



Environmental Monitoring in Hazardous Areas

DO YOU KNOW ABOUT UNSAFE CONDITIONS IN YOUR HIGH RISK AREAS?

EnvironEx is a wide area telemetry system monitoring environmental parameters as well as early warning fire indicators in underground fiery mines.

Elements such as hazardous gas, smoke, dust and airflow is monitored on a continuous basis to provide early warning for evacuation and management information for quick decision making.

EnvironEx will measure and report reliable, continuous telemetry information to provide clear measurements for hazardous areas.



BENEFITS

- Timely notice of health and safety risks
- Early warning for managing risks and evacuation plans
- Reliable information for fire fighting and rescue teams to ensure safety
- DMR requirements for safety can be met



Product Innovation & Service Excellence with each fire prevention Solution Supplied

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ENVIRONMENTAL MONITORING SOLUTIONS

The system is based on a common network cable of max 1000m routed through a typical coal mining section. This cable carries both communications signals and DC power supply. Up to 10 smart sensors can be hooked onto this cable. Each smart sensor can measure up to 4 gases internally, as well as smoke levels, temperature and air velocity on a continuous basis.

The complete system has an Ex ia I rating. The power supply can optionally be mounted in a safe area such as a sub-station, or in a flame proof or sand filled enclosure directly in the hazardous area.

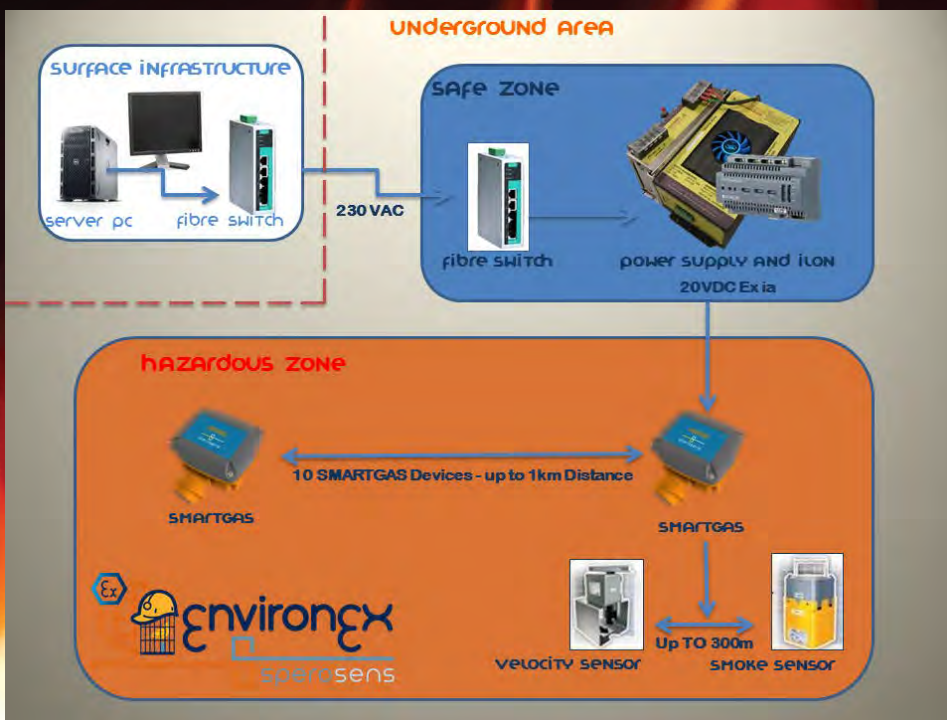
Connectivity to the control centre is via the mine's existing LAN (fibre or Cat 5 per customer choice)

The system will measure the underground environmental conditions in the areas close to the working face of a coal mine. Parameters such as CH₄ gas, CO gas, Oxygen, Noxious gases and Sulphur gases can be monitored in 4 internal channels in each smart sensor. Optionally dust or smoke levels as well as air flow velocities can be measured externally to the Smart Sensor.

If extended monitoring is needed over longer distances in safe areas along conveyor belt routes and safe airways, the non-Ex safe version of the EnvironEx system can be deployed over distances of up to 20km on single cable runs.

Intrinsically safe systems may be maintained, calibrated and installed on a live system.

The presence of explosive gases will not require the system to be shut down, making continuous monitoring of hazardous areas possible.



APPLICATIONS

- Environmental Monitoring in Explosive Atmospheres
- Coal Mines
- Conveyor Belt Monitoring
- Ventilation Monitoring
- Fire Suppression Monitoring

SPEROSENS COMPANY CERTIFICATIONS/ACCREDITATIONS

- SAQCC
- ASIB
- FDIA
- SANS 1475
- ISO 9001
- ECSA PROFESSIONAL REGISTRATION
- IFT PROFESSIONAL REGISTRATION