VESDA®

XTRALIS XAS - CORRECTIONAL FACILITIES SPECIALIST

US Correctional facilities suffered almost three thousand fires between 2003 and 2007, causing direct property damage of 10 million and resulting in over 185 civilian injuries.*

Research shows that fires occur frequently in locked cells within correctional facilities. As a result, it is important that any fires in cells be detected as quickly as possible thus facilitating early evacuation of inmates. Building codes also require smoke detection inside the locked cells which in turn presents specific challenges for fire detection.

CHALLENGES

- Vandalism – detectors that are visible and accessible invite vandalism and tampering from inmates
- Maintenance – accessing secure and restricted areas to test and maintain detectors is costly and challenging
- Nuisance alarms –Correctional facility officers frequently encounter nuisance alarms (particularly with 'in-cell' detectors), usually caused by the inmates, but may also be caused by dust, dirt or other airborne contaminants in the air affecting detector reliability and performance

Whatever the cause, nuisance alarms result in:

- Lost time and operations disruption while guards/staff investigate the cause of the alarm. Significant costs involved as detectors must be examined and replaced should they be damaged, including costs associated with restoring the system to proper operation
- Increased risk to inmates and staff as the fire alarm system could be out of service for minutes, hours or even days depending on the extent of damage. Some systems in remote locations could be out of service for extended periods whilst waiting replacement parts or service technician attendance

CAUSES

The key locations and causes of structural fires in correctional facilities include kitchens or cooking areas, laundry rooms and intentional igniting of mattresses and bedding materials within cells.

SOLUTION: XAS DUCT DETECTOR

The XAS-1-US and XAS-2-US Air-sampling Smoke Detectors (ASDs) are reliable smoke detection devices for challenging spot detection applications. Solutions include HVAC duct smoke detection in restricted areas such as prison cells, transformer vaults and elevator shaft ceilings (when required).

Utilizing a high-performance aspirator and configurable flow monitoring circuitry, the XAS detector actively draws air from a difficult-to-reach HVAC duct up to 80 feet away, allowing simplified access for service. The sampled air is filtered before being analysed by a smoke sensor that is incorporated into the system. Air flow level is displayed on a ten-element bar graph that can be adjusted for high and low flow thresholds. A flow fault is reported as a device trouble via relays to the monitoring system.

VESDA®

Unlike other duct detectors flexible tubes can be used with the XAS duct detector installed in places where typical piping is not easily installed. With duct applications two flexible tubes are installed. The inlet tube is used to sample air from the duct and the second tube exhausts the air back into the duct.

When using the XAS device in an "open area protection" arrangement the detection device can be mounted outside the protected area and accessed without the use of lifts or ladders, bringing tangible cost savings to end users.

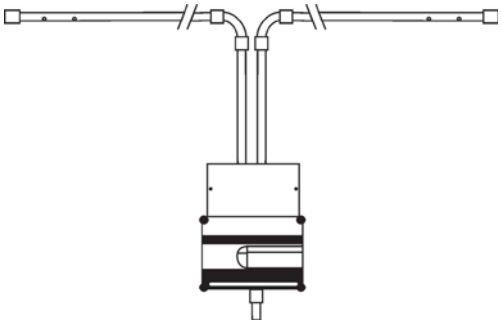
Maintenance/ service for the XAS detector can be performed from floor level making, it well suited for the following types of applications:

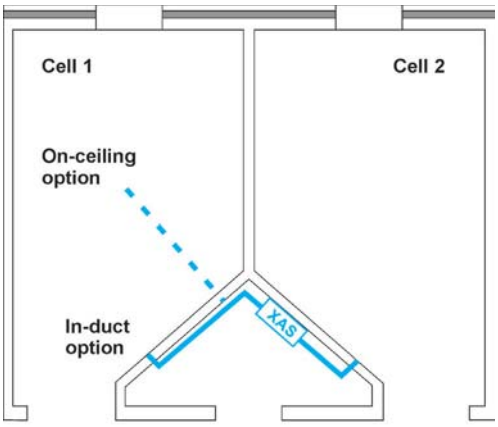
- Where duct detectors are difficult to maintain and service;
- Where an aerial lift device must be used to service duct detectors; and
- Where unobtrusive smoke detection is required.

In addition to duct applications, the XAS detection system can be applied in other challenging environment areas. This includes the top of elevator shafts, and transformer vaults where conventional detectors can be hard to access and maintain or where the device can be adversely affected by the environment of the area it is protecting.

Refer to the XAS data sheet (Document #20637) for detailed specifications.

Part No.
VSP-610-US





Xtralis XAS On-ceiling protection
(for two adjacent prison cells)

WHY USE XTRALIS XAS SMOKE DETECTION SOLUTIONS IN THESE FACILITIES:

- Tamper-proof sampling points offer security which deter vandalism
- Sampling pipe can be located behind vents, invisible to inmates
- Sampling holes can be located where smoke will travel and the detector positioned in a location that has easy access for maintenance
- Remote monitoring and configuration of detectors improves control and cost of ownership in unmanned or secured areas

www.xtralis.com
UK and Europe +44 1442 242 330 **D-A-CH** +49 431 23284 1
The Americas +1 781 740 2223 **Middle East** +962 6 588 5622
Asia +86 21 5240 0077 **Australia and New Zealand** +61 3 9936 7000
Doc. 25679_05

xtralis Honeywell
Xtralis is now a part of Honeywell