

TOC-650 & 750

Addressable Gas Detection Control Panel

IGD



► Cost-Effective

Save up to 70% on installation by repurposing your existing wiring.
Accommodates integration into an existing system.

► Complete, Intuitive Control

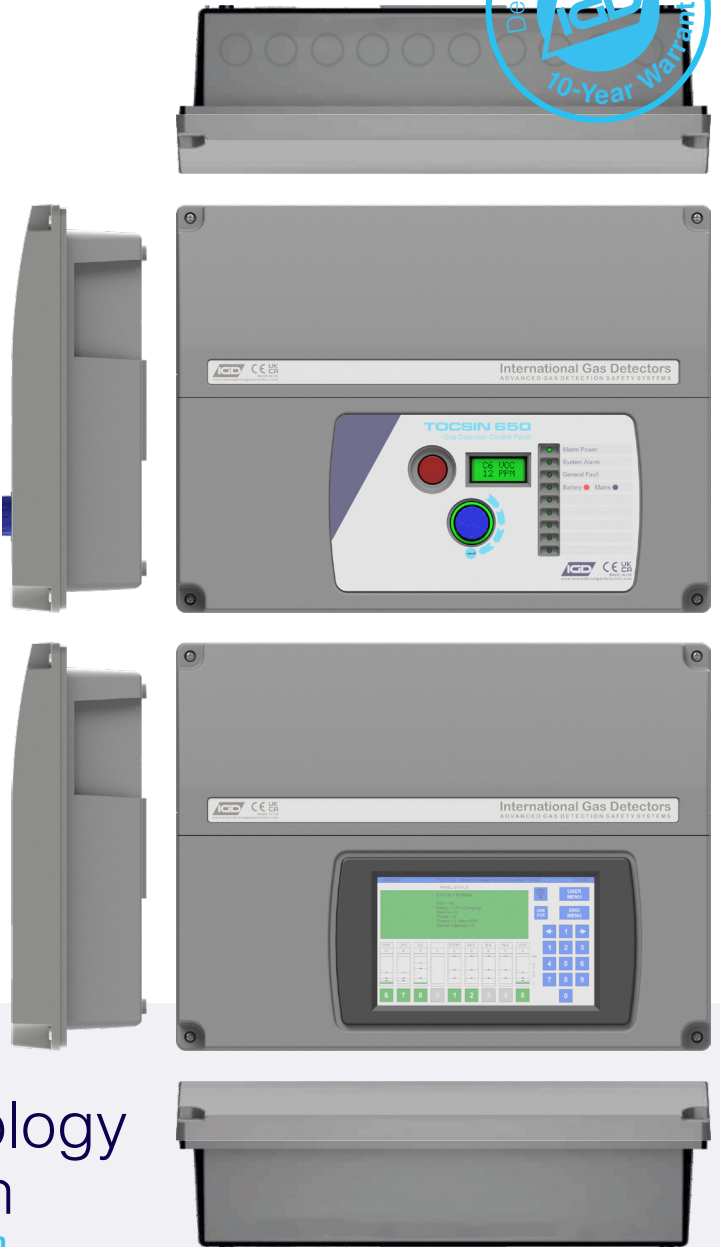
Full event monitoring and optional remote notifications.
Built-in Wi-Fi and cloud-based data acquisition (optional).
RGB display or optional 7" HMI display.

► Unparalleled Versatility

2-Wire Addressable technology.
Allows up to 128 Detector nodes or up to 350 devices.

► Peace Of Mind

Designed and manufactured in the UK.
Backed up by more than a century of expertise and our 10-year guarantee.
All compliance is supported by 3rd party certification.



Groundbreaking Technology & Unbeatable Protection

The Brains of Your Addressable Gas Detection System

Introducing the cutting edge of addressable gas detection: the TOC-650 and 750 Series Control Panels. Equipped with Sentinel+™ 2-Wire Addressable technology, this is IGD's most advanced digitally communicating gas detection system. Designed to provide fast, efficient, accurate performance to protect personnel and plant against

gas hazards. The system offers unparalleled flexibility, accommodating up to 350 additional devices linked in series. Link alarms, interface with plant shutdown hardware, and communicate clearly with BMS and similar systems. 2-Core polarity-independent wiring helps to reduce installation costs without compromising on safety.

Key Features

TOC-650 & 750 Control Panel

Jog-Wheel with 2x8 digit LCD colour-changing display (650)

Available with built-in battery backup module

Full colour 7" HMI touch screen (750)

Power, fault and system alarm LEDs (650)

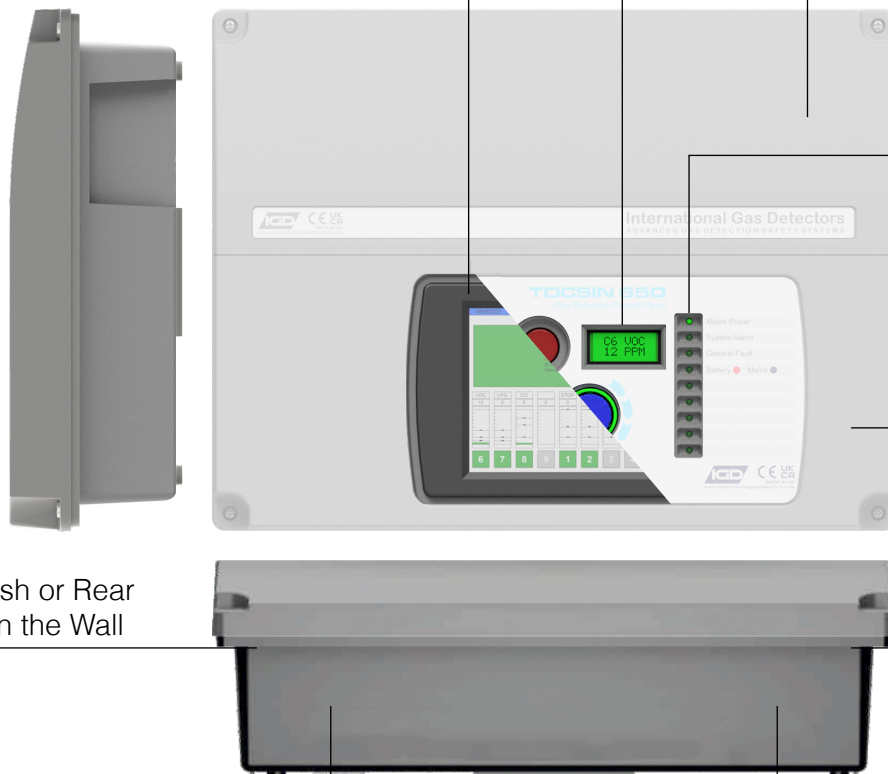
GSM module available to text or, email alarm and system reports

Can be Flush or Rear Mounted on the Wall

Built-In Sounder 85dB @ 100mm (Mutable)

A separate, HMI touch screen can be remote mounted (see SL-004)

10 Off 20mm cable entries along the top



Complete Control

Wi-Fi Connectivity & Remote Monitoring

The Control Panels come with built-in Wi-Fi enabling communication from any laptop, mobile phone, or tablet. Download system reports, perform system servicing, and monitor the status of your system in real time. Optional remote monitoring allows you to perform cloud-based data acquisition and receive email & text alerts with alarm and fault notifications.

Integrate 3rd party systems such as BMS and fire management systems with BACnet/Modbus compatibility. 7" full-colour (750) and RGB (650) displays allow for intuitive interfacing and clear audible and visual alarms offering complete control and total peace of mind.

Advanced 2-Wire Addressable Gas Detection

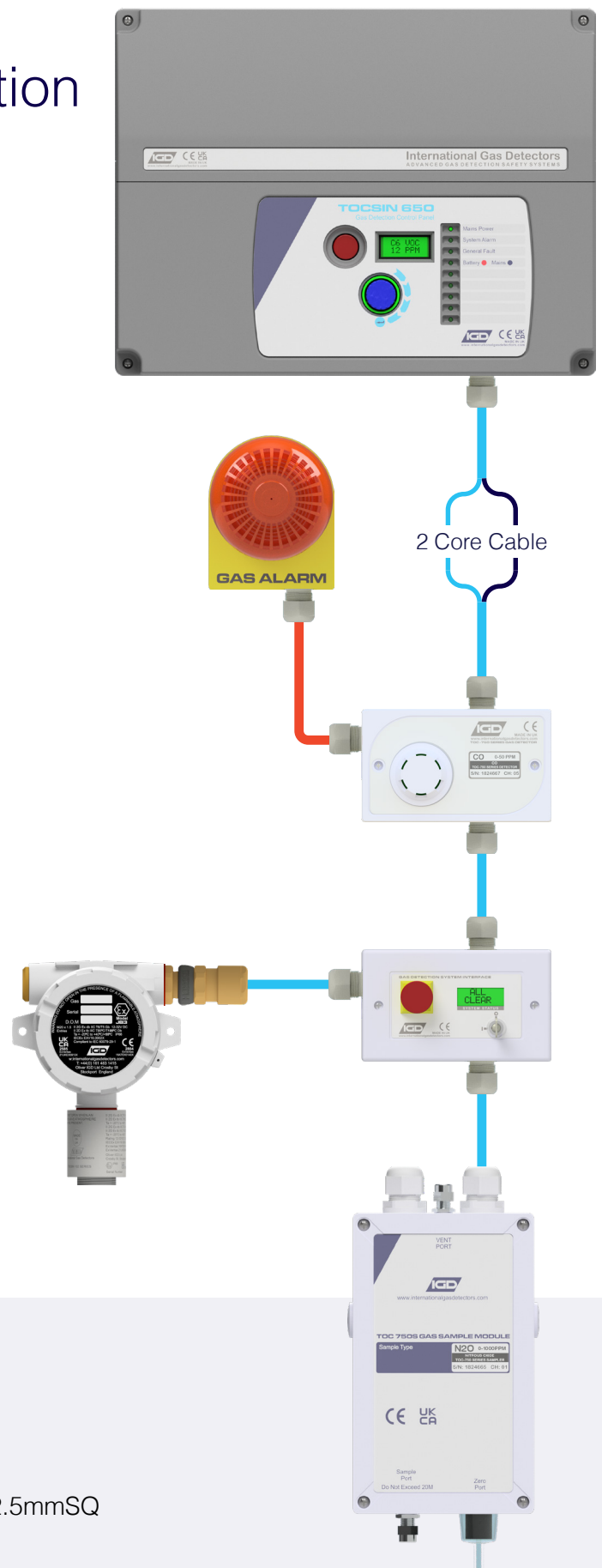
The Future of Gas Detection. Now.

2-Wire Addressable technology combines with our Sentinel+™ digital communication software, to provide an advanced addressable gas detection system designed to offer fast, efficient, and error-free performance. The 2-Wire Addressable system also allows you to link multiple detectors in series on our 2-Core cable providing unparalleled versatility and huge savings on installation and allowing for seamless integration into your setup.

Key features include:

- Auto-find
- Auto-configure
- Auto-update
- Downloadable status reports

Sentinel+™ accommodates interfacing with your safety systems, communication with all hardware and BMS and the addition of alarms, and other external devices. Our 2-Wire Addressable solutions have no polarity requirements, which means we can minimise cabling and system costs without compromising on safety.



Installation Cables

Advanced 2-Wire Addressable Control Panel

- Supported installation cables 2 core 1.5mmSQ or 2.5mmSQ
- Typically SWA, MICC, SY, CY Screened or similar

See the IGD cable system calculator

Specifications

TOC-650 and 750 Control Panels

Power

175W PSU @ 110V
AC Nominal
(88 to 127 V AC
50/60Hz by selection)
175W PSU @ 230VAC
Nominal
(190 to 260V AC
50/60Hz by selection)
340W PSU
(88 to 260V AC
50/60Hz by selection)

Weight

1.75Kg

Dimensions (wxdxh)

See Diagram

Temperature Range

-5° to +40°C
At +55°C De-Rate
PSU Output by 30%

Ingress Protection

IP54

Housing Material

ABS

(+23° to +104°F
At +131°F De-Rate
PSU Output by 30%)

Humidity

0% to 95%
RH Non-Condensing

Mounting

Wall Mount

Display

2 Lines x 8 Digit
LCD Display
Multi-Colour Backlight
(Red-Alarm, Yellow-
Fault, Blue-Normal)
or 7" Touch Screen

User

TOC-650 - IGD Jog
Wheel Option Select

TOC-750 - Full Touch
Interface

I/O

Sounder 85dB @ 100mm (Mutable)
2 off RS485 Ports Modbus (TCP/IP Option Available)
Dedicated E-Stop/Slam Switch Input
Dedicated Fire System Interlock

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









Inputs

Up to 128 off Addressable Series Detectors or I/O
Modules over 6 Addressable Highways

Additional Highways Possible with Additional Hub
Cards
Note: External Booster PSU may be required

Order Codes

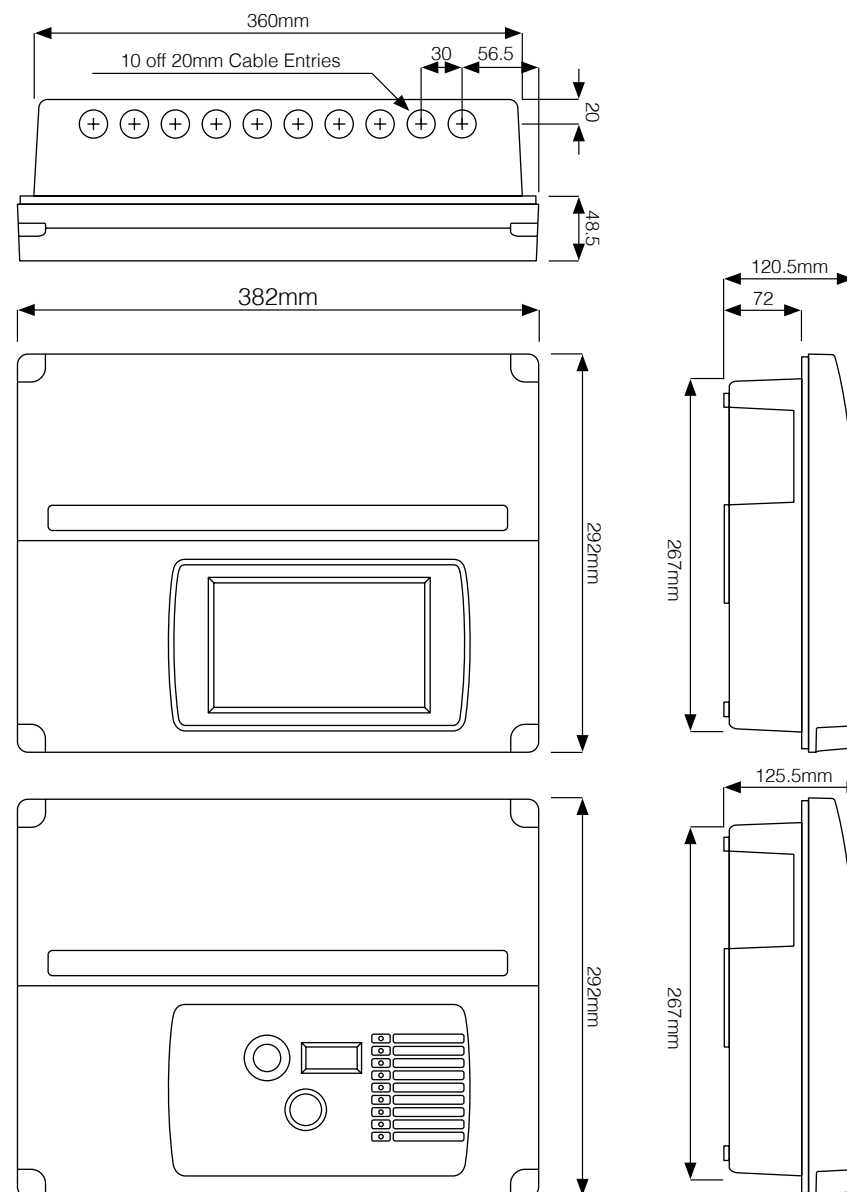
TOC-650 and 750 Control Panels

Order Code	Description	Image
TOC-650-150	110/230V AC Control Panel 150W PSU 2x8 RGB Display and Jog Wheel	
TOC-750-150	110/230V AC Control Panel 150W PSU 7" Touch Screen, built in 5AH Battery Backup	
TOC-635-BAT1	110/230V AC Power Module 300W PSU 5AH Battery Backup	
TOC-635-BAT2	110/230V AC Power Module 300W 17 AH Battery Backup	
TOC-635-BAT3	Booster Module with Battery Backup 5AH Battery Capacity 24V DC PSU at 150W	
TOC-750-IO1	Expansion I/O Card 8 Relay Outputs 10 Digital/Analogue Ports	
5997750	15" HMI Supplied with VESA Mount, PSU and Terminal Enclosure	
5083101	Beacon Sounder 17-60BV DC Amber/Red <106 dB @ 1m	

For the full list of accessories, see the data sheet SL-051.

Dimensions

TOC-650 and 750 Control Panels



EC Declaration of Conformity

Declares the product listed as:

TOC-650
TOC-750

Addressable Gas
Detection Control Panel

Issuers name and address:

Oliver IGD Limited of
Triton House
Crosby St
Stockport, SK2 6SH
United Kingdom

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.

United Kingdom

Electromagnetic Compatibility Regulations 2016

Electrical Equipment (Safety) Regulations 2016

European Union

2004/108/EC

EMC Directive

2014/35/EU

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.

IEC 60079-0:2017 7th Ed

IEC 60079-29-1:2016 2nd Ed

IEC 50270

IEC 60529

IEC 60068-2-6

IEC 60335:2012+A11:2014

Technical File Reference

Explosive Atmospheres Equipment General Requirements

Explosive Atmospheres. Gas Detectors. Performance Requirements of
Detectors for Flammable Gases.

Electromagnetic compatibility - Electrical Equipment for the Detection and
Measurement of Combustible Gases, toxic Gases or Oxygen

Degree of Protection to IP54

Vibration

Electrical Safety

T750-TF9/T650-TF9

Quality Management
Certificate Number

FS 646773

EMS 696504

Oliver IGD Limited operate an
independently assessed ISO 9001:2015
Quality Management System & ISO 14001
Environmental Management

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



Issued by: 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

Date: 1 December 2022

Declaration Ref: DEC-9

Position: Managing Director