



INFRA RED GAS SENSOR/ TRANSMITTER

*Plant safety protection for
Methane and Carbon Dioxide.*

FEATURES

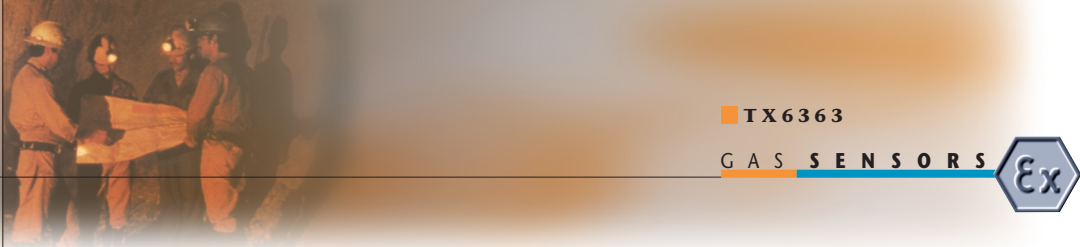
- Fixed gas monitoring for point source hazards and perimeter protection in arduous duty and exposed locations.
- Safety protection for gas risks occurring in hazardous areas and general industrial applications.
- Drift free infra-red gas sensing element with long term stability.
- Choice of analogue output signal:-
4...20mA • 0.4...2V • 5...15Hz.
- Intrinsically safe for use in Group I and Group II hazardous areas.
- Special versions with weatherproof plug and socket connectors available.



PRE-CALIBRATED GAS SENSING MODULES

Pre-calibrated plug-in gas sensing module with a standardised output signal for convenient replacement and servicing.





TECHNICAL
details

| | |
|-------------------------------|--|
| Ambient Temperature Limits: | -10°C...44°C. |
| Storage Temperature Limits: | -20°C...60°C. |
| Ambient Pressure Limits: | 1 bar ± 100 mbar absolute. |
| Humidity: | 95% RH non-condensing. |
| Protection Classification: | Dust and waterproof to IP66. Gas inlet port to IP52. |
| Housing Material: | Stainless steel filled Polyamide 6. |
| Nett Weight: | 450g. |
| Cable Entries: | M20 x 1.5. |
| Electrical Connections: | 4mm Barrier/clamp terminals. |
| Information Display: | 3 1/2 Digit LCD. |
| Vibration Limits: (BS2011) | 10...100Hz, 0.25mm pk. 100...600Hz, 2g pk. |
| Impact Limits: | 20 joules (Housing). |
| Measuring Range: | Methane: 0...5% v/v (0...100% LEL). Methane: 0...100% v/v. Carbon Dioxide: 0...2% v/v. |
| Linearity: | ±2.5% FSD. 0...5% v/v. |
| Maximum Drift: | Methane: ±0.05% /month. Carbon Dioxide: ±100ppm /month. |
| Repeatability: | Methane: ±0.1%. Carbon Dioxide: ±0.05%. |
| Response Time(T90): | ≤20 secs. |
| Sensing Element Life: | >2 years. |
| Warm Up Time: | <20 secs. |

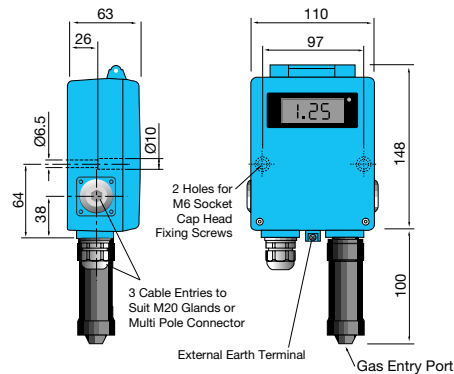
GAS SENSING MODULE

Plug-in module with retaining lock. Standardised interface signal to enable easy interchange of modules.



DIMENSIONS
in mm.

TX6363

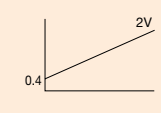
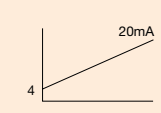
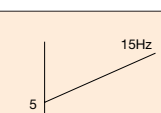




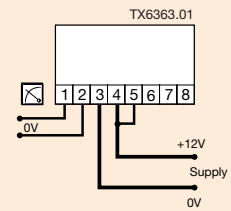
ELECTRICAL details

TX6363.01 Group I Applications (12V dc).



| | | |
|------------------------|------------------------|--|
| Output | 0.4...2V |  |
| Min Load @ 12V dc | 1K ohms | |
| Supply | 9...16.5V dc | |
| Nominal Supply Current | 100mA | |
| Output | 4...20mA |  |
| Max Load @ 12V dc | 160 ohms | |
| Supply | 9...16.5V dc | |
| Nominal Supply Current | 120mA | |
| Output | 5...15Hz |  |
| Max Load | Opto isolated. 2mA max | |
| Supply | 9...16.5V dc | |
| Max Supply Current | 100mA | |

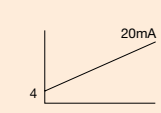
Connections:



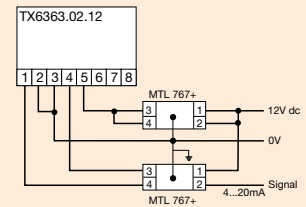
Gas sensors located in a Group I hazardous area must be powered from an approved intrinsically safe source. Please see Trolex Installation and Operating Data for recommendations.

TX6363.02 Group II Applications (12V dc).

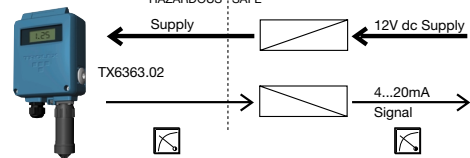


| | | |
|------------------------|--------------|--|
| Output | 4...20mA |  |
| Max Load @ 12V dc | 160 ohms | |
| Supply | 10.5...13.5V | |
| Nominal Supply Current | 120mA | |

Connections:




Gas sensors located in Group II hazardous area must be used in conjunction with approved safety barriers. Zener barriers or isolation barriers may be used. Please see Trolex Installation and Operating Data for recommendations.

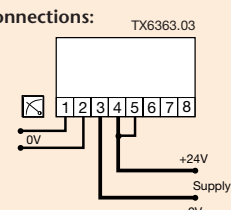


TX6363.03 General Purpose Applications (24V dc).

NOT FOR USE IN CLASSIFIED HAZARDOUS AREAS.

| | | |
|-------------------|-------------|--|
| Output | 4...20mA |  |
| Max Load @ 24V dc | 160 ohms | |
| Supply | 20...30V dc | |
| Nominal Current | 100mA | |

Connections:





ORDER REFERENCE

■ TX6363.01 INFRA RED GAS SENSOR/TRANSMITTER. (Group I)



■ TX6363.02 INFRA RED GAS SENSOR/TRANSMITTER. (Group II)



■ TX6363.03 INFRA RED GAS SENSOR/TRANSMITTER. (General Purpose) (CO₂ ONLY)



Please specify additional information:

OUTPUT SIGNAL:

- 0.4...2V (11)
- 4...20mA (12)
- 5...15Hz (13)

TYPE OF GAS:

- CH₄ 0...5% v/v (243)
- CH₄ 0...100% v/v } (Group I & Group II ONLY) (242)
- CO₂ 0...2% v/v (253)
- CO₂ 0...5% v/v (244)

MEASURING RANGE (for Methane):

- 0...5% v/v (0...100% LEL)
- 0...100% v/v

CERTIFICATION & APPROVAL



| | | | | |
|----------|--|-------|----------------|--------------------|
| Group I | TX6363 Infra Red Gas Sensor/Transmitter: | I M1 | EEx iad I | SIRA 00 ATEX 2061X |
| Group II | TX6363 Infra Red Gas Sensor/Transmitter: | II 2G | EEx iad IIC T4 | SIRA 00 ATEX 2061X |



Designed to comply with the requirements of the EC directive:

- ATEX directive 94/9/EEC
- EMC directive 89/336/EEC

EURONORM The TX6363 Infra Red Gas Sensor/Transmitter complies with ENG1779 Part 1 and Part 2: 2000 performance approvals.

TROUBLE FREE SERVICING

Our 24 hour replacement and exchange service for gas sensing modules simplifies periodic plant maintenance.



Troxex service contracts for gas sensors have been specifically structured to encompass complete after-care responsibility of installed sensors ensuring peace-of-mind and operational security.



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