



SMARTSENSE[®] SINGLE GAS MONITOR SENSOR MODULE

- Single/dual gas detection per module
- Modular architecture allows for monitoring expansion
- Easily hot-swappable for quick replacement
- Factory pre-calibrated
- smartCal compatible

FEATURES

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

With its intrinsically safe designed smartsense® Single Gas Monitor Sensor Module, the SSSG-100 can be customised to monitor multiple gases at a single location.

Sensor Modules can be configured to use Series 7, Series 4, Dual Gas Series 4 electrochemical, or NDIR hydrocarbon sensors and can be combined to cover a wide range of typical mine gases. Implementing solutions to monitor gases such as carbon monoxide, hydrogen sulphide, and hydrocarbons (e.g. methane), are made simple with SSSG-100 Sensor Modules.

Sensor Modules come equipped with full-range temperature and pressure compensation.

Due to its modular architecture, the SSSG-100 can have up to six Sensor Modules stacked easily and neatly together and has hot-swapping capabilities to simplify sensor calibration, service, and replacement. Customised SSSG calibration caps make for a streamlined LED-guided calibration process.

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 may be configured via one of the SSSG-100 Terminal Module options.

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.

Rev. B

TECHNICAL DATA

ELECTRICAL PARAMETERS	
Power Supply (via SSSG Terminal)	10 to 24 Vdc
Current Consumption ¹	<20.0 mA @ 24 Vdc <30.0 mA @ 15 Vdc <37.0 mA @ 12 Vdc <45.5 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

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