

## **Sentro Wireless**

Safety monitoring of toxic and flammable gases, in heavy-duty applications, powered by the Strata CommTrac wireless network

**Environments:** Mining • Tunnelling • Shale gas • Underground storage areas • Underground transportation • Process plants • Utilities • Oil & Gas

### Features

- Powered from commercially available batteries, giving up to 45 days operating life
- A truly wireless gas detector powered by the Strata CommTrac wireless network
- Clear and concise menu-driven, user-calibration instructions with detailed sensor diagnostic data
- Monitors carbon monoxide, hydrogen sulphide and methane with options for other gases
- Large LCD screen
- Built-in visual alarm LEDs
- Programmable alarm setpoints
- Option to monitor external relay contacts and to report their state across the Strata CommTrac wireless network



### Benefits

- Wireless operation powered by the Strata CommTrac wireless network, removes the need for expensive to setup and maintain wired infrastructure
- The high-brightness, LCD screen provides clear information with direct on-screen instructions and diagnostic data
- Measures gas concentrations every 1 second and reports status every 90 seconds, except under Warning and Alert conditions when all changes are reported immediately
- Screen backlight is turned on whenever a Warning or Alert events occurs
- Sensors draw minimal power to maximise battery life
- Dual-wall housing gives maximum impact strength, is protected against dust and moisture to IP65, and is suitable for use in arduous operating environments
- Housing cover can be removed with power applied for module replacement and servicing



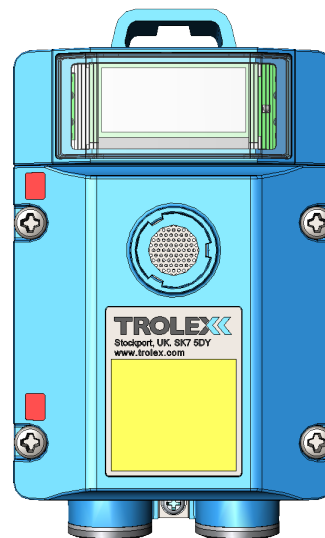
## Functional Overview

The heart of the TX6355 Sentro Wireless is the Sentro eModule, an intelligent standardised gas sensing module. Different Sentro eModules are available to detect a number of different gases, at various concentrations according to your needs.

The eModules are already calibrated so they can be substituted at any time with a replacement module. Each eModule retains its calibration data, the condition of the gas sensing element and its service history. The eModule is automatically recognised by Sentro when it is inserted. This significantly simplifies calibration and maintenance and the eModule can be changed, even with the power applied. Up to 20 insert codes can be configured when it is necessary to ensure that the same type of Sentro eModule is always used.

Two user adjustable alarm set-points allow you to configure alarm levels appropriate to your operating scenario. Selected toxic gas sensing modules are equipped with automatic Time Weighted Average (TWA) and Short Term Exposure Limit (STEL) calculation, in accordance with COSHH recommendations.

The Sentro Wireless communicates using the Strata CommTrac wireless network. The Strata CommTrac wireless network consists of a series of battery powered wireless nodes distributed at regular intervals to form a mesh network with a base node connected to the mine data infrastructure.

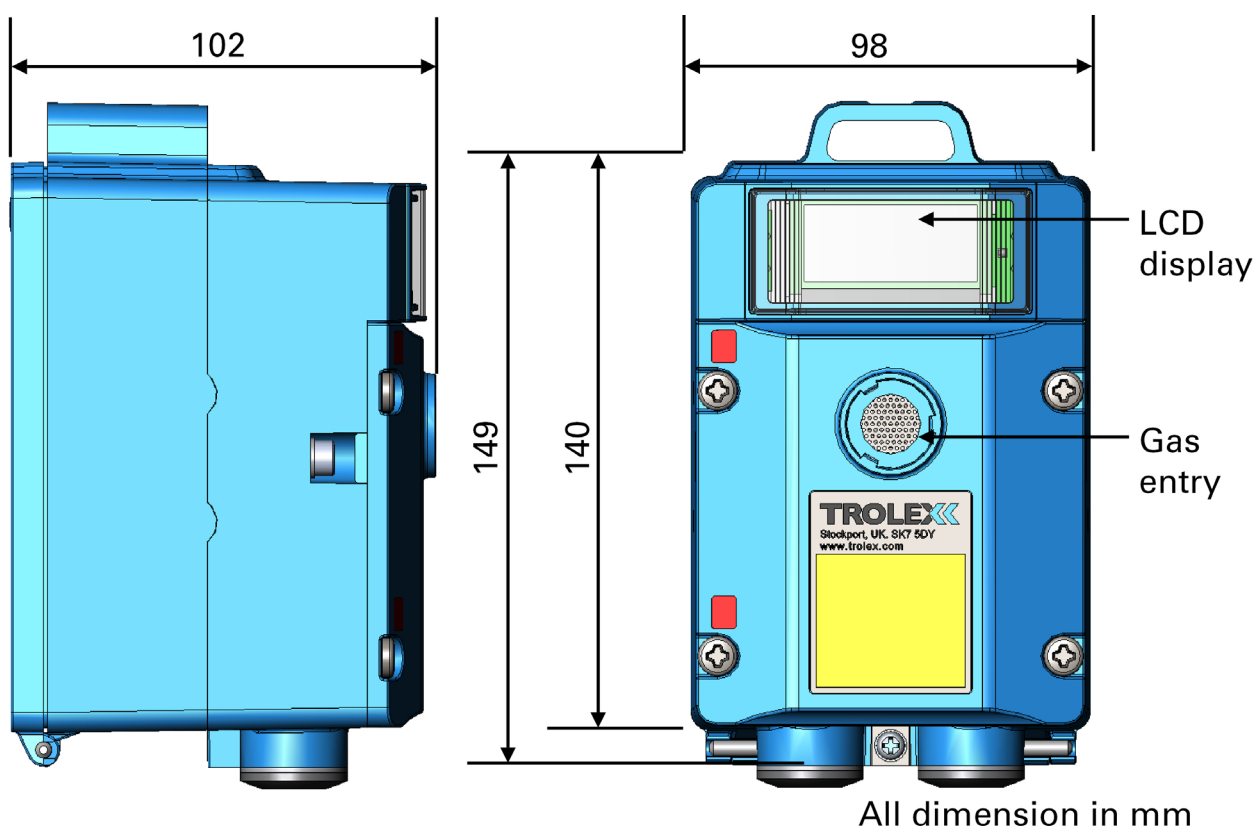


Sentro eModule

## Technical Information

Supply voltage:	6 V dc from internal batteries
Current consumption:	Up to 45 days of operating life from internal batteries
Wireless output signal:	Proprietary, details TBA
Alarm output:	Alarms can be selected to operate at two adjustable set-points with option for built-in visual alarms.
Gases detected:	Carbon monoxide, carbon dioxide, chlorine, hydrogen, hydrogen sulphide, methane, nitric oxide, nitrogen dioxide, oxygen or sulphur dioxide
eModule working life:	Over 12 months dependent upon eModule type and monitoring conditions
Operating temperature range:	-20 to +40 °C
Humidity:	95% non-condensing
Storage temperature limits:	-20 to +60 °C
Housing materials:	Reinforced polymer
Protection classification:	Housing dust and waterproof to IP65 Gas port protected to IP54
Weight:	1.4 kg
Mounting:	By attachment point on the top of the housing - accepts a standard 25 mm strap

## Dimensions



## Order Reference

### MSHA Approved

TX6355.04.01	Sentro Wireless (base unit and battery box) MSHA approved - without Sentro eModule
TX6355.10.04.01	Sentro Wireless (base unit only) MSHA approved - without Sentro eModule
TX6355.11.04	Sentro Wireless (battery box only) MSHA approved

### MASC Approved

TX6355.05	Sentro Wireless (base unit and battery box) MASC approved - without Sentro eModule
TX6355.10.05	Sentro Wireless (base unit only) MASC approved - without Sentro eModule
TX6355.11.05	Sentro Wireless (battery box only) MASC approved

### General Purpose

TX6355.03	Sentro Wireless (base unit and battery box) General Purpose - without Sentro eModule
TX6355.10.03	Sentro Wireless (base unit only) General Purpose - without Sentro eModule
TX6355.11.03	Sentro Wireless (battery box only) General Purpose

Remember to order the required eModules



## Order Reference - continued

TX6350.01.240	eModule - methane 0 to 100% LEL (4.4% v/v) - pellistor
TX6350.01.295	eModule - methane 0 to 100% LEL (5% v/v) - pellistor
TX6350.01.246	eModule - methane 0 to 4% v/v - pellistor
TX6350.01.244	eModule - methane 0 to 5% v/v - pellistor
TX6350.01.250.50	eModule - carbon monoxide 0 to 50 ppm - electrochemical
TX6350.01.250.250	eModule - carbon monoxide 0 to 250 ppm - electrochemical
TX6350.01.250.500	eModule - carbon monoxide 0 to 500 ppm - electrochemical
TX6350.01.251	eModule - hydrogen sulphide 0 to 50 ppm - electrochemical
TX6350.01.252	eModule - sulphur dioxide 0 to 20 ppm - electrochemical
TX6350.01.254	eModule - nitrogen dioxide 0 to 20 ppm - electrochemical
TX6350.01.255	eModule - chlorine 0 to 10 ppm - electrochemical
TX6350.01.257	eModule - oxygen 0 to 25% v/v - electrochemical
TX6350.01.259	eModule - nitric oxide 0 to 50 ppm - electrochemical
TX6350.01.261	eModule - hydrogen 0 to 1000 ppm - electrochemical
TX6350.01.243	eModule - methane 0 to 5% v/v - infrared
TX6350.01.300	eModule - methane 0 to 4% v/v - infrared
TX6350.01.245	eModule - methane 0 to 100% LEL (4.4% v/v) - infrared
TX6350.01.249	eModule - methane 0 to 100% LEL (5% v/v) - infrared
TX6350.01.242	eModule - methane 0 to 100% v/v - infrared
TX6350.01.278	eModule - carbon dioxide 0 to 5% v/v - infrared
TX6350.01.279	eModule - carbon dioxide 0 to 100% v/v - infrared
TX6350.01.297	eModule - methane 0 to 4% v/v - LED infrared
TX6350.01.248	eModule - methane 0 to 5% v/v - LED infrared
TX6350.01.296	eModule - methane 0 to 100% v/v - LED infrared
TX6350.01.298	eModule - methane 0 to 100% LEL (4.4% v/v) - LED infrared
TX6350.01.299	eModule - methane 0 to 100% LEL (5% v/v) - LED infrared
TX6350.01.301	eModule - carbon dioxide 0 to 5% v/v - LED infrared
TX6350.01.302	eModule - carbon dioxide 0 to 100% v/v - LED infrared



Please contact the Trolex Sales Team for further information and advice:

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### Certifications

**United States of America - MSHA:**

Meets applicable requirements of Title 30 Code of Federal Regulations  
Part 18 - Approval No. 18-A150002-0

**South Africa - MASC:**

I.A. No. MASC M/15-0133X Ex rating: Ex ia I

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