

## DATA SHEET



## TOCSIN 101 4-20mA FREON GAS TRANSMITTER MODULE

Designed to provide a cost effective solution for freon gas monitoring applications the Tocsin 101 is one of the latest developments from IGD to join the established Tocsin monitor range.

The Tocsin 101 freon sensor uses the latest semiconductor technology for maximum reliability outputting a 4-20mA linear signal. The unit has an alarm relay output and the option of an alarm buzzer.

The Tocsin 101 is designed to interface to the full range of IGD control panels giving maximum flexibility. Alternatively the Tocsin 101 signal can be interfaced directly into control and BMS systems.

## SPECIFICATION

Power Supply	24V DC 12-32V DC (1.5w)
Temperature	0-40°C
Humidity	5 – 95% RH Non Condensing
Accuracy	+/-20% FSD
Resolution	Alarm Only
Outputs	4-20mA (Max. 1000Ohms @ 32V)
Response Time	T90 60 Seconds
Freon Range	0-1000ppm
Size	W=140 x L=140 x H=70mm
Weight	1.3 Kg

## FEATURES.

Volt Free Alarm Outputs
4-20mA Output ( 20mA Alarm4mA correct operation)
Inbuilt signal filtering
Stand alone operation

## WITHUS

대전시 대덕구 대화동 289-1  
산업용재유통단지 11-112

TEL:042-670-7840  
FAX:042-670-7848

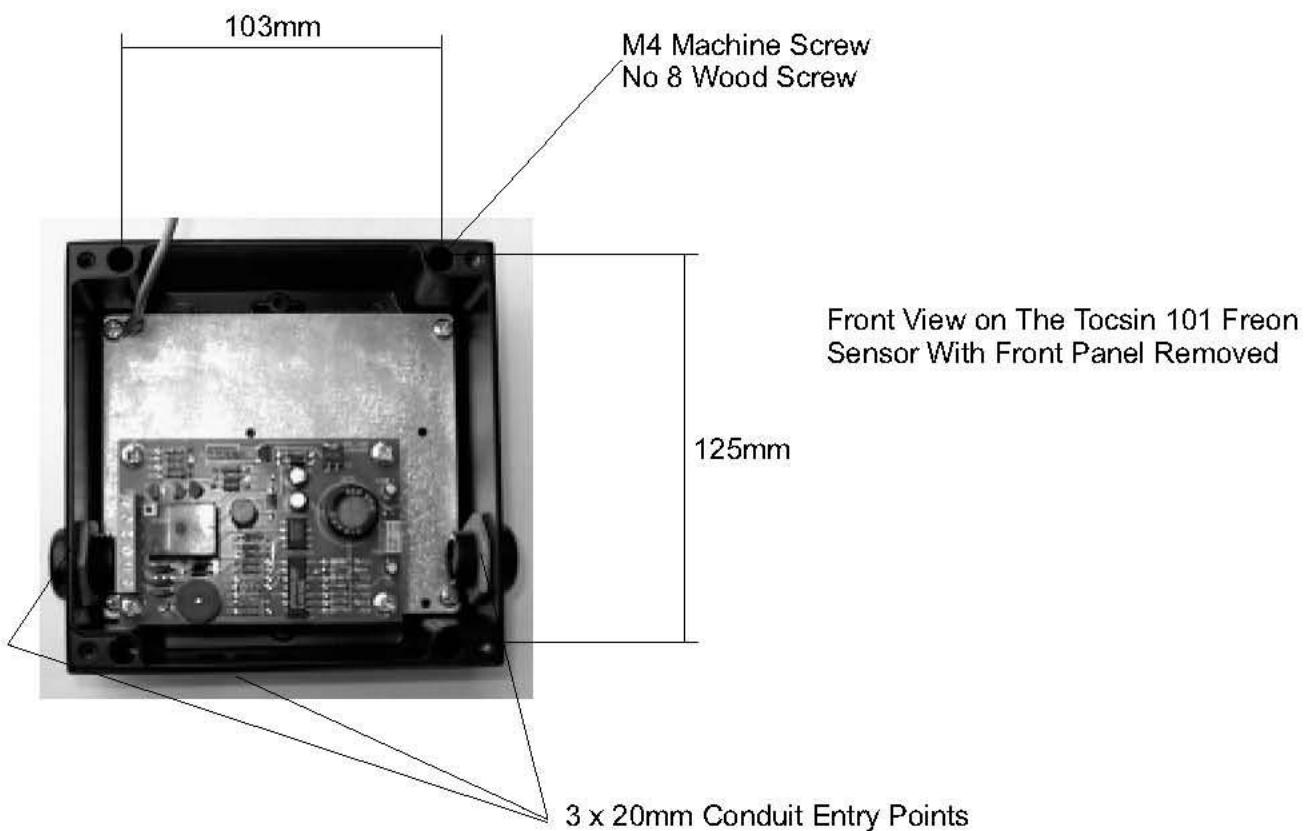
Oliver IGD Limited Reserve the right  
to amend specifications without prior notice

**DATA SHEET****TOCSIN 101 4-20mA FREON  
GAS TRANSMITTER MODULE**

## Sensor Mounting Information.

The Tocsin 101 range of hazardous gas detectors are designed to wall or ceiling mount the diagram below shows the mounting positions for the enclosure.

The gas sensor electronics are loop powered to provide a 4-20mA output signal linearly proportional to the sensor gas range.



Front View on The Tocsin 101 Freon  
Sensor With Front Panel Removed

**WITHUS**

대전시 대덕구 대화동 289-1  
산업용재유통단지 11-112

TEL: 042-670-7840  
FAX: 042-670-7848

Oliver IGD Limited Reserve the right  
to amend specifications without prior notice

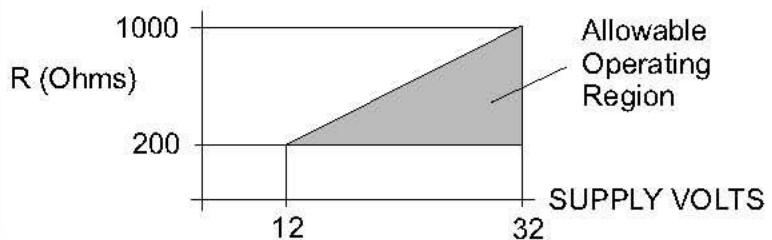
## DATA SHEET



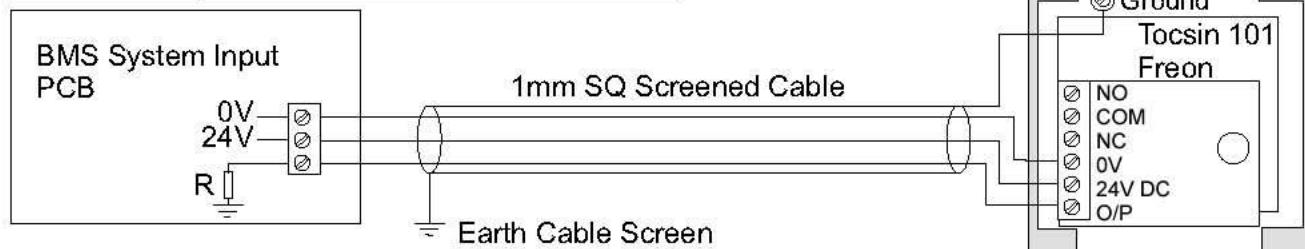
### TOCSIN 101 4-20mA FREON GAS TRANSMITTER MODULE

The Tocsin 101 is a two wire 4-20mA Transmitter. The enclosed diagram indicates three possible wiring configurations.

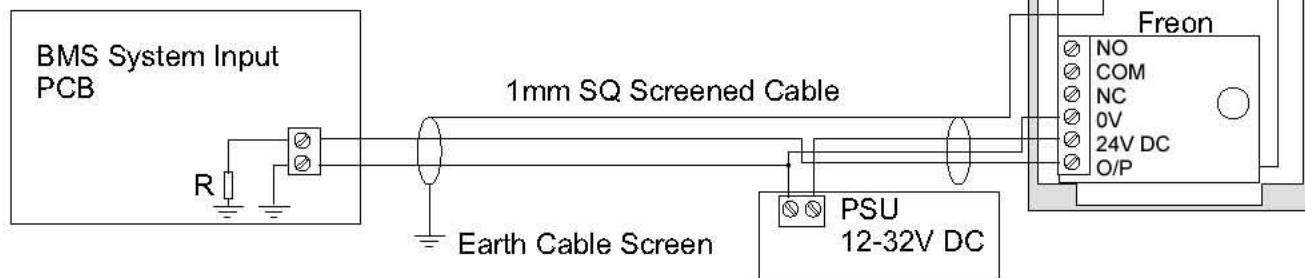
1. Wiring the Tocsin 101 to a Tocsin 400 series control panel.
2. Wiring the Tocsin 101 into a 4-20mA input (BMS type system) where the input provides the drive current.
3. Wiring the Tocsin 101 to a 4-20mA input using an external PSU.



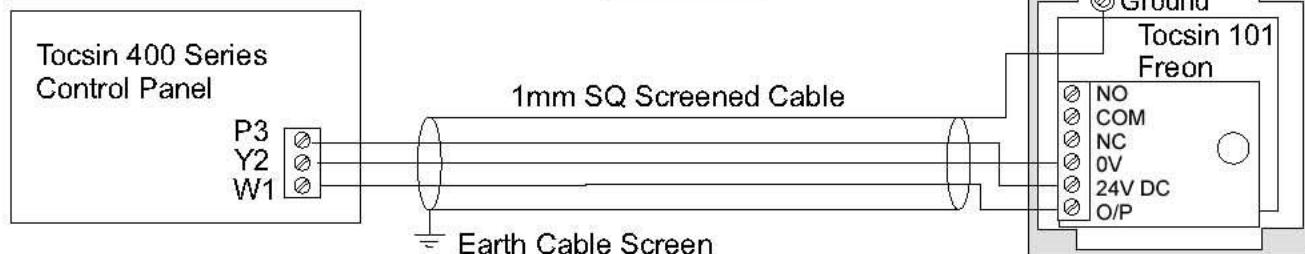
#### Option 1 BMS System Sources Power For Tocsin 101



#### Option 2 BMS Needs External Power For Tocsin 101



#### Option 3 Tocsin 101 Connected To 400 Series Control Panel



WITHUS

대전시 대덕구 대화동 289-1  
산업용재유통단지 11-112

TEL: 042-670-7840  
FAX: 042-670-7848

Oliver IGD Limited Reserve the right  
to amend specifications without prior notice

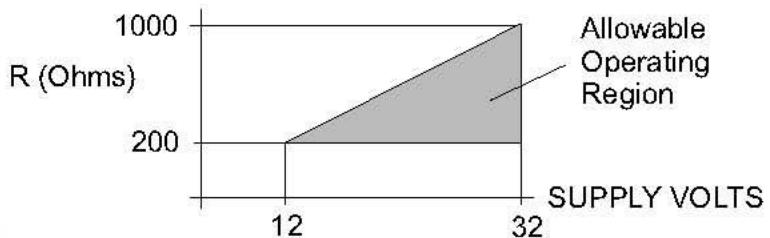
## DATA SHEET



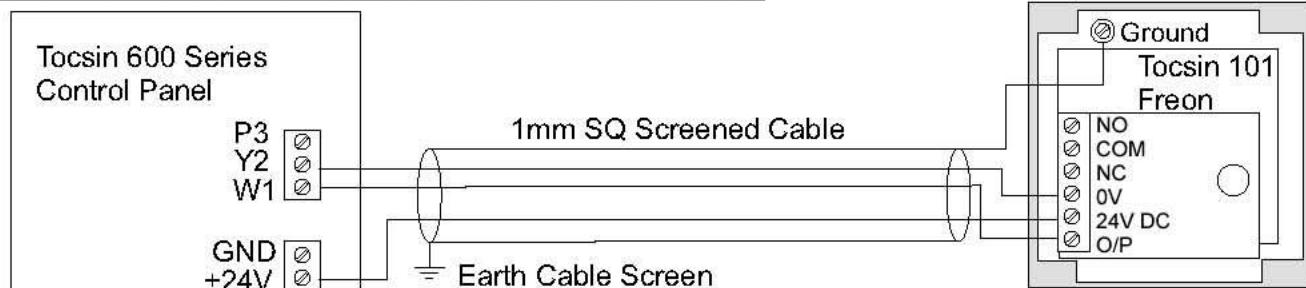
### TOCSIN 101 4-20mA FREON GAS TRANSMITTER MODULE

The Tocsin 101 is a two wire 4-20mA Transmitter. The enclosed diagram indicates three possible wiring configurations.

1. Wiring the Tocsin 101 to a Tocsin 400 series control panel.
2. Wiring the Tocsin 101 into a 4-20mA input (BMS type system) where the input provides the drive current.
3. Wiring the Tocsin 101 to a 4-20mA input using an external PSU.



#### Option 3 Tocsin 101 Connected To 600 Series Control Panel



Alarm set point adjustment

SW1 Sounder enable/disable  
SW2 Alarm relay enable/disable



Plug replaceable freon detector

Alarm setpoint adjust.  
Use calibration gas of a known concentration and adjust the potentiometer until the alarm activates.

For example for an alarm set point at 500ppm apply 500ppm calibration gas and adjust the potentiometer until the alarm activates. Note that there is a 10 second delay built into the circuit.

WITHUS

대전시 대덕구 대화동 289-1  
산업용재유통단지 11-112

TEL: 042-670-7840  
FAX: 042-670-7848

Oliver IGD Limited Reserve the right to amend specifications without prior notice