APPLICATION DATA SHEET

OLIVER IGD

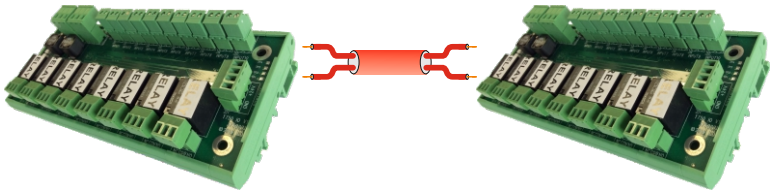
Control Systems | Transmitters | Sensors | Accessories

TOCSIN 750 SERIES

Advanced Addressable 2-Wire Gas Detection System

2-Wire
Addressable

- The latest addressable technology from International Gas Detectors.
- Communication over Power
- Only uses 2 Core Cable for Power and Communication.
- Polarity Independent.
- Typical System is 40% Faster to Install with Fewer Connections
- Improved Reliability
- Improved Connectivity to External systems
- Re-use Existing Cabling When Updating
- ATEX and Safe Area Gas Detectors
- USB For Backup and Data Collection
- Ethernet Connectivity
- Full Event Monitoring, Time & Date Stamped
- Rs485 BMS Connectivity



2-Wire Addressable I/O Cards
Control Where its Needed

4 Data Highways Each Supporting up to 32 Gas Detectors/Devices Using 2 Core Cable

2 Core Cable

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

2 Wire Addressable Gas Detectors. Flammables, Toxic's, Oxygen

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

IGD
International Gas Detectors
CH_4 H_2S CO_2 NO SO_2 NO_2 CO

OLIVER IGD
Triton House
Crosby St
Stockport
SK2 6SH
England

Ref T750E

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

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Control Systems Transmitters Sensors Accessories

Standard Specifications

Power	110/230V AC 50/60Hz 24V DC Option
Construction	ABS
Display	260K Colour 7” 800x480 Touch with LED backlight
User	Full Touch Interface (Security USB Key Option)
Outputs	3 off SPCO Relays 4A Non-Inductive User Configurable 1 off Fault Relay SPCO Relays 4A Non-Inductive 1 off Solid State Beacon Sounder Output *Additional Digital Inputs/Relay Outputs Can Be Added To Highways if Required*
Other I/O	Sounder 80dB @ 100mm (Mutable) 2 off RS485 Ports Modbus Dedicated E-Stop/Slam Switch Input Dedicated Fire System Interlock Ethernet Port USB
Inputs	Up to 128 off Addressable Series Detectors or I/O Modules Over 4 Addressable Highways *Additional Highways Possible With Additional Hub Cards* *Note external Booster PSU may be required*
Temperature	-5 to 40 Deg C Full Specification. To 55 Deg C De-Rate PSU by 15%
Humidity	0-95% RH Non-Condensing
Sealing	IP54
Mounting	Wall Mount
Weight	1.75Kg

Standard Features

3 Alarms Levels Programmable Per Detector

Alarms Configurable as Rising, Rising Latching, Falling, Falling Latching

Full Interface Capability With Two RS485 Interfaces For Modbus

Full Modbus Memory Map, Read from All Connected Devices to External BMS/SCADA/DCS Systems.

Set up From Control Panel of PC Interface

Optional Internal Battery Backup or External Battery Backup

If Fitted, Battery Backup status Indicated From On Screen Display

1 Second Update For All Connected Devices

Sensor Check Function Automatically checks For Correct and Timely Calibration and Operation

Continuous Error Checking

Calibration Possible At Sensor or From Controller

Events Logging For up to 1000 Events Time and Date Stamped

Extensive Service and Calibration Features

Meets the Requirements of EN 60079 Series of Standards For Gas Detection.

IGD
International Gas Detectors
CH_4 H_2S CO_2 NO_2 SO_2 NO CO

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Control Systems Transmitters Sensors Accessories

EC Declaration of Conformity

CE

Issuers name and address:

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

Declares that the product listed as:

TOCSIN 750

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.

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*
EN 61000-6-2: 2005	EMC Generic standards. Immunity for industrial environments
EN 61000-6-4/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	T750-TF9

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

Quality Assurance Certificate Number
ExVeritas 16PQAN0014

Quality Assurance Notification Number:
2585

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

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

Quality Management Certificate Number
FS 646773

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

Testing Agency:

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

Mehr Sicherheit. Mehr Wert.

TUV Certificates and reports can be checked on-line at https://www.tuev-sued.de/industry_and_consumer_products/certificates
Select Oliver IGD when prompted on the website to view certificates

Issued by: Oliver IGD Limited, Stockport, SK2 6SH , United Kingdom

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: 1.June 2015

Declaration Ref: T750-DEC-2
Ref T750E

International Gas Detectors

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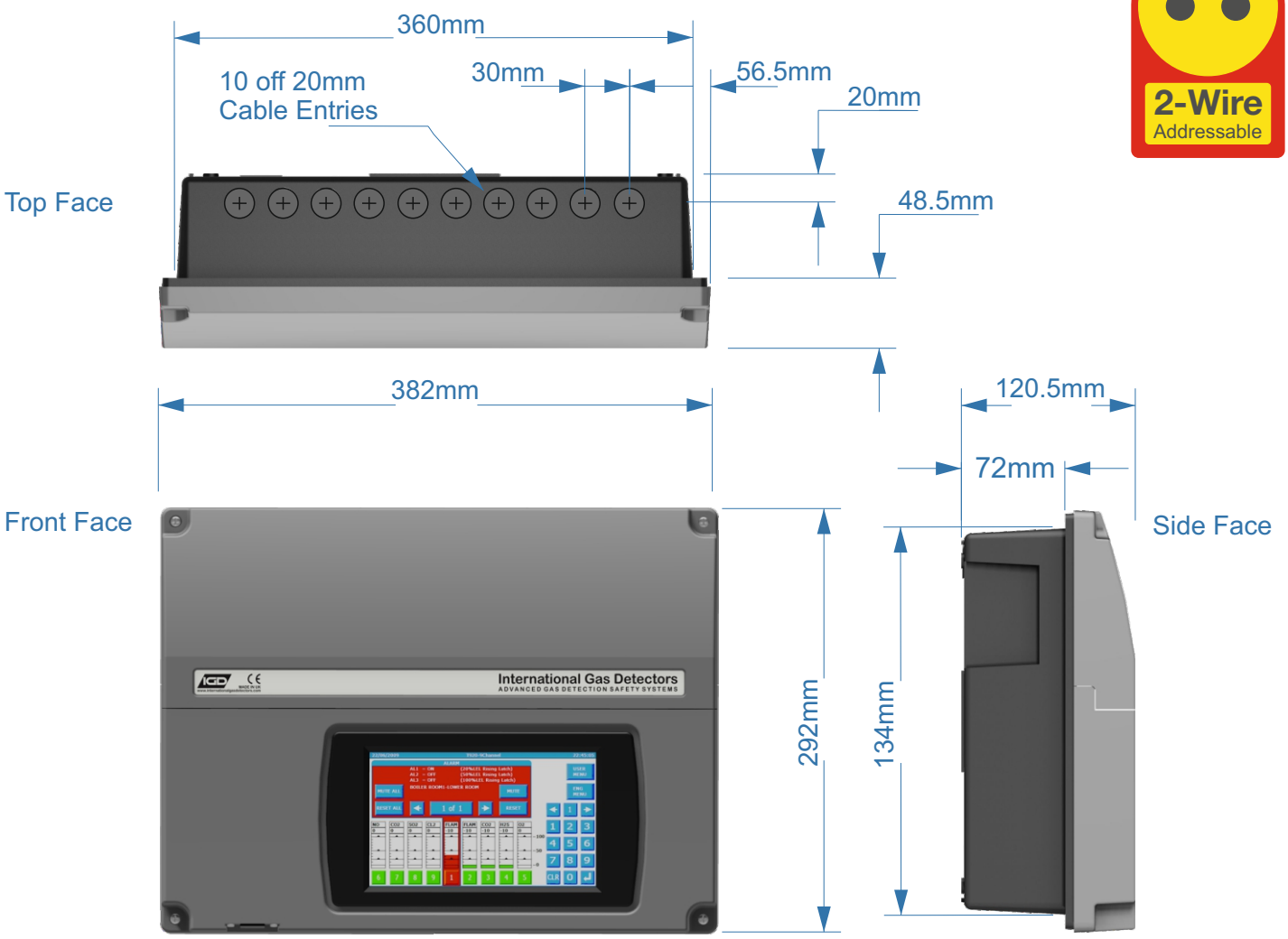
Control Systems Transmitters Sensors Accessories

Tocsin 750 Physical

2-Wire Addressable



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

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Control Systems Transmitters Sensors Accessories

Order Codes

Part Number	Description
TOC-750-24	24V DC Control Panel No Internal PSU Standard Features inluding HMI Display 4 Relays, 4 Highways
TOC-750-150B	110/230V AC Control Panel 150W PSU Standard Features inluding HMI Display 4 Relays, 4 Highways 4AH Internal Battery Backup
TOC-750-150	110/230V AC Control Panel 150W PSU Standard Features inluding HMI Display 4 Relays, 4 Highways
TOC-750-300B	110/230V AC Control Panel 300W PSU Standard Features inluding HMI Display 4 Relays, 4 Highways 4AH Internal Battery Backup
TOC-750-300	110/230V AC Control Panel 300W PSU Standard Features inluding HMI Display 4 Relays, 4 Highways
TOC-750-BAT1	TOC-750-BAT1 7AH Battery Backup 24V DC PSU AT 150W NOTE: Use with 24V DC Version Tocsin 650/750
TOC-750-BAT2	TOC-750-BAT2 17AH Battery Backup 24V DC PSU at 300W 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

TOCSIN 750 Series Controller

TOCSIN 750 Series Annunciator
Options With:
Display, Relay Output, Digital or
Analogue Input, Flammable Gas Detector

TOCSIN 750 Series Detectors
Flammable Gases, Toxic Gases
Oxygen

TOCSIN 102 Series Detectors 2-WIRE
Flammable Gases, Toxic Gases
Oxygen For ATEX Applications

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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

Where Required For Longer Cable Runs or Where Device and Accessory Density is High add Power Boosters or Cascade Hubs to Increase Distance Capability to up to 3KM

2 Core Highway as:
24V L1,L2
Typically 1.5mmSQ
Unscreened Cable

Gas Bottle Store

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

ATEX Zoned Area

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

IGD
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CH_4 H_2S CO_2 NO_2 SO_2 NO CO

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