TOCSIN 640

Pre-Configured Gas Detection System, CO2, O2 or N2O

With all the features of a standard 640 system and pre-fitted with a detector and mains lead. Available with CO2, Oxygen or N2O detection . This version of the 640 is Pre-Calibrated and configured with standard alarms based on HSE document EH40. Ready to use within minutes of delivery with virtually no installation. The clear to read multi-colour display Provides clear indication of alarm status. Green in normal operation, flashing red on alarm and with level indication the system is simple to fit and operate. The built in sounder also provides clear indication of an alarm condition. Alarms automatically reset once the hazard is clear requiring no user input. Clear, Simple to use and effective protection.

Idea for use in:

Small Surgeries For Oxygen Depletion Monitoring

CO2 Detection in Horticulture, Brewery Applications

Background N2O Monitoring

Systems are shipped with factory calibration certificates. The gas detectors fitted have long life Infra-red or polymer cells fitted with typical operational life in excess of 5 years.

Features

- Supplied Pre-Calibrated with Detector: CO2, Oxygen or N2O
- Easy to Wall Mount
- Pre-Fitted With Mains Lead
- Expand Later as Required With Additional Detectors:
- Relay Outputs as Standard
- 4-20mA Output as Standard
- RS485 Modbus as Standard
- Control up to 24 Devices as Gas Detectors or I/O Modules
- LCD Display With Multi Colour Backlight, Flashes Red on Alarm, Flashes Yellow on Fault etc
- E-Stop Input (System Configurable)
- Dedicated Interlock to Fire Systems (System Configurable)

CO2
O2
N2O

EC Declaration of Conformity

Issuers name and address:

Oliver IGD Limited of
Triton Hous,
Crosby Street,
Stockport,
Sk2 6SH
England

CE

Declares that the product listed as:

TOC-640

Single or Multi-Channel Detector Control Panel Combined with a Gas Detector

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 50271:2010	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*
EN 61000-6-2:2005	EMC Generic standards. Immunity for industrial environments
EN 61000-6-4:2007/A1:2011	EMC Generic standards. Emission standard for industrial environments
EN 61000-3-2:2014	EMC Limits. Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3:2013	EMC Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase
Technical File Reference	T640-TF9

Product Markings   **CE**   **TOC-640**   S/-*serial number*

Oliver IGD Limited Operate and Independently assessed ATEX/IECEX QAN.	Oliver IGD Limited operate an independently assessed ISO9001:2008 Quality Management System.	Testing Agency:
Quality Assurance Certificate Number **ExVeritas 16PQAN0014**	Quality Management Certificate Number **FS 646773**	TUV - SUD Octagon House Concorde Way PO 15 5RL Fareham
Quality Assurance Notification Number: **2585**		
ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, UK, LL13 9UZ	BSI Assurance UK LTD, Chiswick High Road, London W4 4AL UK	

TUV Certificates and reports can be checked on-line at https://www.tuev-sued.de/industry_and_consumer_products/certificates

Issued on: 20th Feb 2016   At Oliver IGD Limited, Stockport, SK2 6SH , United Kingdom

Signature:

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

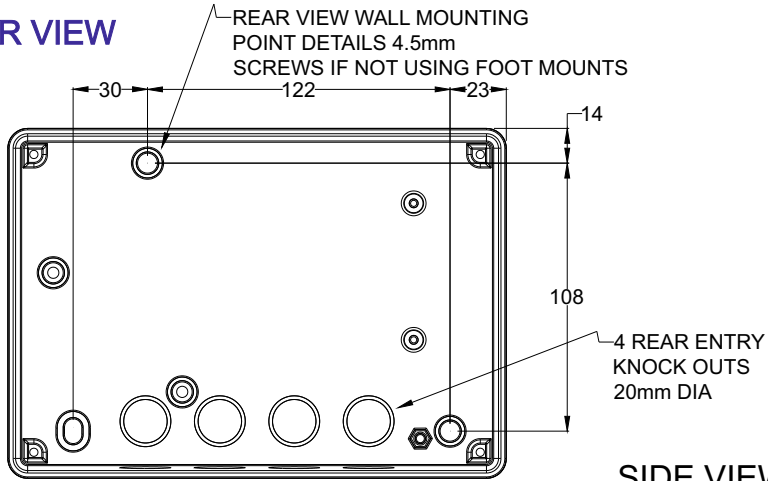Name   Andrew J Collier M.I.O.D
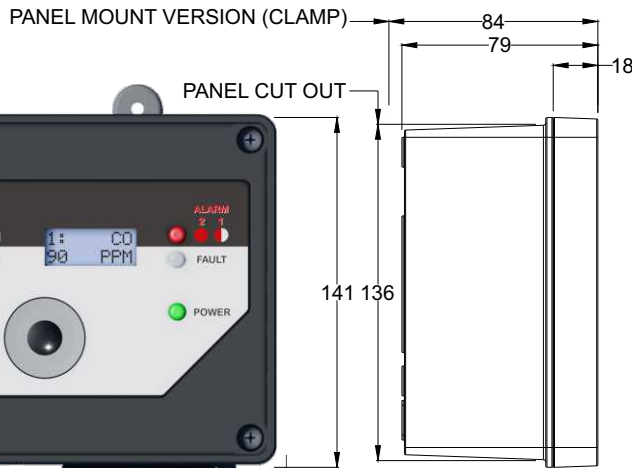
Position: Managing Director   Date: 20th Feb 2016   Declaration Ref: TOC-640-DEC-2
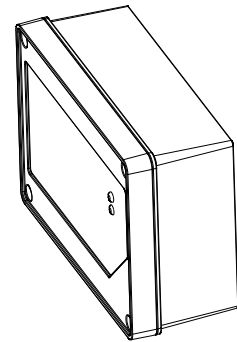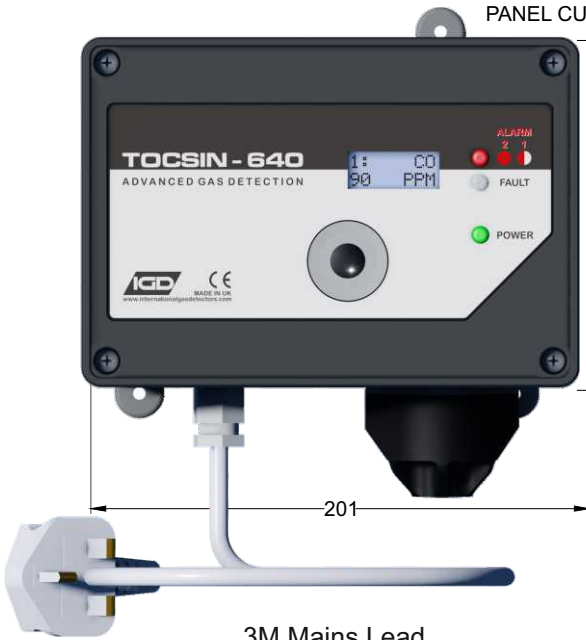
REAR VIEW

REAR VIEW WALL MOUNTING
POINT DETAILS 4.5mm
SCREWS IF NOT USING FOOT MOUNTS

30 — 122 — 23

14

108

4 REAR ENTRY
KNOCK OUTS
20mm DIA

PANEL MOUNT VERSION (CLAMP)

SIDE VIEW

84

79

18

FRONT VIEW

PANEL CUT OUT

TOCSIN - 640
ADVANCED GAS DETECTION

ALARM
2 1

1:      CO
90   PPM

FAULT

POWER

IGD   CE
MADE IN UK
www.internationalgasdetectors.com

141 136

201

3M Mains Lead

TOCSIN - 640
ADVANCED GAS DETECTION

ALARM
2 1

CO
0   PPM

FAULT

POWER

IGD   CE
MADE IN UK
www.internationalgasdetectors.com
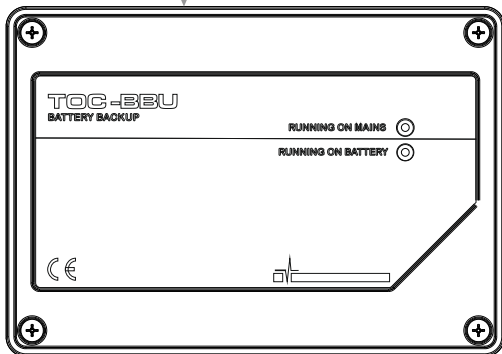
Optional Battery Backup Kit
PN 5686601

Note this module uses the
same style enclosure as the
TOCSIN 640 and houses
batteries and charge control.
It is usually mounted below
the TOC-640 and is supplied
with all required connectors.

ORDER CODES

TOCSIN 640 Controller 110/230V AC FOR CO2	TOC-640-CO2
TOCSIN 640 Controller 110/230V AC FOR O2	TOC-640-O2
TOCSIN 640 Controller 110/230V AC FOR N2O	TOC-640-N2O
Controller Panel Mount Kit	5686401
Battery Backup Module	5686601

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.

Use with Tocsin 103 Series detectors. IP Rated steel enclosures for harsh industrial environments.

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

Use with Tocsin 102 Series detectors for hazardous area applications requiring ATEX approved equipment

Flammable Gas Detection
Toxic Gas Detection
Oxygen Depletion

Protecting People Since 1917

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)
User	IGD Jog Wheel Option Select
Outputs	3 off SPCO Relays 4A Non-Inductive User Configurable 1 off 4-20mA Linear Output User Configurable
Other I/O	Sounder 80dB @ 100mm (Mutable) RS485 Port Modbus Dedicated E-Stop Input Dedicated Fire System Interlock
Inputs	Up to 24 off Addressable Series Detectors or I/O Modules *Note external Booster PSU may be required*
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

Sensor Accuracies & Response Times

Sensor Response times and accuracies are determined by the type of sensor used. The following table provides general guidance for tests carried out by IGD at standard conditions.

Type	T90 Response	Accuracy
Pellistors	<10s	+/-2% LEL
Infra Red	<15s	+/-2% of Range
Electrochemical as CO,H2S,SO2	<30s	+/-2% of Range
as O2	<15s	
as NO2,CL,NH3	<50s	

Standard Ranges

Type	Ranges Available State When Ordering
CO2 Infra Red	0-5000ppm 0-2% 0-5%
Oxygen Electrochemical	0-25%
N2O Infra Red	0-1000ppm