

**ONE LIFE.
PROTECT IT.**



SENTRO X»

DATA SHEET

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FEATURES

- Main programmable **SENTRO X Controller** with OLED graphic display and keypad
- Integral output signals: RS485 MODBUS, 4 mA to 20 mA and 0.4 V to 2 V
- Optional dual relay output relay cards with programmable alarm functions
- Optional intrinsically safe ethernet card
- Optional integrated A/V alarm beacon for local area warning
- Programmable Setpoint monitoring functions with assignable warnings and alarm
- Programmable STEL and TWA monitoring functions on selected toxic gas sensors
- Plug-in calibrated gas sensing gBlocs for a range of oxygen, toxic and flammable gas
- Optional remote gas sensor configuration with interconnecting flexible armoured conduit with 4-core cable

PRODUCT OVERVIEW

TX6310 SENTRO X Controller with integral gas sensor

This is the main control unit within the **SENTRO X Gas Detector** suite, housing the central intelligence of the gas detection system.

Designed to the rugged standards for direct operation in underground hazardous areas and heavy industrial applications.

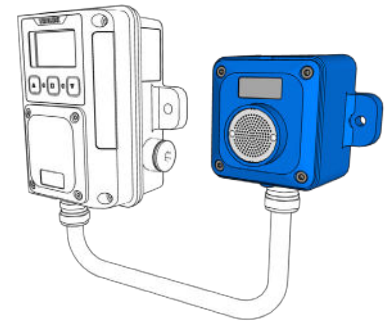
Certified to the latest Group I, M1 intrinsically safe standards and gas performance requirements, giving the highest possible safety protection.



TX6310
SENTRO X Controller

TX6320 Remote Gas Sensor

Data from the remote gas sensor is transmitted to the **SENTRO X Controller**, which can be mounted in a more accessible and convenient location, up to 10 metres away from the gas detection area.



TX6320 Remote Gas Sensor interfacing with a **SENTRO X Controller**

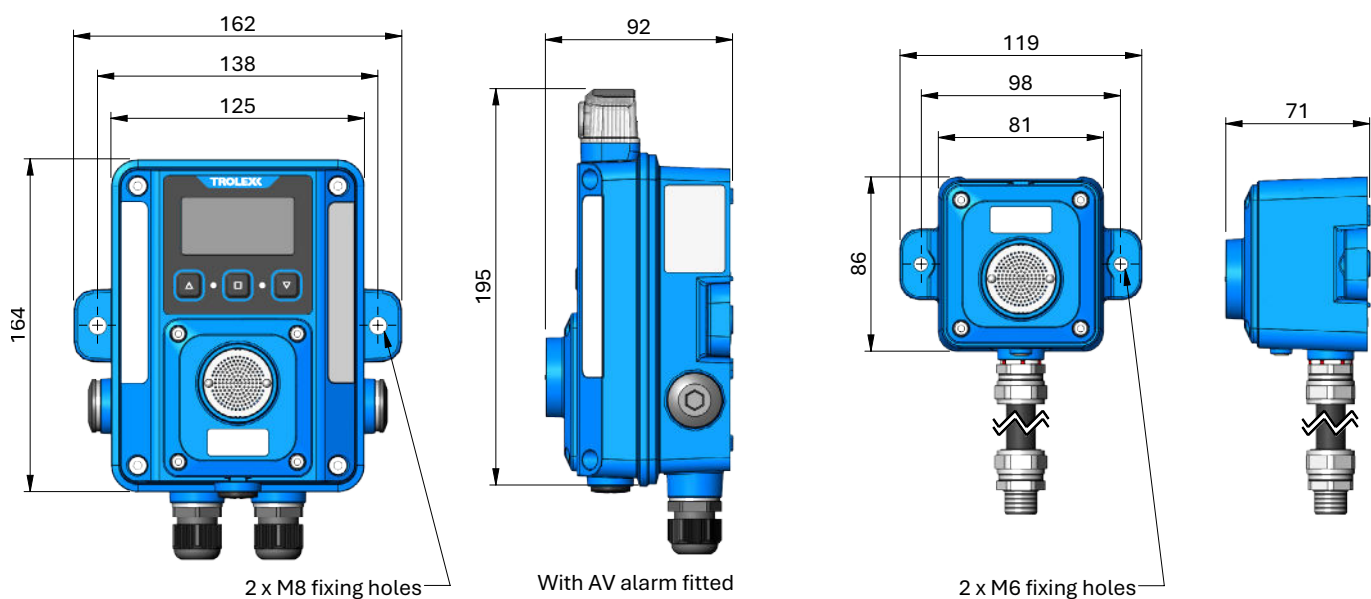
TX6310 SENTRO X Controller with integrated audio/visual (A/V) alarm

Local area A/V alarm, with high brightness LEDs and loud sounder.



SENTRO X Controller
with an A/V
alarm fitted

DIMENSIONS



TECHNICAL SPECIFICATION

Operating temperature	-20 °C to +40 °C
Storage temperature limits	-20 °C to +60 °C
Humidity	90% RH non-condensing
Housing materials	Reinforced PC/ABS polymer EMC protected and proof against surface electrostatic discharge
Ingress protection	TX6310 SENTRO X Controller : IP65 TX6320 Remote Sensor: IP65 A/V alarm: IP65
Net weight	TX6310 SENTRO X Controller : 775 g (maximum weight) TX6320 Remote Sensor: 215 g
Mounting	TX6310 SENTRO X Controller : • 2 x M8 fixing holes (unistrut compatible) TX6320 Remote sensor: • 2 x M6 fixing holes (unistrut compatible)
Connections	TX6310 SENTRO X Controller : • 4 x threaded M20 cable entries provided with 2 x PVC cable glands and 2 x blanking plugs • 1 x threaded M16 cable entry (for Remote Sensor) TX6320 Remote Sensor: • M16 cable entry provided with stainless steel cable gland (for connection to SENTRO X Controller)
Information display	Graphic OLED
Supply voltage	9.5 V to 16 V DC from an approved intrinsically safe source
Certification	ATEX Grp I CAT. M1 and IECEx Grp I, EPL Ma See section 8 Certification and Conformity of user manual (P5600.1600) or full details

ELECTRICAL DETAILS

Electrical connections	5 mm pitch lever lock terminals
Conductors	Max. 2 per terminal
Conductor size	Nominal 2.5 mm ² , 14 AWG (4 mm ² maximum)
Supply voltage	Maximum: 16 V Minimum: 9.5 V
4 mA to 20 mA max. line load at 9.5 V	Maximum: 214 Ohms
0.4 V to 2 V min. line load	Minimum: 4 K Ohms

Current consumption details

Component list	Input voltage	Typical current draw
SENTRO X Controller	Minimum 9.5 V	30 mA
SENTRO X with Remote Sensor	Minimum 9.5 V	75 mA

Additional

A/V alarm (active)	Minimum 9.5 V	+55 mA
1 x Relay card (2 Relays energised)	Minimum 9.5 V	+45 mA
Ethernet card (10 Mbs)	Minimum 9.5 V	+40 mA

gBlocs (Gas)

Electrochemical	Minimum 9.5 V	+25 mA
Pellistor	Minimum 9.5 V	+45 mA
Infrared	Minimum 9.5 V	+65 mA

Note: Current consumption details are based on minimum input voltage.

ORDER OPTIONS

TX6310 SENTRO X Controller

Option	Certification	Option	Cover	Option	A/V alarm	Option	Extension card
01	ATEX Grp I	01	Gas Inlet	00	Not fitted	00	None
06	IECEX Aus Grp I	02	Blank cover	01	Fitted	01	1 x Dual Relay
						02	2 x Dual Relay
						03	1 x Ethernet
						04	1 x Dual Relay 1 x Ethernet

TX6320 Remote Sensor

Gas sensors may be required to operate in restrictive and inaccessible locations. gBloc sensors can be mounted remotely from the **SENTRO X Controller** in a compact housing constructed to the same rugged standards as the **SENTRO X Controller**.

The Remote Sensor can be equipped with any standard gBloc in the range and uses the identical gas inlet cover with the same stainless-steel grille and moisture resistant membrane.

Option	Certification	Option	Flex conduit/cable
01	ATEX Grp I	000	Not fitted
06	IECEX Aus Grp I	050	5 m
		100	10 m

Note: Please refer to the P5600.1605 for the General Purpose **SENTRO X** data sheet and/or P5600.1603 for the **SENTRO X** gBloc data sheet.

DISCLAIMER

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At Trolex, we save lives.

We believe that no person should risk their life to earn a living.

Our aim is to become the world's leading name in health and safety technology, through pioneering products that provide real-world benefits to our customers, whenever workers operate in hazardous environments.

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