



Correctional Facilities and Detention Centers

ICAM[™]
by  **xtralis**[™]

No Need To Compromise...

Smoke and fire detection in prisons has been a real challenge in the past as it has called for a compromise between safety and the risks of vandalism or inflicted injuries.

Xtalis ICAM aspirating systems offer the best of both worlds!

Vulnerabilities Within Prisons

- Inmate tampering
- Abuse and nuisance alarms
- Suicide using wiring
- Inflicting injuries
- Arson
- Wiring
- Accessibility
- Maintenance access
- Repair



Point smoke detectors are unsuitable for prison cell use due to their inherent vulnerability of construction and the difficulty in gaining access for service.



Unique ASD Solutions That Work For Prisons

ICAM Aspirating Smoke Detection (ASD) provides unique solutions to vandalism, maintenance problems and false alarms.

How does ICAM ASD work? The air from the protected area is actively sampled through a network of pipes. These pipes typically have one sampling hole per pipe, per cell. Typically the sampling hole is installed in the return air grille, but can be concealed inside the cell often in light fittings or inconspicuously in the HVAC system. Alternatively, flush capillary Sampling Points can be used, concealed in the cell.

ICAM IAS

The ICAM IAS is a single or dual channel air-sampling wide-bore conventional detection system. The IAS system can be protected by a metal case or sited in the service riser between adjacent cells. The IAS-2 two channel system is a cost effective solution when sited in shared service risers.

The IAS systems utilize a high performance aspirator and flow monitoring circuit. Rapid detection of flow failure caused by tampering is reported to the fire alarm control panel as a device fault. Closed loop sampling is also provided whereby the exhausted air can be completely returned to the sampled prison cell. An IAS system is ideal for prefabricated cells where a complete installation can be made off-site.

ICAM ILS

The ICAM ILS is a single or dual channel air-sampling wide-bore laser detection system. The ILS system operates in a similar way but offers high sensitivity smoke detection of up to 0.06% obscuration/m (0.02% obs/ft), making it highly suitable for long cell corridors and communal areas.

ICAM IFT-15

The ICAM IFT-15 is unique in its ability to pinpoint the source of an incipient smoke incident and locate the event, therefore minimizing investigation and downtime. These advanced detectors provide intelligent addressability to identify up to 15 protected areas, via micro bore air sampling tubes, with a high sensitivity ranging from 0.001% to 20% obscuration/meter (0.0003% to 6.1% obs/ft). IFT-15 is ideally suited to protected prison and correctional institutions for compartmentalized, tamper-proof smoke detection and easy centralized maintenance.



**IAS-1 and IAS-2
Aspirating Smoke Detector**



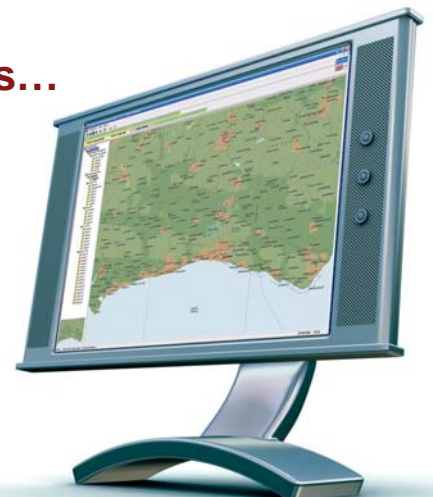
**ILS-1 and ILS-2
Laser Aspirating Smoke
Detector**



**IFT-15
Highly sensitive aspirating
smoke detectors**

Xtralis VSM4, Have The System At Your Fingertips...

Xtralis VSM4 management software provides full and comprehensive integration of your fire protection systems. VSM4 configures, monitors and troubleshoots your fire systems. It is easy-to-use and has been designed to provide you, the operator, with complete control. The user-friendly interface allows you to quickly assess and respond to system events - all from one convenient location. Xtralis VSM4 is a total solution for integrated control and monitoring of your Very Early Warning smoke detection system.



Other Industries

Unmanned Sites

- Fully self-contained
- Additional environmental parameters monitored
- Web access

Warehouses

- Pipes can be placed within the racking
- Minimize maintenance costs
- Access difficult to reach areas which cannot be monitored by normal detection

Correctional Facilities and Detention Centers

- Tamper proof air sampling
- Central Maintenance facilities

Cold Stores

- No heated detector bases
- Very Early Warning
- Unaffected by high airflows
- Simple installation

Mines

- Individual protection of high-voltage switchgear cabinets
- HV cabinets are bolted and cannot be opened easily
- PLC and control rooms
- Electrical substations

Historic Buildings/ Museums

- Discrete monitoring
- Rapid response
- Monitoring valuable assets

IT Rooms

- Extremely high sensitivity
- Individual cabinet identification
- Unaffected by high air speeds

Exclusive Residences, Apartments, Hotels, Shops and Offices

- Aesthetic, invisible
- Remote web monitoring

Utility Providers

- Large area coverage
2,000 sqm (20,000 sq ft)

Transport

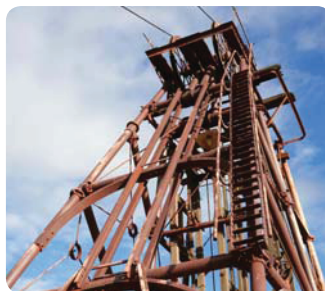
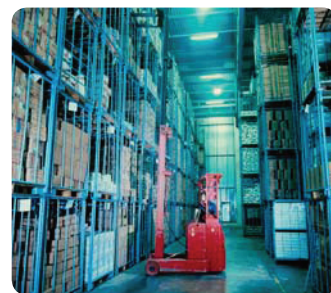
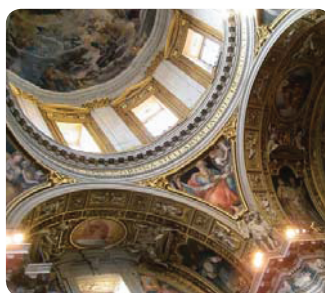
- Ideally suited to long compartments
- Concealed detection
- Automatic air pollution compensation
- Multiple sectors for carriage sets with integral cabs

Significant Religious Buildings

- Unobtrusive detection
- Earliest detection

Wind Turbines

- Smoke detection control during braking both Emergency and Operational
- Unaffected by arcing, lightning and static electricity
- Unaffected by air speeds within the generator
- Insensitive to environmental conditions



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