SSSG-SENSOR-PRT-MTR
SMARTSENSE®
PARTICULATE
MONITOR

- Particulate Matter Sensing
- PM0.5, 1.0, 2.5, 4 and 10
- Modular Architecture
- Easily hot-swappable for quick replacement
- No maintenance calibrations

smartsense®

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FEATURES

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

With the growing health and safety concerns of diesel particulates underground, measuring and managing particulate matter becomes vital to promoting a healthy workforce.

The smartsense® particulate matter sensor gives you absolute control to reliably measure particulate matter. The particulate matter sensor gives both the mass concentration and the number concentration of particulate matter ranging in size from 0.3µm to 10µm.

The particulate matter sensor conveniently and seamlessly interfaces to our SSSG-100 modules to add particulate matter sensing.

Fully programable alarm and output set points can be configured through the terminal module, through modbus or through any smartsense® application

MECHANICAL DATA	
Communication	Designed to be used with the SSSG terminal Module for communication over Modbus RS-485 or 4-20mA
Weight (nominal)	1.00 kg (2.20 lbs)
Input Voltage	10V to 24V, designed to be powered through the SSSG terminal module
Weight	0.36 kg (0.79 lbs)

TECHNICAL DATA

PERFORMANCE SPECIFICATION	
Sensing Technology	Laser Scattering
Measurement Range	0.3µm to 10µm
Concentration Range	0 - 1000 µg/m³
PM Size (mass concentration)	PM1.0, PM2.5, PM4, PM10
PM Mass Concentration precision	PM1.0 to PM2.5: ± 6 % m.v. (for 0 to 100µg/m³), ± 10 % m.v. (for 100 to 1000µg/m³) PM4 to PM10: ± 25 µg/m³ (for 0 to 100µg/m³), ± 25 % m.v. (for 100 to 1000µg/m³)
PM Size (Number concentration)	PM0.5, PM1.0, PM2.5, PM4.0, PM10
PM Number Concentration Precision	PM0.5 to PM2.5: ± 100 #/cm³ (for 0 to 1000 #/cm³), ± 10 % m.v. (for 1000 to 3000 #/cm³) PM4 to PM10: ± 250 #/cm3 (0 to 1000 #/cm³), ± 25 % m.v. (1000 to 3000 #/cm³)
Sampling Interval	1 second (when not in self cleaning mode)
Self Cleaning	Yes, Fan purging
External Filtration	Yes, Replaceable

ENVIRONMENTAL DATA	
Temperature Range	10°C to 40°C (50°F to +104°F)
Recommended Humidity Range	20% to 80% RH

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. A, (Preliminary)

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