TOCSIN 640

Fast, Effective Gas Detection System Controller

TOCSIN 640 is a multi-channel detector controller. Easy to install set up and operate with powerful interface features.

Two Case Styles Are Available

The systems can be used with any of the Tocsin Addressable range detectors or I/O modules providing maximum flexibility.
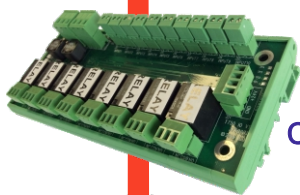
Up to 24 Addressable Devices

Wall and panel mount options are available.

The enclosures can accommodate bottom or rear conduit entries where cabling is buried into walls etc.

The controller has three SPCO relays as standard, which can be extended with external modules.

An RS485 Modbus interface is provided as well as dedicated interlocks for E-stops and fire systems.

Addressable I/O Cards Control Where its Needed

Data Highway SupportS up to 32 Gas Detectors/Devices Using 2 Core Cable

4 Core Cable

Local Displays With Options for Slam Switches, Sounders Detectors and I/O

Addressable Gas Detectors. Flammables, Toxic's, Oxygen

Addressable ATEX Gas Detectors. Flammables, Toxic's, Oxygen

Features

Flexible Power Supply Options

Wall or Panel Mounting

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)

Battery Backup Option

Standard Specifications

Power	TOC-640-230	110/230V AC 50/60Hz 25W
	TOC-640-24	24V DC Option
	TOC-640-150	110/230V AC 50/60Hz 150W
	TOC-640-150B	110/230V AC 50/60Hz 150W

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 with TOC-640-230

Temperature   -5 to 55 Deg C

Humidity   0-95% RH Non-Condensing

Sealing   IP54

Mounting   Wall Mount, Panel Mount Kit Option

Weight	TOC-640-230	0.84 Kg
	TOC-640-150	1.25 Kg
	TOC-640-150B	1.60 Kg

REF: ROS64D

IGD

International Gas Detectors

CH4 H2S CO2 NO SO2 NO2 CO

OLIVER | IGD

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Website: www.internationalgasdetectors.com

bsi.

UKAS MANAGEMENT SYSTEMS
003

FS646773
Ref: ROS6410E

PRODUCT DATA SHEET

www.internationalgasdetectors.com

OLIVER IGD

Control Systems | Transmitters | Sensors | Accessories

EC Declaration of Conformity

Issuers name and address:

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

CE

Declares that the product listed as:

TOC-640

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 50271:2010	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**		TUV - SUD Octagon House Concorde Way PO 15 5RL Fareham
	Quality Management Certificate Number **FS 646773**	
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	**TÜV SUD** 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 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-1

Tocsin 640, 25 Watt Version Physical

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

FRONT VIEW

PANEL CUT OUT

TOCSIN - 640
ADVANCED GAS DETECTION

1: CO
90 PPM

ALARM
2 1
FAULT

POWER

IGD CE
MADE IN UK
www.internationalgasdetectors.com

141 136

201
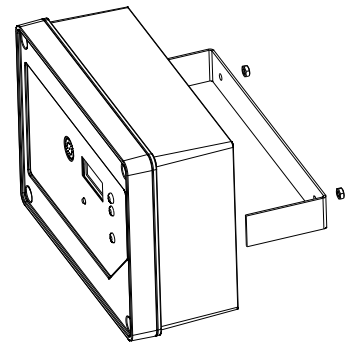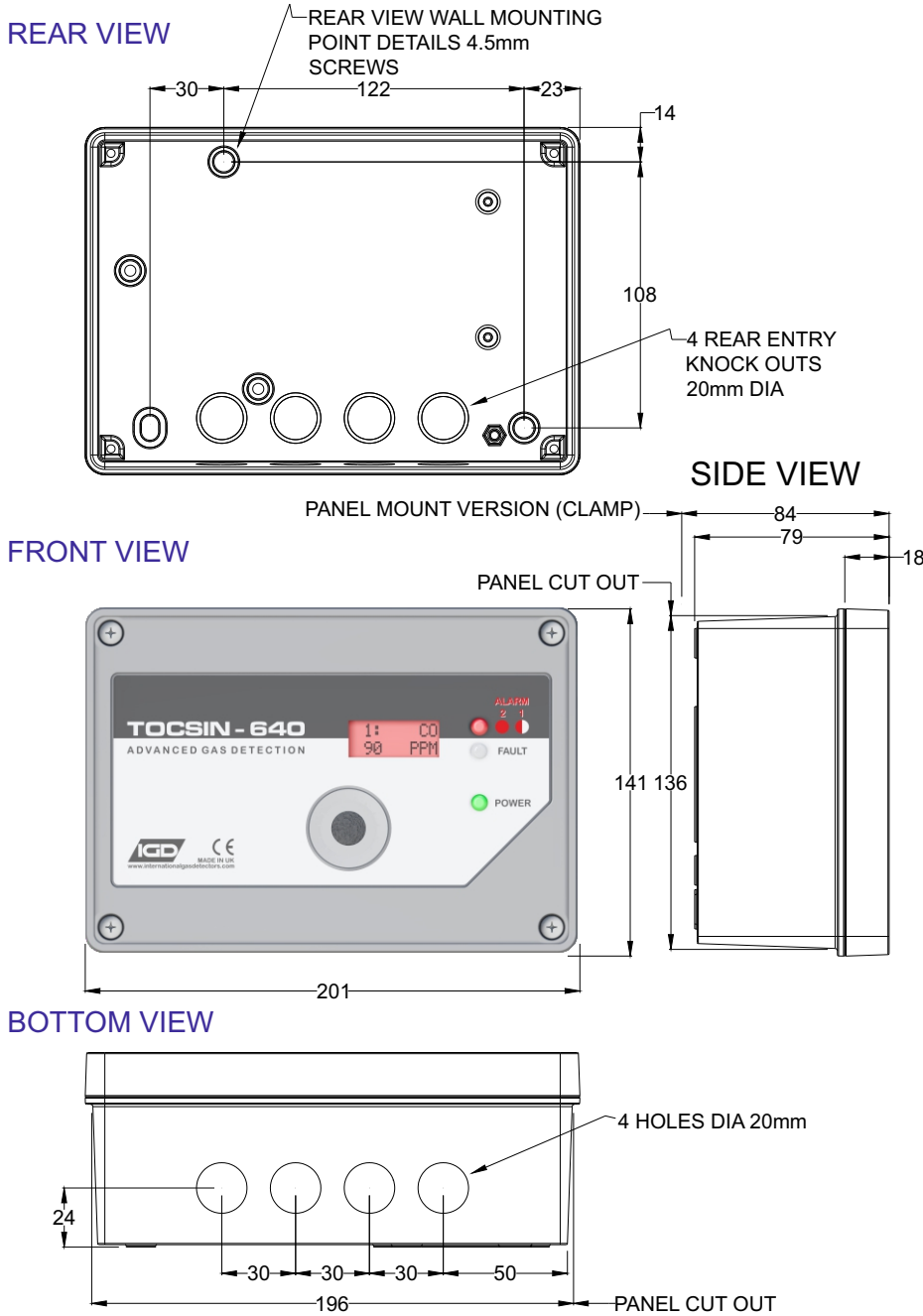
Optional Panel Mounting Kit
PN 5686401
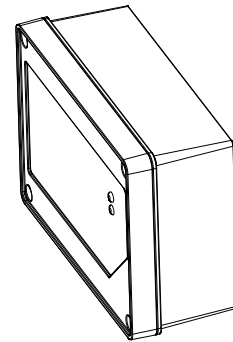
Optional Battery Backup Kit
PN 5686601

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.

BOTTOM VIEW

4 HOLES DIA 20mm

24

30   30   30   50

196   PANEL CUT OUT

International Gas Detectors

CH4 H2S CO2
NO SO2 NO2 CO

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MANAGEMENT
SYSTEMS
003

FS646773
Ref: ROS6410E

Tocsin 640, 150 Watt Version Physical

Front Face

382mm

120.5mm

72mm

Side Face

292mm

134mm

International Gas Detectors
ADVANCED GAS DETECTION SAFETY SYSTEMS

ALARM
FAULT
TOCSIN - 640
ADVANCED GAS DETECTION
POWER

Bottom Face

360mm

10 off 20mm Cable Entries

30mm

56.5mm

20mm

48.5mm
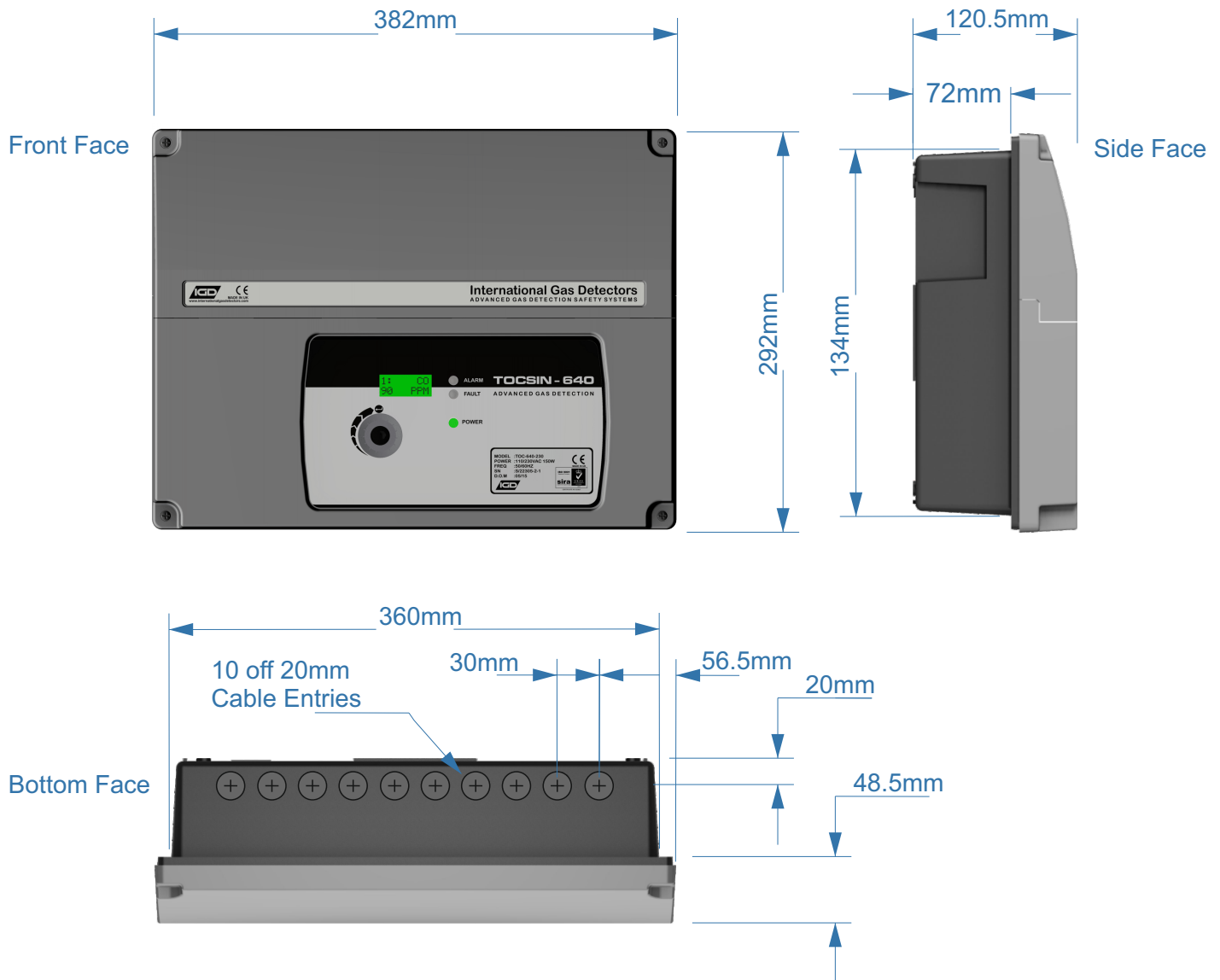
Installation Cables

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

Typically SWA, MICC, FP200, SY, CY, H03VVH2-F Mains Cable Unscreened or Similar

ORDER CODES
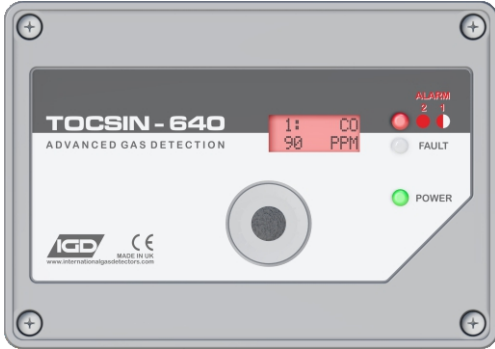
TOCSIN 640 Controller 110/230V AC	TOC-640-230
TOCSIN 640 Controller 24V DC	TOC-640-24
Controller Panel Mount Kit	5686401
Battery Backup Module	5686601

TOCSIN - 640
ADVANCED GAS DETECTION

ALARM 2 1
FAULT
POWER

1: CO
90 PPM

TOC-BBU
BATTERY BACKUP
RUNNING ON MAINS
RUNNING ON BATTERY

Combine Controllers With Detectors and I/O Nodes as Required
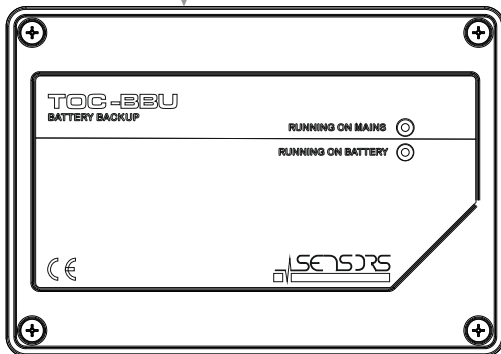
Use with TOC-30 Series Detectors and I/O modules. ABS housed detectors sealed up to IP65 rating.

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

System Example

Controller in Supervisors Office

Use Annunciators For Door Entry Control.

Use Annunciators with Gas Detector Interfaces to Detect & Alarm in Specific Areas

Laboratory

Mix Annunciators With Other Addressable Devices Such as TOC-750 Series Detectors. Use ATEX Rated detectors where required

2 Core Highway as:
24V   A,B
Typically 1.5mmSQ
Unscreened Cable

Gas Bottle Store

Use the Annunciator I/O Capability to Control Gas Supply Valves, Beacon-Sounders or other devices

ATEX Zoned Area

IGD

International Gas Detectors

CH4 H2S CO2 NO SO2 NO2 CO

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