



SMARTSENSE[®] SINGLE GAS MONITOR TERMINAL MODULE WITH SENSOR

- Single/dual gas detection per module
- Modular architecture allows for monitoring expansion
- Optional Digital/Analog inputs and outputs
- Programmable alarm set points
- smartCal compatible
- Calibration record, alarm history

FEATURES

The smartsense® Single Gas Monitor SSSG-100 is an all-in-one, customisable gas monitoring unit, reliable in all mining workplace environments.

The IS-designed smartsense® Single Gas Monitor Terminal Module with On-board Sensor can be used as a standalone environmental monitoring solution. A robust, multi-gas monitoring system can be built by adding up to six hot-swappable SSSG-100 Sensor Modules to the Terminal Module. Mine safety can be further increased with the addition of a SSSG-100 Alarm Module.

The smartsense® Single Gas Monitor SSSG-100 Terminal Module with Sensor functions as a black box, storing critical information such as Calibration Record, Alarm History, and data logging for post-accident investigation.

Fully programmable set points for Alarm and Output controls along with Short Term Exposure Limit (STEL) and Time Weighted Average (TWA) limits for sensor modules can be configured and viewed over RS485 Modbus.

INTERFACES	
Connectivity	RS485 Modbus
External Inputs (optional)	2 x Digital Input 2 x Analog Input (4-20 mA or 0.4 - 2 Vdc)
External Outputs (optional)	2 x Independent Programmable Digital Output 2 x Analog Output

TECHNICAL DATA

ELECTRICAL PARAMETERS	
Power Supply	10 to 24 Vdc
Current Consumption ¹	<9.0 mA @ 24 Vdc <9.5 mA @ 15 Vdc <10.5 mA @ 12 Vdc <11.0 mA @ 10 Vdc
Operating Temperature	-20 °C to +40 °C
Humidity	90 % Non-condensing
IP Rating	IP66/67

¹ Information shown for an electrochemical sensor. Current consumption varies by sensor type. Please consult the SSSG-100 User Manual for detailed data

GAS SENSING PARAMETERS	
Carbon Monoxide (CO)	0-50 ppm 0-100 ppm 0-500 ppm 0-1000 ppm
Oxygen (O ₂)	0-25 %
Methane (CH ₄)	0-5 % 0-100 %
Carbon Dioxide (CO ₂)	0-5 %
Sulphur Dioxide (SO ₂)	0-10 ppm 0-50 ppm 0-100 ppm
Hydrogen Sulphide (H ₂ S)	0-50 ppm 0-100 ppm 0-500 ppm
Nitrogen Dioxide (NO ₂)	0-10 ppm 0-50 ppm
Nitrous Oxide (NO)	0-50 ppm 0-100 ppm
Propane (C ₃ H ₈)	0-2 %
Ammonia (NH ₃)	0-50 ppm 0-100 ppm
Hydrogen Cyanide (HCN)	0-20 ppm
Ozone (O ₃)	0-2 ppm
Chlorine (Cl ₂)	0-20 ppm
Hydrogen (H ₂)	0-1000 ppm

Technical data are limit values.

If the product is integrated into systems or operated in combination with other devices, its permissible operating values can deviate from these limit values. Subject to technical modifications without prior notice.

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