Made in the UK

Established 1999

Advanced

Axis AX

Key Features & Benefits

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Made in the UK

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SSD5943

Advanced Axis AX Fire Alarm System

The Axis AX fire system features a range of high-performance UL 864 10th Edition listed control panels and devices designed for the stringent detection requirements of UL 268 7th Edition.

Key Features & Benefits

Compliance	**UL 864 10th Edition (panels).**	Meets the latest UL requirements, simplifying specification and compliance on demanding commercial, industrial and infrastructure projects.
	UL 268 7th Edition (detectors).	Provides a U.S. market-aligned architecture optimised for modern UL 268 7th Edition performance, false-alarm mitigation and survivability.

Modular, Scalable Panel Architecture	Modular fire alarm system with standalone panels **(1, 2 or 4 SLC loops)**, modular command centres, audio amplifiers, power supplies, and a full range of intelligent modules.	High loop capacity and modular expansion allow phased growth without redesign, ideal for small to large commercial and mixed-use projects. This approach also minimises product variation and lowers training overheads.

Distributed Networking	Distributed network architecture supporting **up to 200 panels/nodes.**	Enables large, multibuilding and 'campus style' installations to operate as a single, unified fire alarm network.
	True peer-to-peer decentralised intelligence at every panel/node.	Improves system resilience by removing reliance on a central controller and maintaining local operation across the network even during catastrophic failures.
	Unified system-wide overview and diagnostics. *Please see Diagnostics & Maintenance section for more information.*	Provides clear visibility and control across the entire site, supporting effective incident management and maintenance.
	Reduced need for long cable runs and central infrastructure.	Simplifies system design, shortens installation time and helps lower overall project cost.
	Unique sector-based (building partitioning) programming.	Allows buildings, areas and event type information to be distributed where required.

Control Panel Range	Intelligent 1, 2 and 4 loop panels (AX CTL 1L, AX CTL 2, AX CTL 4).	Scalable hardware options allow cost-effective selection without changing platforms or software tools.
	Each SLC supports up to 126 addressable devices and industry unique sub-addressing with up to 200 zones per panel and up to 25,000 devices per network.	High device density per loop reduces panel count, wiring and installation costs.

Intuitive User Interface and Controls	Panels feature intuitive menus, simple 'click-and-select' programming, and clear status indication.	Reduces commissioning time and improves usability for operators and service technicians.
	Autolearn feature.	Programming is easy (and much simpler than many other systems).

Signaling Line Circuits (SLCs)	Class X, A or B SLC operation using a fully digital protocol.	Improves system resilience and survivability, with flexible wiring options to suit various site requirements.
	High noise immunity and operation over non-shielded cable.	Improves reliability in electrically noisy environments.
	Extensive SLC diagnostics.	Enhanced diagnostics support NFPA wiring survivability goals and assist with rapid identification of wiring faults.

Cause & Effect & Logic	Advanced simplistic cause & effect configuration with spreadsheet style programming.	Allows complex logic (phased evacuation, HVAC shutdown, smoke control) without external controllers or custom coding. Delivers precise, site-specific fire responses and simplifies complex fire strategies.
	Dynamic zoning independent of physical wiring.	Simplifies late-stage changes and future system modifications, reducing commissioning time.

PerfectSync (Audible & Visual Synchronisation)	PerfectSync technology synchronises audible and visual devices.	Provides compliant, consistent audible and visual warning throughout the building, even across multiple panel installations.
	Panel wide or network wide synchronisation.	Ensures perfect synchronisation on small to large installations without the need for add-on synchronisation modules.
	Fully integrated into Axis AX notification appliance circuits and audio amplifier circuits.	Simplifies design, commissioning and fault finding compared to third party synchronisation solutions.
	Axis AX integrates multi-channel digital audio within the fire system architecture.	Removes the need for separate audio systems, reducing cost and system complexity. Allows multiple messages to occur simultaneously throughout a facility. Up to 16 digital pre-recorded messages per amplifier.
	Audio messages are built into each network node, supporting superior system redundancy.	Maintains evacuation messaging even in the event of partial network failures.

DynamixSmoke (Smoke Control Integration)	Integrated DynamixSmoke control of fans, dampers and actuators.	Enables compliant, automated dedicated and non-dedicated smoke control without third-party interfaces.
	Smoke control logic is configured using a unique specification-based matrix approach.	Makes complex smoke strategies easier to understand, verify and commission for engineers. Simplifies complex smoke strategies and reduces configuration errors.
	Fully monitored and UL UUKL compliant.	Provides confidence to consultants and AHJs that smoke control is correctly supervised and fault tolerant.

Audio & Emergency Communication	Simplistic integrated support for voice evacuation and digital audio.	Allows a single, unified life safety platform rather than separate fire and voice systems.
	Loop-powered sounders and loop-powered sounder beacons available.	Reduces installation time and cost as no additional wiring or power supplies are required. Sounders and sounder beacons are individually addressable and sit on the same loop as other devices.

Fireman's Telephones (Firefighter Communication)	Axis AX supports integrated firefighter emergency telephone systems using the same fire alarm system platform.	Provides reliable two-way communication for firefighters without requiring a separate system.
	Centrally controlled at single or multiple command centres.	Improves incident management by giving firefighters direct, supervised two-way communication at various locations.
	Monitored handsets, firefighter phone jacks and telephone risers for rapid fault reporting.	Ensures faults are clearly indicated, supporting compliance and ongoing operational readiness.
	Support for up to 500 telephone jacks distributed across two telephone risers (250 per riser).	Enables firefighters to communicate with each other more easily, with a particular focus on communication in high-rise buildings.
	Conference call facility for up to 5 active telephones.	Allows multiple fire fighters to communicate in a group during a fire event.

User Interface & Commissioning	Graphical LCD display with intuitive menus and guided programming.	Reduces learning curve for engineers unfamiliar with Axis AX, speeding up commissioning and diagnostics.
	Common hardware architecture across the AX range.	Simplifies spares, training and service procedures across multiple sites.
	Ability to program directly from the panel via a laptop.	Intuitive software makes commissioning simpler and faster.

Diagnostics & Maintenance	Built-in Windows-based service and diagnostics tools.	Enables rapid fault identification and service reporting, reducing downtime and service technician hours.
	Automatic drift compensation and contamination monitoring.	Reduces nuisance alarms and supports predictive maintenance strategies, reducing downtime and improving system reliability.
	Network-wide built-in voltage and ammeters for input and output circuits.	Superior troubleshooting without the need for independent, inconsistent Amp/Volt meters.
	Temperature compensated battery charging with integral cell failure detection.	Provides correct environment charging with real-time battery replacement notification.

Power & Outputs	Multiple voltage regulated 2A NAC outputs.	Broad compatibility with listed notification appliances and predictable system performance.

Integration & Interfaces	Support for annunciators, I/O drivers and BMS interfaces.	Enables seamless integration with building management and third party life safety systems.

Intelligent Detection	Axis AX supports a comprehensive range of intelligent detectors, CO detectors, sounder bases, I/O modules and loop-powered devices.	Provides accurate detection and precise device-level information.
	Enhanced smoke sensing algorithms designed to comply with UL 268 7th Edition fire scenarios, including improved cooking-related nuisance rejection.	Reduces unwanted alarms through improved discrimination between normal environmental conditions and real fire signals.
	Offers advanced multicriteria detection options to provide faster, more reliable fire identification across smouldering and flaming conditions.	Enhances occupant safety by accelerating fire recognition while maintaining resistance to false alarms.
	Incorporates optimised optical chamber design and digital signal filtering for improved stability in industrial, healthcare, and high-airflow environments.	Improves long-term system reliability in challenging environments by mitigating dust and airflow sensitivity.
	Provides per-device status, contamination levels, drift compensation, and advanced health data through the Axis AX diagnostics suite.	Predictive maintenance features help identify devices nearing service thresholds before false alarms occur, aligning with modern customer expectations for 'low-touch' fire systems. Faster device polling and stable digital signalling improve real-time responsiveness during alarm conditions.
	Provides a unified mechanical and electrical platform using common detector bases, streamlined addressing methods, and standardised device families that reduce installation steps and minimise wiring variation.	Supports labour-efficient installation thanks to common bases, simplified addressing, and consistent device families.
	Integral IN/OUT wiring isolators on various analogue/addressable intelligent devices.	Saves on installation time and cost, meeting NFPA, UL and ULC requirements for single-fault pathways preventing the loss of devices in more than one zone.
	Analogue/addressable bases are addressed rather than the detectors.	Saves time and minimises errors, as the devices can be plugged into any base at any location on the site.
	In-built device isolation.	Isolators enable minimal impact during cable fault conditions.

Manufacturing & Support	Over 25 years of manufacturing expertise, fully backed up by expert technical and sales support teams.	Provides confidence in build quality, product longevity and product lifespan support.
	A world-leading fire alarm manufacturer with products protecting people and property in more than 80 countries.	Guaranteed products that meet or exceed stringent local, national and international standards.

Axis AX protects these sites

Abu Dhabi Airport Fuel Depot – Abu Dhabi, UAE

The second largest airport in the UAE, serving over 12 million passengers each year.

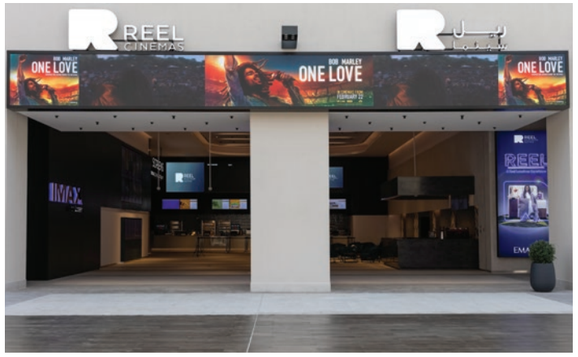
The fire system covers control rooms, office buildings, substations and operational areas. It comprises five Axis AX 4-loop panels, BACnet BMS integration and over 300 individual components and devices. The Axis AX panels supplied by Advanced are networked together in a fault-tolerant 'ring network' and then interfaced to a Programmable Logic Circuit (PLC) using redundant communication. Optical smoke detectors are specified in the main buildings, while flame and gas detectors are being used in operational areas, interfacing directly with the PLC.

Bidbid-Sur Tunnel – Oman

A critical infrastructure project along the Bidbid-Sur road.

An Axis AX fire safety system integrates cutting-edge fire detection and suppression mechanisms tailored to the tunnel's unique environmental challenges.

The installation includes IP67-rated components to ensure resilience against moisture, and a water deluge system which integrates jet fans with sprinklers. The meticulous design prevents smoke from being pushed into adjacent tunnels, and ensures clear evacuation routes and optimal visibility for emergency responders.



Reel Cinemas – Bahrain

A cinema complex in Bahrain's popular Marassi Mall.

The scalability and advanced configuration options of the Axis AX system overcame the logistical challenges posed by this dynamic environment, and a 4-loop panel was chosen alongside a comprehensive range of devices. In addition, a voice evacuation system was integrated into the installation, ensuring clear and effective emergency communications across all areas of the cinema.

Jebel Ali M-Station – Dubai, UAE

The UAE's largest power and desalination plant.

The plant, capable of producing over 2,000MW of electricity and 140 million gallons of water per day, is protected by an 89-node fire panel network including 46 dual redundant panels. The system includes bespoke gas detection panels and over 7,000 UL 864 and EN54 devices, as well as customised control equipment designed and manufactured by our AdSpecials team.

Marassi Galleria – Kingdom of Bahrain

Bahrain's premier beachside shopping mall.

A network of 19 Axis AX fire panels protects the 178,000m2 shopping mall in Bahrain. A further network of 14 Axis AX fire panels was also installed at the mall's adjoining waterfront boutique hotel and serviced apartments – the Vida Hotel and Residences.

Sands Pointe – Miami, Florida

A 29-storey condominium and one of Florida's most upscale real estate developments.

An Axis AX fire system was installed in response to the client's specification for a robust, technically-advanced and cost-effective fire system.

The system includes a notification applicance in every bedroom and multiple dampers on each floor for smoke control. Four data-gathering voice panels were installed, and a command centre oversees the entire system.

1550 Beacon Street – Brookline, Massachussets

An 18-storey residential high-rise.

The bulding recently benefitted from a major fire safety upgrade with the installation of an Axis AX fire system. The installation covers all common areas, apartments, and sectional sprinkler devices throughout the building. Four Axis AX panels were installed alongside an existing Axis AX command centre which controls the voice element of the system.

Visit our website for full details of these projects and to discover other installations.