

TX6355 **Data Sheet**

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



Benefits

- Wireless operation powered by the Strata CommTrac™ wireless network, removing the cost of setup and maintenance of wired infrastructure
- The high-brightness, LCD screen provides clear information with direct on-screen instructions and diagnostic data
- Measures gas concentrations every 2 seconds 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 event occurs
- Sensors draw minimal power to maximize battery life
- Dual-wall housing gives maximum impact strength. Protection 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

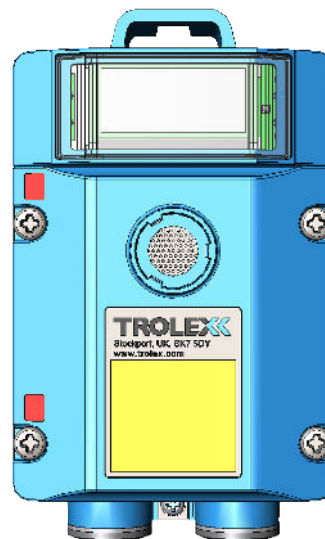
Functional Overview

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 requirements.

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 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.

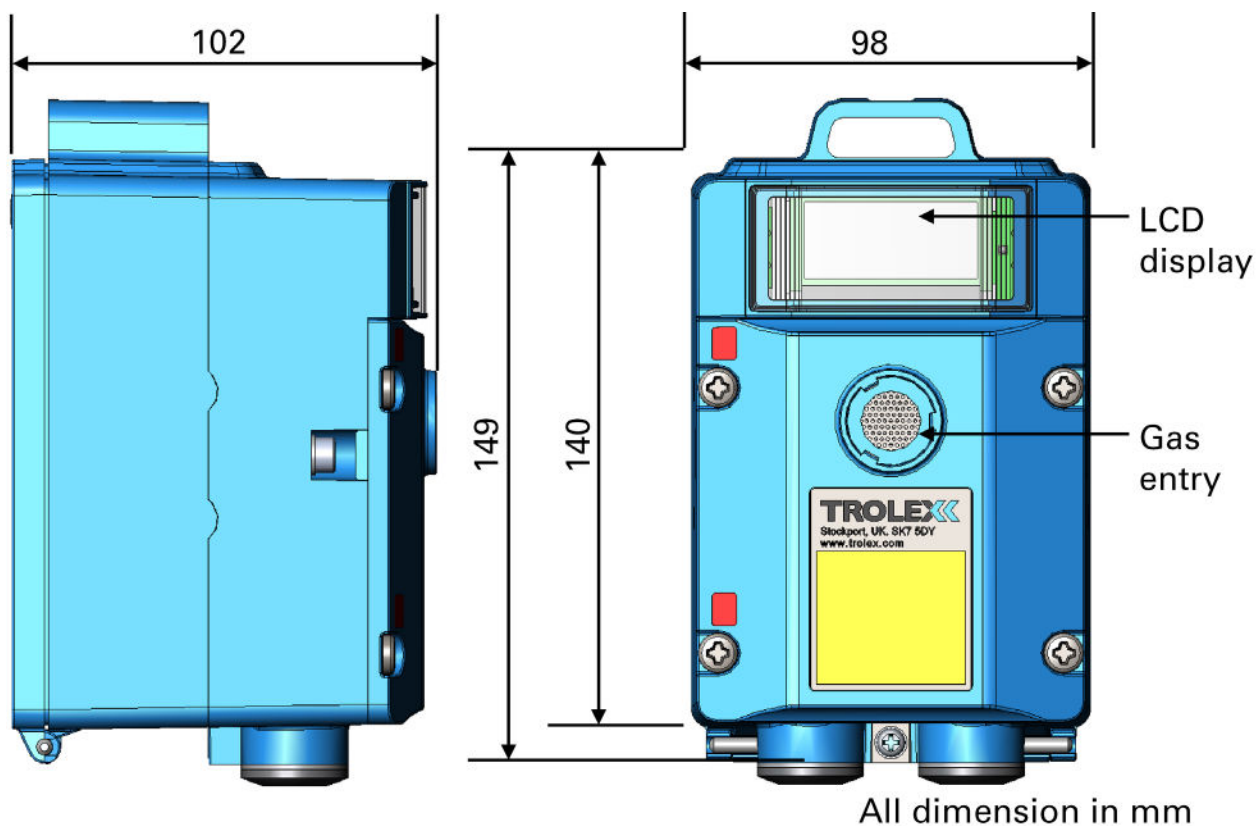


Sentro eModule

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
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
Certification:	Group I - IECEx, MSHA, EAC

Dimensions



Order Reference

Certification	Order Code
General Purpose	TX6355.00.01
EAC	TX6355.14.01
MSHA	TX6355.04.01
MSHA-QPS *	TX6355.04.02
* QPS approval is only valid when used with eModule options marked with an asterisk (see Page 4)	
IECEx GrpI (Aus)	TX6355.06.01

Please order eModules separately (see page 4)



Order Reference eModules

	TX Reference		Certification Reference		Gas Type Reference
example	TX6350	•	04 MSHA	•	250.50 CO 0-50 ppm
example	TX6350	•	06 IECEX (AUS) Grp I	•	251 H2S 0 - 50 ppm

* QPS performance approved eModules are marked with an asterisk in the table below

Certification				
	EAC 14	MSHA 04	IECEX (AUS) Grp I 06	General Purpose 00
Electrochemical Gas Sensors				
CO 0-1000 ppm	-	-	250.1000	250.1000
CO 0-2000 ppm	-	-	-	250.2000
CO 0-250 ppm	250.250	-	250.250	250.250
CO 0-250 ppm Low X H2	-	-	-	-
CO 0-300 ppm	-	-	-	250.300
CO 0-50.0ppm	-	-	-	250.50.DP
CO 0-500 ppm	250.500	250.500 *	250.500	250.500
CO 0-1000 ppm	250.1000	-	250.1000	250.1000
CO 0-500 ppm Low X H2	-	-	-	250.500.H2
CO 0-50ppm	250.50	250.50 *	250.50	250.50
CO 0-50 ppm Low X H2	-	250.50.H2	-	250.50.H2
H2S 0-100 ppm	-	-	-	251.100
H2S 0-300 ppm	-	-	-	251.300
H2S 0-50 ppm	-	-	-	251.DP
H2S 0-50 ppm	251	-	251	251
NO2 0-10 ppm	254.10	-	254.10	254.10
NO2 0-100 ppm	251.100	-	-	254.100
NO2 0-20 ppm	254	-	254	254
O2 0-25 % v/v	257	-	257	257
SO2 0-20 ppm	252	-	252	252
SO2 0-50 ppm	252.50	-	-	252.50
CL2 0-10 ppm	255	-	255	255
NO 0-50 ppm	-	-	-	259.DP
NO 0-50 ppm	259	-	259	259
NH3 0-10 ppm	260	-	260	260
NH3 0-200 ppm	-	-	-	260.200
NH3 0-500 ppm	-	-	-	260.500
H2 0-1 % v/v	-	-	261.1	-
H2 0-1000 ppm	261	-	261	261

Certification				
	EAC 14	MSHA 04	IECEX (AUS) Grp I 06	General Purpose 00
Catalytic Gas Sensors				
C2H2 0-100 % LEL	-	-	-	303
C3H8 0-100 % LEL	-	-	-	282
CH4 0-100 % LEL (5.0 %)	241	-	-	-
CH4 0-100 % LEL(4.4 %)	240	-	-	240
CH4 0-4 % v/v	246	-	246	246
CH4 0-5 % v/v	244	-	244	-
Infrared Gas Sensors				
CH4 0-100% LEL (4.4%)	240	-	-	-
CH4 0-100% LEL (5.0%)	241	-	-	-
CH4 0-5.00% v/v	244	-	-	-
CH4 0-10 % v/v IR	294	-	-	-
CH4 0-100 % v/v IR	242.HR	-	-	-
CH4 0-100 % LEL IR (4.4 %)	245	-	-	245
CH4 0-100 % v/v IR	242	-	-	242
CH4 0-20 % v/v IR	-	-	-	-
CH4 0-4 % v/v IR	300	-	-	-
CH4 0-5 % v/v IR	243	-	243	243
CO2 0-1 % v/v IR	278.1	-	-	-
CO2 0-2 % v/v IR	278.2	-	-	-
CO2 0-1.50 % v/v LED IR	-	301	-	301
CO2 0-100 % v/v IR	279	-	-	279
CO2 0-2 % v/v IR	-	-	-	-
CO2 0-5 % v/v IR	278	-	278	278