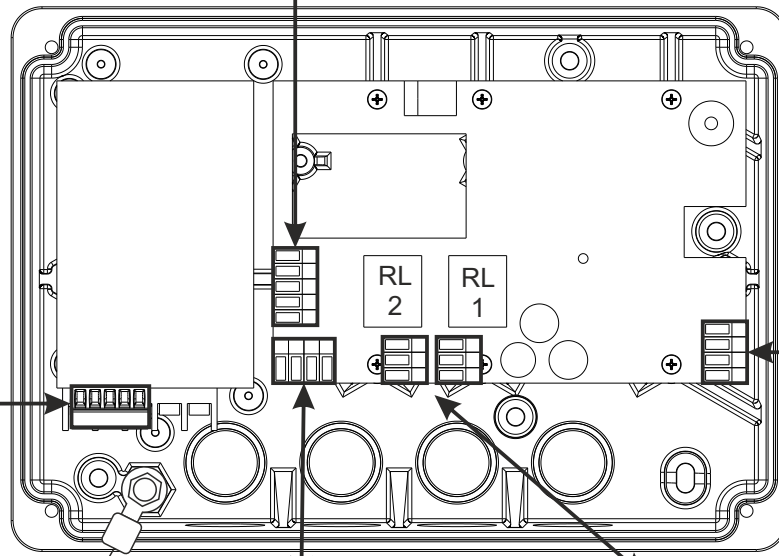
Analogue Output Interfaces

| +24V DC |
| - 24V DC |
| mA Sig 1 |
| mA Sig 2 |
| mA Sig 3 |

Note as standard mA outputs are set. These can be re-configured as 0-10V signals

Front View Cover Open

Mains Power Connector 110/230V AC 50/60Hz

| L | nc | N | nc | E |

RL 2   RL 1

RS485 Modbus Comms Port

| 0V DC |
| A |
| B |
| 24V DC |

Connect to detectors and nodes using 4 core 1.5mmSQ CY style cable or FP200 style cable as appropriate. Cable screens should be terminated as indicated

Connect up to 8 addressable devices. These can be Gas Detectors or by using the available I/O Nodes any 4-20mA Device such as pressure or temperature transmitters, read these back to the control panel as any other detector and set alarms as required.
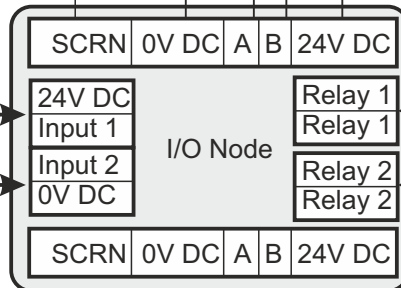
Detector I/O Interface
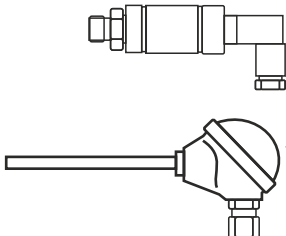
| 0V DC | A | B | 24V DC |

Normally Closed	Connections common to each of the two relay outputs
Common	
Normally Open	
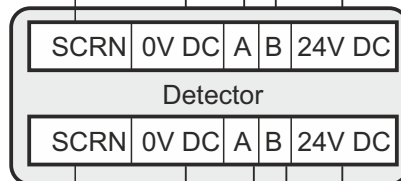
Gas detectors count as one device, there can be any mix of gas detector types on the highway. For example Flammable Gas Detectors, Carbon Monoxide, Oxygen etc.

| SCRN | 0V DC | A | B | 24V DC |

Detector

| SCRN | 0V DC | A | B | 24V DC |

| SCRN | 0V DC | A | B | 24V DC |

24V DC		Relay 1
Input 1	I/O Node	Relay 1
Input 2		Relay 2
0V DC		Relay 2

| SCRN | 0V DC | A | B | 24V DC |

Each I/O Node counts as one device and can be used to interface to analogue devices and provide additional relay outputs where they are needed to control items such as beacon-sounders, solenoids or interfaces to fire panels. Depending on loading external power may be required.