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Your Solution for Remote BDA and DAS Monitoring

Dealer's Guide

Why do you need to remotely monitor your BDA or DAS system?

When it comes to critical operations in the public safety sector, it is crucial to ensure that vital equipment such as Bi-Directional Amplifiers (BDA) and Distributed Antenna Systems (DAS) are functioning properly. BDA/DAS failures are silent risks; they can come from issues like amplifier faults or shutdowns, power supply or battery backup failures, donor antenna signal degradation, oscillation or system interference, and loss of uplink/downlink signal paths. Without remote visibility, these problems often go unnoticed until a system test, or worse, a real emergency.

Knowing in real time if there is a problem and what exactly that problem is can help you save precious seconds and more efficiently get your systems back up and running. Moreover, the NFPA-1225 (2022 edition) code requires real-time supervisory alarms for power loss, antenna malfunction, low battery, and system faults. Davicom's systems allow you to do all of this and more, with the benefit of additional remote control and automation capabilities.

Why choose Davicom?

Customizable

Choose the features that fit your needs

Scalable

The scalable architecture adapts to any type of deployment and allows for future expansion

Reliable

Trusted by thousands in the public safety industry

Compatibility

Compatible with most BDA/DAS manufacterers

Core Units

Our solution consists of deploying either a Davicom CORTEX 320 or a Davicom CORTEX 360 within the BDA or DAS network, depending on the scale and complexity of the project. These intelligent monitoring and control units provide continuous visibility into system performance, allowing for immediate detection of faults such as amplifier issues, antenna failures, power disruptions, or signal loss. With advanced alarm logic, automation capabilities, and seamless SNMP integration, Davicom ensures that public safety communication systems stay operational and responsive.

Real-Time Status Monitoring

The Davicom CORTEX units provide real-time visibility into key system parameters such as uplink and downlink RF levels, amplifier gain, VSWR, noise floors, and DC power status. These devices continuously monitor the health of power supplies, battery backup systems, and signal distribution paths, ensuring you are instantly aware of any performance degradation or component failure.

Alarm Management & Automation

Alerts can be delivered in a variety of ways, including SNMP traps to your network management system, email notifications, SMS messages, or voice alerts. These voice alerts can be broadcast over site speakers or transmitted through connected radios to ensure immediate awareness. The system can also trigger automated actions, such as switching relays to turn on warning lights, notifying a fire alarm panel, or adjusting system parameters in real time to mitigate issues.

SNMP Integration

The Davicom CORTEX units can operate as both an SNMP manager and an SNMP agent, enabling it to either poll BDA equipment directly or receive SNMP traps from them. This creates a streamlined and unified monitoring environment using a single, widely adopted protocol. For BDAs that do not support SNMP, Davicom provides AXON modules that convert physical alarm signals from the BDA into SNMP-compatible alerts. This approach ensures full network visibility regardless of equipment brand or communication limitations.

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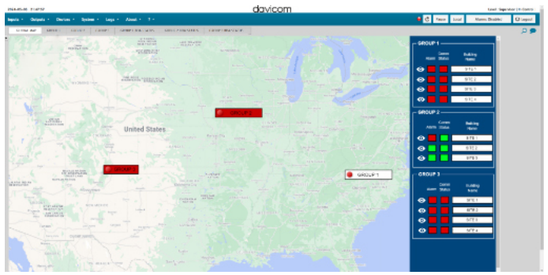
Core Units

Advanced GUI and Visualization

The Davicom CORTEX platform features a powerful and fully customizable graphical user interface that allows operators to create personalized workspaces tailored to their BDA and DAS networks. Interactive dashboards can include site maps with alarm overlays, group views of multiple BDAs, and detailed status panels for individual units. Real-time values, alarm conditions, and system health indicators are presented clearly and can be arranged to suit operational workflows. All events and alarms are time-stamped and logged, with easy export options for compliance reporting and post-incident analysis.



Scalability & Flexibility

The Davicom monitoring solution is designed to grow with your BDA or DAS network, adapting easily to different project sizes and levels of complexity. The Davicom CORTEX 320 is well suited for mid-scale deployments, while the Davicom CORTEX 360 is ideal for larger networks and can function as a central controller when used alongside distributed AXON or NEURO units. This modular approach ensures that every installation, whether a single facility or a region-wide system, can be managed efficiently and expanded as needed.

Available Packages (per number of BDAs):

1 BDA

8 BDA

16 BDA

32 BDA

320 CORTEX

360 CORTEX

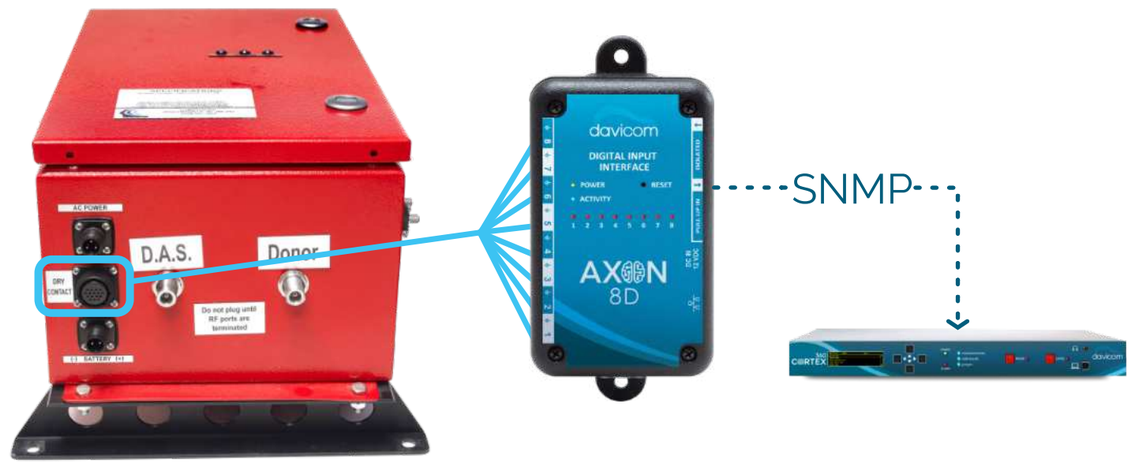
64 BDA

128 BDA

No SNMP? No problem!

If the BDAs installed in your network do not have SNMP capabilities, it is still possible to accurately monitor and manage them with the help of our compact and powerful AXON-8D and its built-in SNMP agent.

Connect to the AXON-8D through the dry contact/relay alarm output of the BDA, and securely communicate with the Davicom CORTEX unit using SNMP v1/v2c/v3.

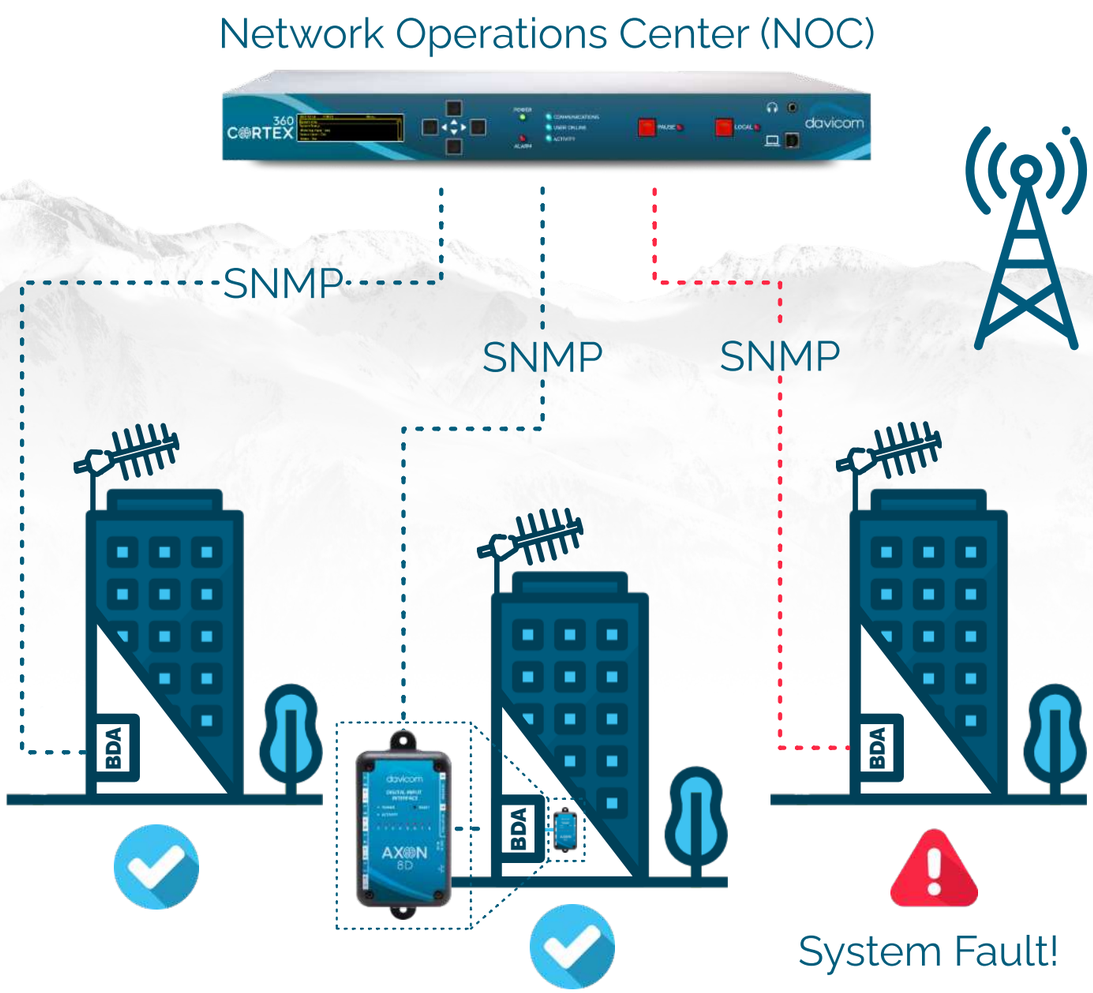


If the BDAs installed in your network allow relay control, but cannot do it over SNMP, it is still possible to automate actions with the help of the AXON-5R. Connect to the AXON-5R through the relay alarm output of the BDA, and remotely perform actions such as switching off interfering equipment.

Centralized Monitoring Approach

Davicom CORTEX units provide centralized, real-time monitoring of BDA or DAS systems across multiple buildings. From a single location, operators can supervise signal levels, power supply status, and system faults using SNMP. When an issue is detected, the Davicom CORTEX can trigger alarms through email, voice messages, radio, or activate onboard relays.

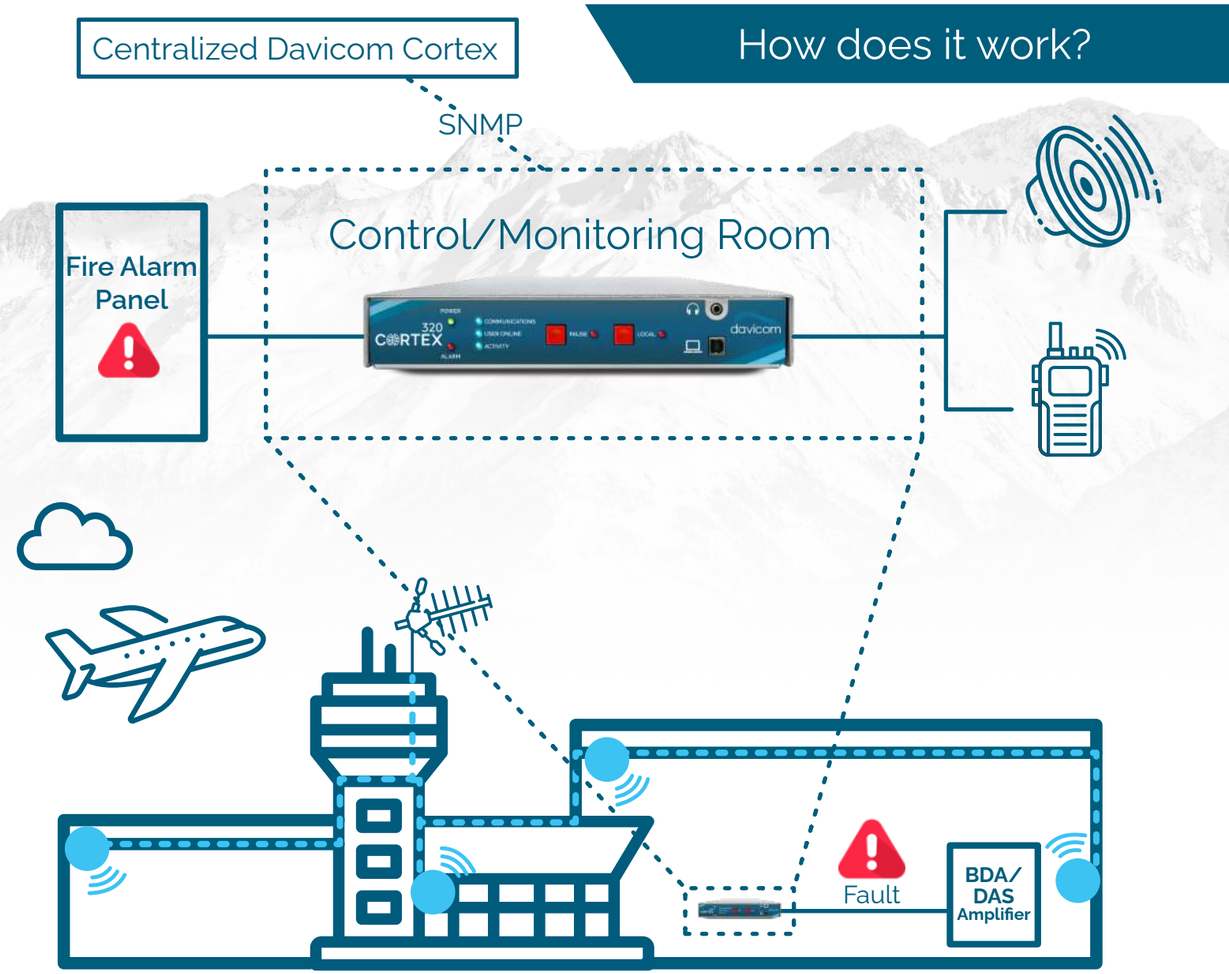
How does it work?



Advanced In-Building Alarm & Monitoring Approach

Typical Distributed Antenna Systems often span multiple zones, floors, or even buildings, especially in large facilities like airports. The Davicom CORTEX provides centralized, intelligent monitoring of the entire DAS infrastructure by polling amplifiers and other SNMP-enabled components, detecting faults or abnormal performance in real time. When an issue arises, the Davicom CORTEX can trigger actions such as activating a relay to notify a fire alarm panel, sending email alerts, or broadcasting voice alarms over site speakers or radio channels. This ensures full situational awareness and faster response in mission-critical environments.

How does it work?



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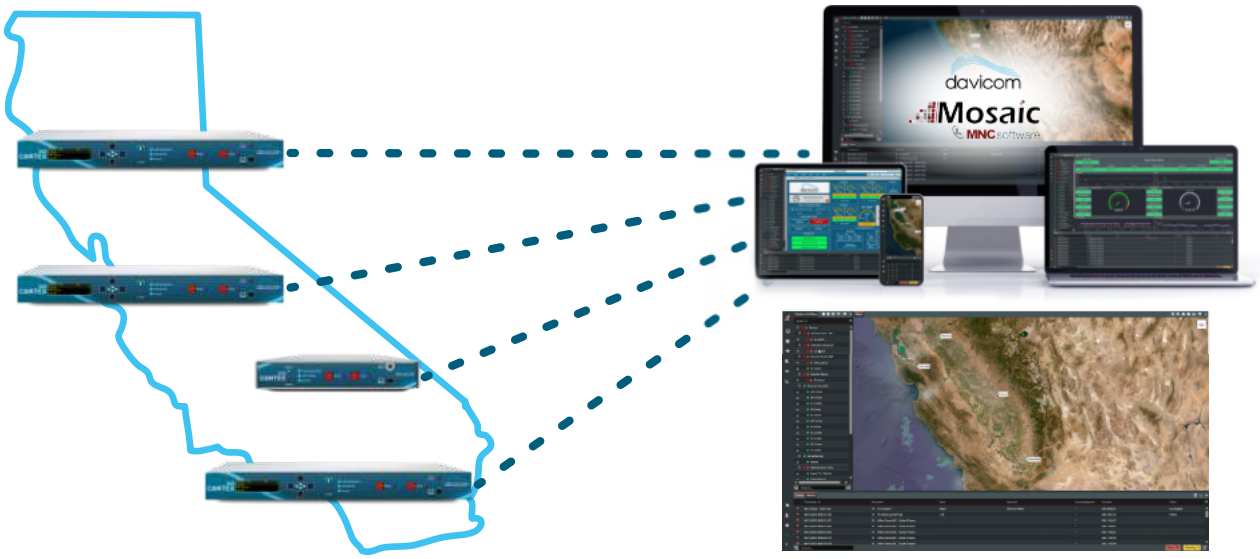
Are you an organization that surveils a very large network or multiple customers?

Centralize the information of all Davicom CORTEX units responsible for each sub section of your network and manage everything from a single location.



Centralized Visibility for Large Scale BDA and DAS Networks

Davicom provides a powerful monitoring solution that brings all your data into one centralized view. Using the MOSAIC network management platform, you can connect and oversee an entire fleet of Davicom CORTEX units. Each unit operates independently in its assigned region, county, or facility, monitoring BDAs and DAS components in real time.

All collected data and alarms are forwarded to the MOSAIC platform, where they are displayed on an interactive map with detailed dashboards and event logs. This setup gives you complete visibility across your entire network, from a single interface.

You gain full situational awareness, simplified operations, and the ability to manage complex networks efficiently and reliably.

Get in Touch

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