

PRODUCT DATA SHEET

www.internationalgasdetectors.com

OLIVER IGD

Control Systems

Transmitters

Sensors

Accessories

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



International Gas Detectors

CH₄ H₂S CO₂
N₂O SO₂ NO₂ CO



Triton House
Crosby Street
Stockport
SK2 6TS
England

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



FS646773
Ref: ROS641B

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EC Declaration of Conformity

Issuers name and address:

Oliver IGD Limited of
Triton Hous,
Crosby Street,
Stockport,
SK2 6TS
England



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. <i>Excluding requirements for SIL</i>
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** *SI-serial number*

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

Oliver IGD Limited operate an independently assessed Testing Agency: ISO9001:2008 Quality Management System.

Quality Assurance Certificate Number
ExVeritas 16PQAN0014

Quality Management Certificate Number
FS 646773

Quality Assurance Notification Number:
2585

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



ExVeritas,
Units 16-18,
Abenbury Way,
Wrexham Industrial Estate,
Wrexham, UK, LL13 9UZ

BSI Assurance UK LTD,
Chiswick High Road,
London
W4 4AL
UK

Mehr Sicherheit.
Mehr Wert.

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 6TS, 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



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CH₄ H₂S CO₂
NO NO₂ SO₂



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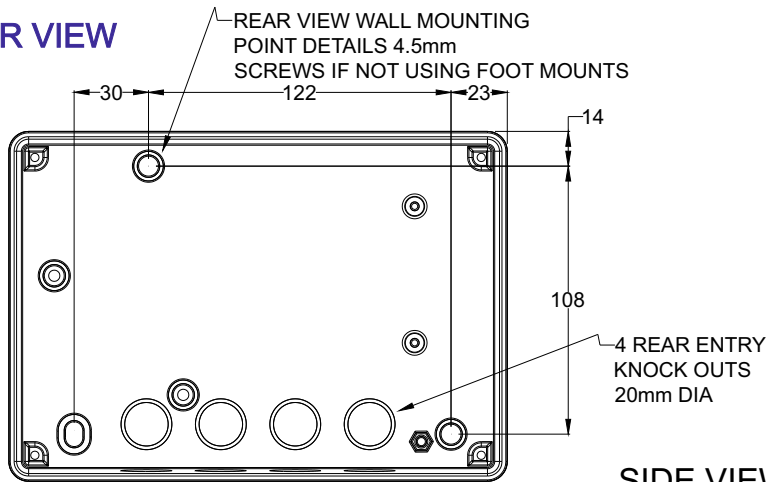
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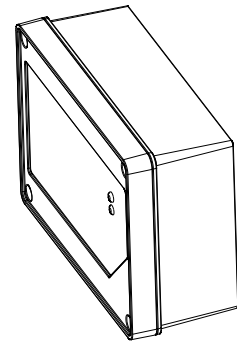
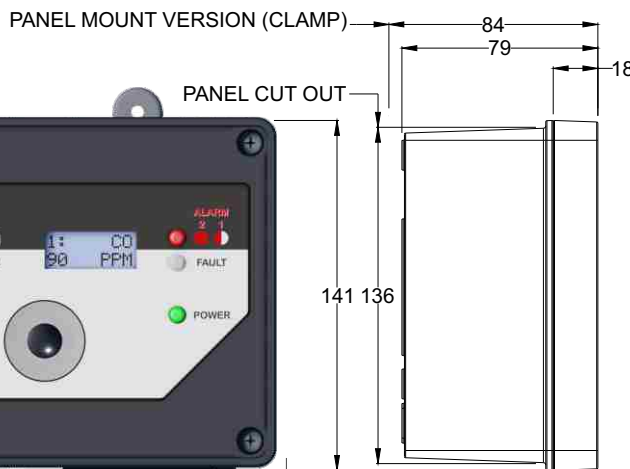
REAR VIEW



FRONT VIEW



SIDE VIEW



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.



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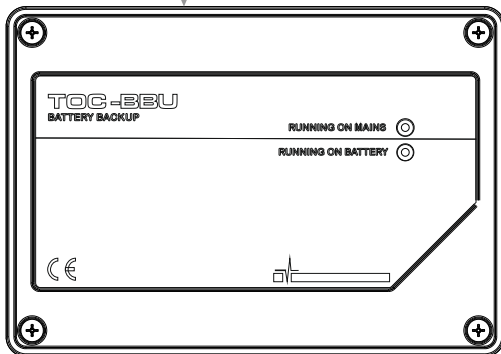
Accessories

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.



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



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



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



International Gas Detectors
 CH4 H2S CO2
 N2O NO2 SO2



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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 <i>Note external Booster PSU may be required</i>
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,H ₂ S,SO ₂	<30s	+/-2% of Range
as O ₂	<15s	
as NO ₂ ,CL,NH ₃	<50s	

Standard Ranges

Type	Ranges Available State When Ordering
CO ₂ Infra Red	0-5000ppm 0-2% 0-5%
Oxygen Electrochemical	0-25%
N ₂ O Infra Red	0-1000ppm



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NO₂ SO₂ NO



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