

# APPLICATION DATA SHEET

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[WWW.OLIVER-IGD.CO.UK](http://WWW.OLIVER-IGD.CO.UK)

**OLIVER IGD**

Control Systems

Transmitters

Sensors

Accessories



## TOCSIN 920 Detector Control Panel

- Wall, 19" Rack or Panel Mounting Units
- 110/230V 50/60Hz AC operation
- 250 Addressable devices as: Relays, 4-20 Inputs or Gas Detectors
- Latest Colour Touch Screen HMI Interface
- Integrate Other Signal Inputs
- One Man calibration Function
- Fully Accessible Modbus, Bacnet, Ethernet Interface
- Use as a Host Unit In Conjunction With Tocsin 700
- WAV File Audible Alarms

## Control up to 250 Addressable Gas Detectors

### Excellent Value

- ☐ Gives you lots of control and configuration for a low price.

### Large Possibilities.

- ☐ Allows you to connect with up to 250 devices on multiple highways
- ☐ Connects with all Oliver IGD detectors
- ☐ You can integrate any 4-20mA or switched input device onto the system

### Ultimate Flexibility

- ☐ Highway and relay connections can be distributed where you need them, either at the controller or around the site.
- ☐ Software and/or PC interface allows easy channel setup and alarm programming with full Cause & Effect tables

### Easy to maintain

- ☐ Unique walk zero and calibration tests allow one man set up of large detection systems.
- ☐ Full detector diagnostics

### Ultimate Control

- ☐ Integrate to BMS or DCS systems
- ☐ Bacnet or Modbus Options
- ☐ LAN Ethernet Option



**IGD**

International Gas Detectors

CH<sub>4</sub> H<sub>2</sub>S CO<sub>2</sub>  
N<sub>2</sub> SO<sub>2</sub> NO<sub>2</sub> O<sub>2</sub>

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Ref OIGD920-1

# TOCSIN 920

## Detector Control Panel

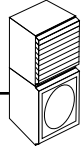


Ethernet LAN Options

RS232/485 Comms Link To Host Systems, SCADA, BMS etc via MODBUS or similar

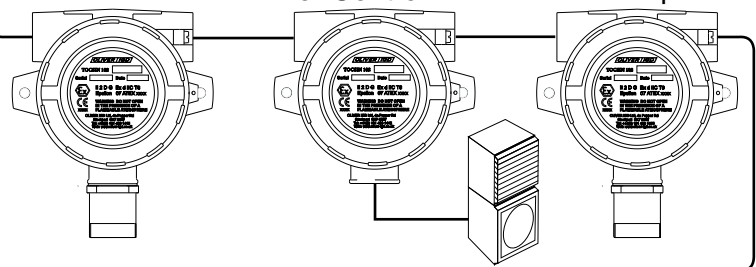
8 Volt Free Relay Contact Outputs As Standard Expandable

Audio Visual Units Available



Relay Output Nodes For Local Alarm or Control

Up to 32 Detectors Flammable or Toxic Gases Per Loop



110/230 VAC

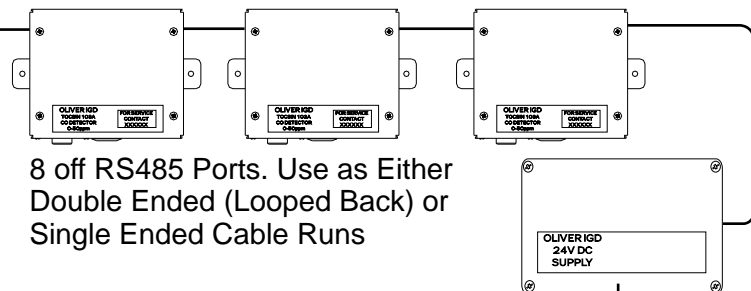
Or

24V DC Power Options

Battery Back Up Units Available

Connect RS485 Ports to Act as a Host For Tocsin 700 Series Control Panels. See the Same Detectors Connected to The Tocsin 700 on The Tocsin 900

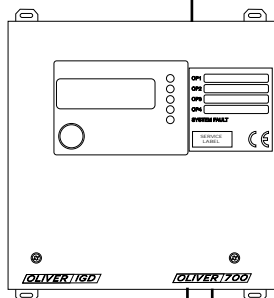
Compatible With IGD Tocsin 103, 102 or 903 Series Detectors.



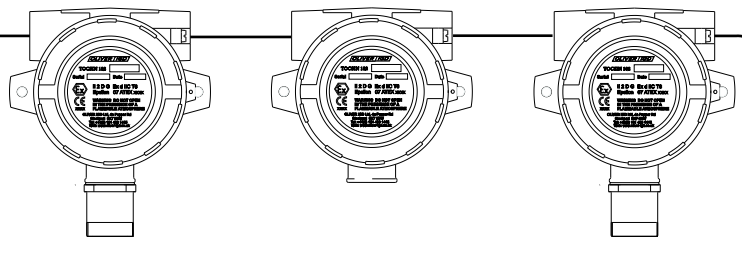
8 off RS485 Ports. Use as Either Double Ended (Looped Back) or Single Ended Cable Runs

Power Boosters To Cater For Long Cable Runs

Any Mix of Detectors, Flammable, Toxic, Oxygen and Relay Outputs



ATEX or Safe Area Detectors



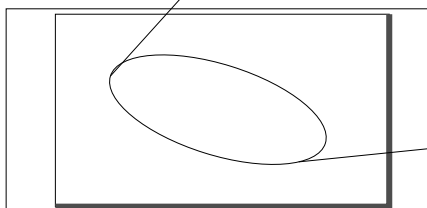
# TOCSIN 920 Detector Control Panel

## Typical system Block Diagram

Typical Screen Shot, Tocsin 920 Series HMI Display.  
Touch Screen 260,000 Colours, 800 x 480, 7" Display.

Base Systems Comprise:

- Touch Screen HMI Panel
- 150W PSU
- One Data Highway Hub
- One Addressable Relay Output Card.



Tocsin 920 Series  
Control Panel  
(panel mount version)

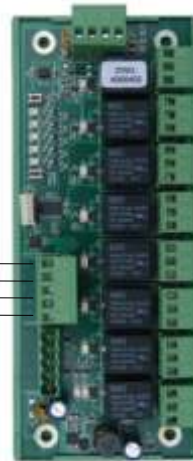
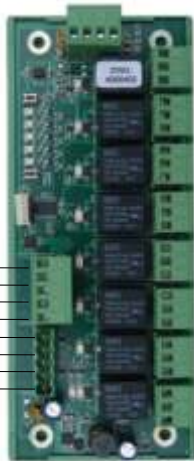
4 Core Cable Highway

Data Highway  
Hub. 8 Ports  
Serving Up To  
32 Devices



Up to 32 Addressable Detectors, Relay  
Output Nodes, Cards or Signal Input  
Nodes Per Data Highway  
Note the Maximum Number of System  
Devices Per Tocsin 920 is 250

8 Port Hubs and  
Relay Cards can  
be chassis or DIN  
Rail Mounting for  
inclusion into OEM  
cabinets. All Devices  
are 24V DC  
Powered. Field  
boxes are available  
for in field installation  
of Hubs and relay  
cards if required.



8 Output  
Addressable  
Relay Card

8 Output  
Addressable  
Relay Card



International Gas Detectors  
CH<sub>4</sub> H<sub>2</sub>S CO<sub>2</sub>  
N<sub>2</sub>O NO<sub>2</sub> SO<sub>2</sub>



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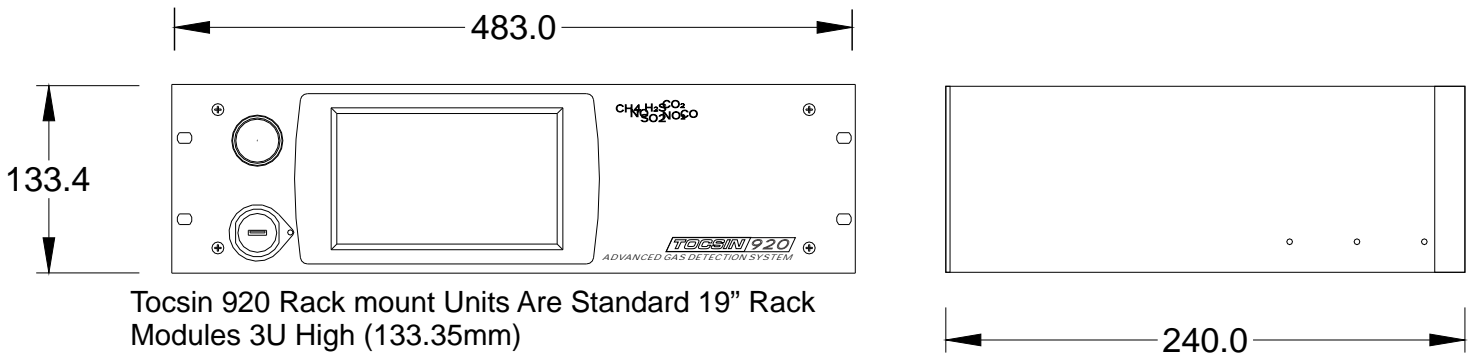


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# TOCSIN 920

## Detector Control Panel

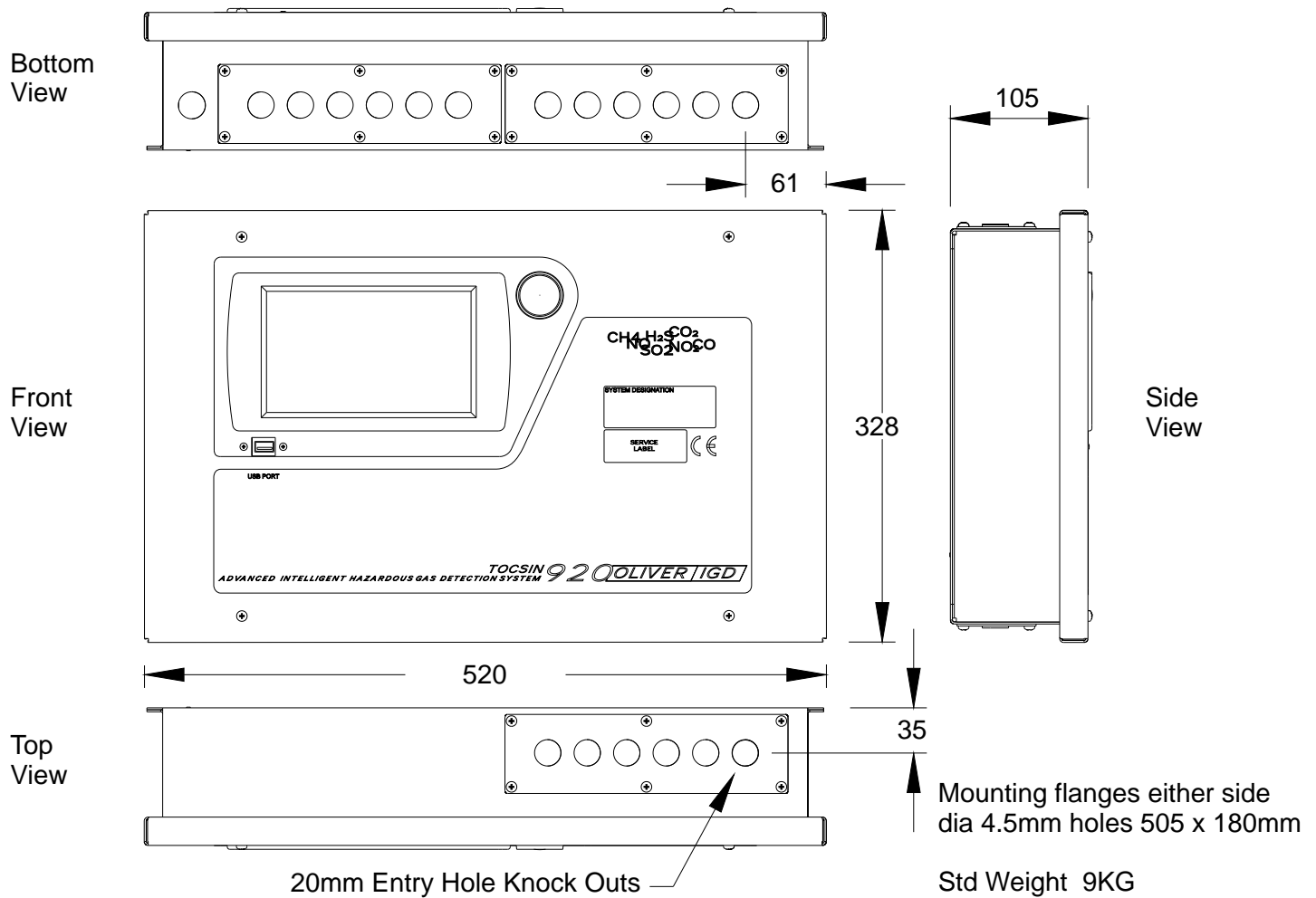
### 19" Rack Mount Option



Tocsin 920 Rack mount Units Are Standard 19" Rack Modules 3U High (133.35mm)

All electrical Terminations are to the Rear of the Rack

### Wall Mount Option



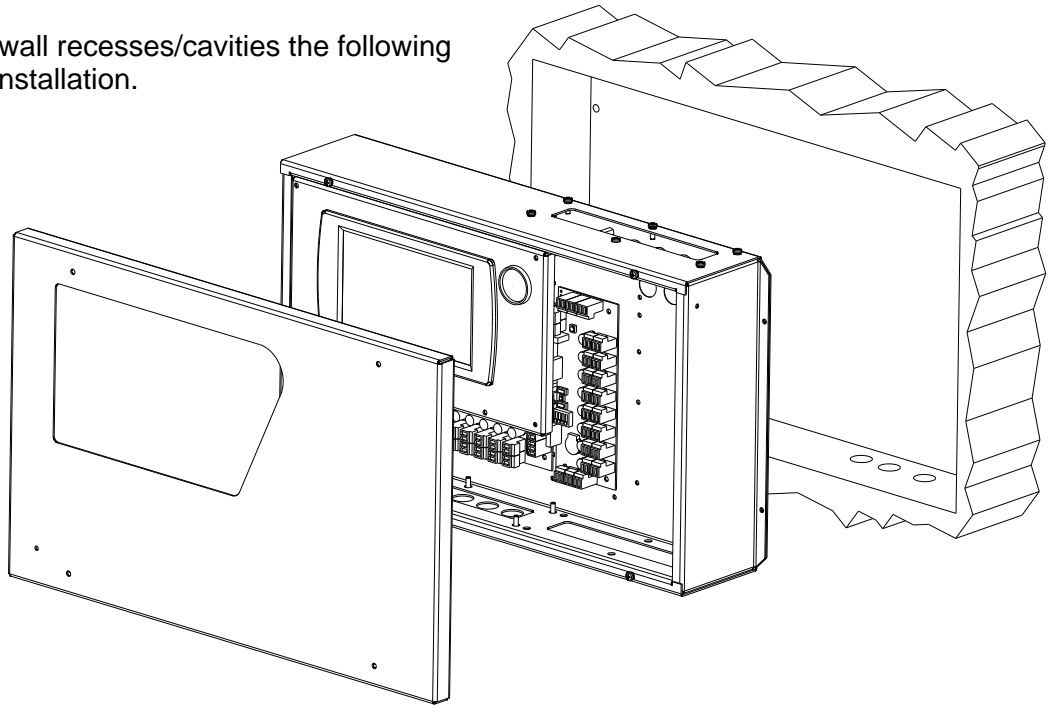
# TOCSIN 920

## Detector Control Panel

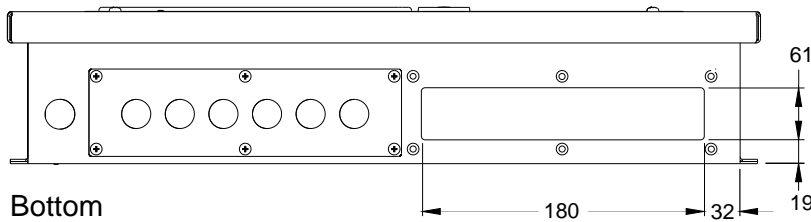
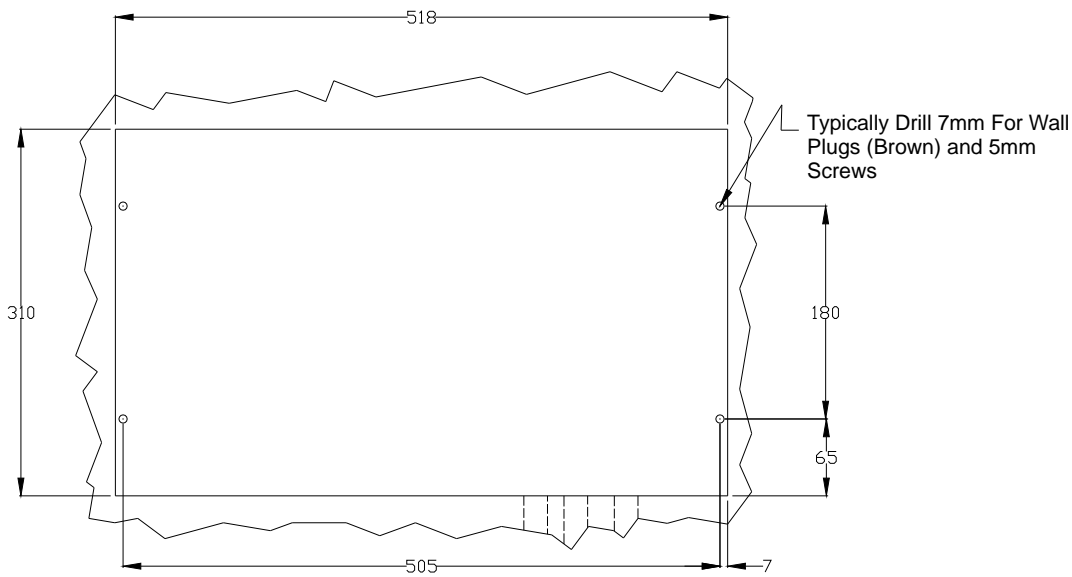
### Wall Mounting Into a Cavity

For flush mounting into wall recesses/cavities the following detail indicates correct installation.

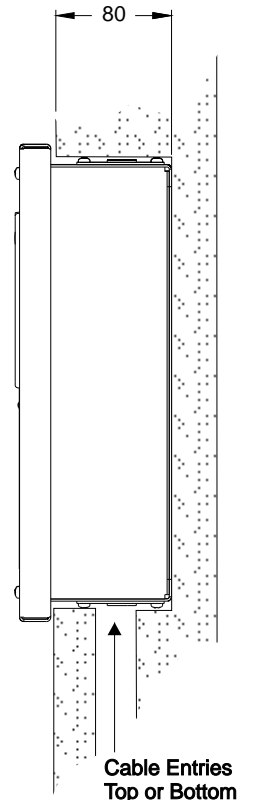
If the following detail is adhered to the front cover of the Tocsin 920 will overlap the edge of the cavity.



Cavity Detail



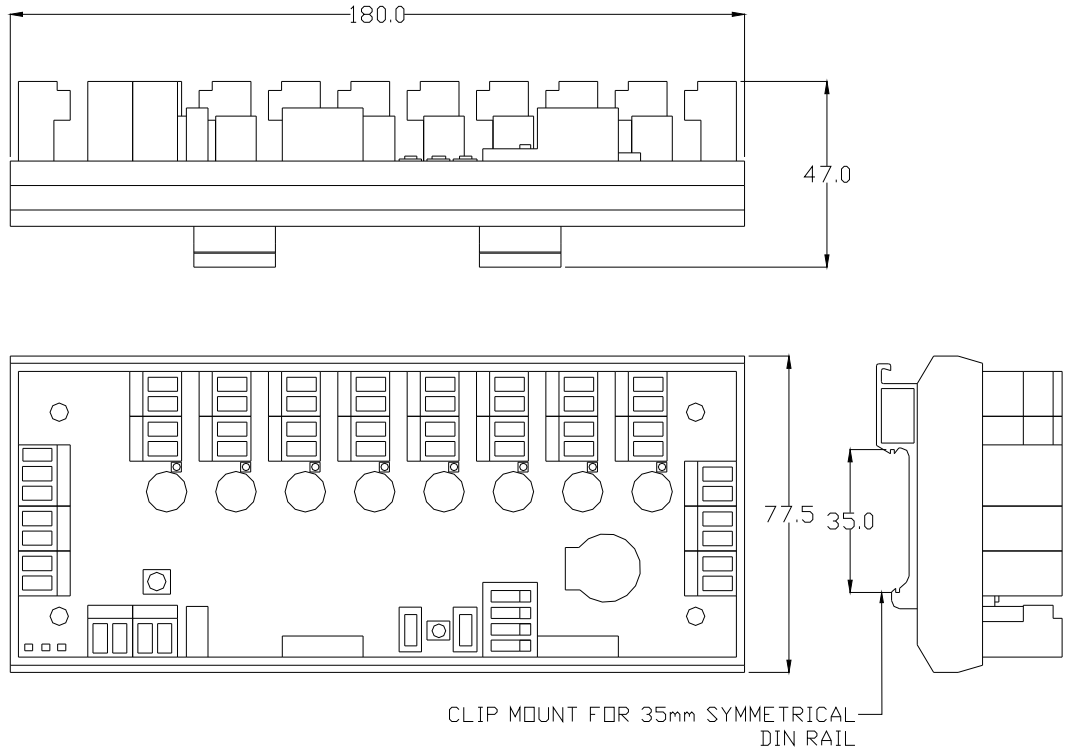
Bottom View



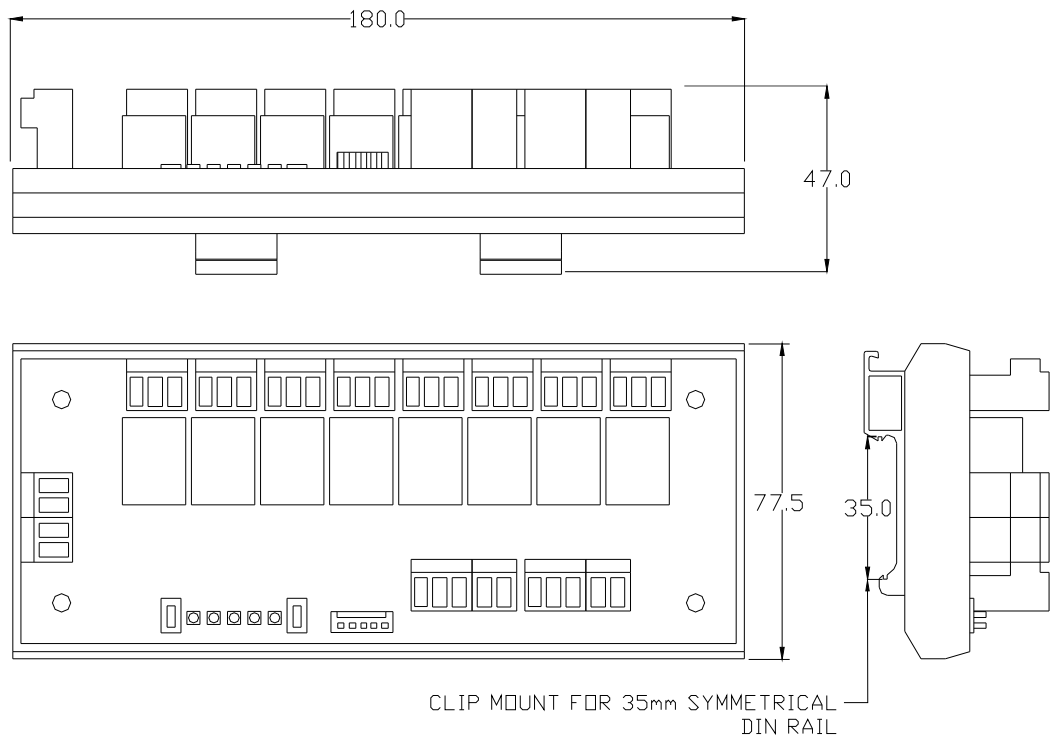
Wall Section View

# TOCSIN 920

## DIN Rail Mounted Highway Hub Dimensions



## DIN Rail Mounted Relay Card Dimensions



# TOCSIN 920

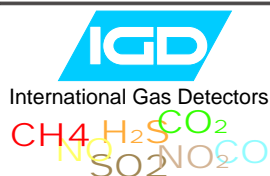
## Detector Control Panel

### Specification

Power Source	110/230V AC 50/60Hz
Power Consumption	200 Watts Base Unit (system dependant)
Display	Colour HMI 800x480
Operating Temperature	0°C to 55°C
Operating Humidity	5 to 95% non-condensing
Accuracy	Sensor dependant
Resolution	0.00% 0.00ppm Dependant on Sensor Type
Update Rate	1 Second
Size (mm)	365 (H) x 533 (W) x 110 (D) Wall Mounting Version 3U High Rack Mounting Version
Inputs	Up to 8 x RS485 loops (Expandable Using Additional Hubs)
Outputs (Standard)	8 x configurable SPCO relays (7A non conductive load Expandable using Additional relay Cards)
.	1 x RS232/485 Comms Link (Modbus/Bacnet)
CE Declaration	BS EN 61000-6-4 EMC Compatibility 'Emissions' for industrial environments BS EN 61000-6-2:2001 EMC 'Immunity' for industrial environments BS EN 61010-1: 2001 Safety requirements for electrical equipment

### Order Codes

5920101	Tocsin 920 Wall Mount Base Unit 110/230V AC 50/60Hz
5920102	Tocsin 920 Panel Mount Base Unit (For OEM Integration) 110/230V AC 50/60Hz
5920201	Tocsin 920 19" Rack Mount Base Unit 110/230V AC 50/60Hz
5920301	Modbus Option
5920401	Bacnet Option (TBA)
5920501	Addressable Relay Card 8 SPCO Relays For Use in Base Units
5920601	Addressable RS485 Hub 8 RS485 Ports For Use in Base Units
5920701	Addressable Relay Card 8 SPCO Relays DIN Rail Mounting
5920801	Addressable RS485 Hub 8 RS485 Ports DIN Rail Mounting
5920901	Field Box. Field wall mounting enclosure to accommodate two cards, as either relays or hubs
5921001	Battery Backup Module
5921101	DIN Rail Mount 24V DC PSU Module 110/230V AC 50/60Hz



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