

Public Address and Voice Alarm System

Application Note

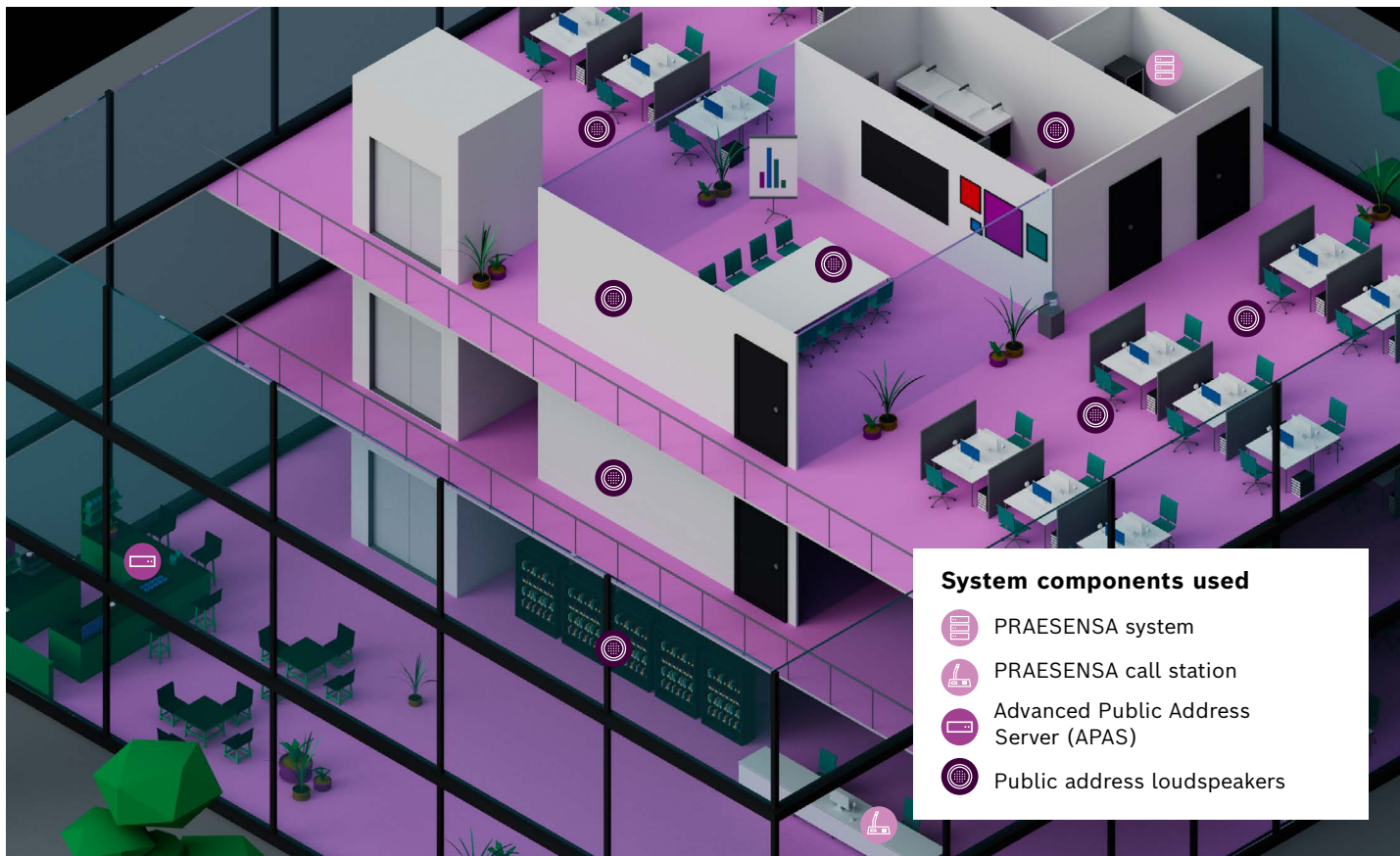
Commercial buildings

Ensuring highest safety and security in commercial buildings

Security is key in commercial buildings, in particular for companies within the financial and governmental sector. An important factor to ensure 24/7 security throughout all premises is the installed public address and voice evacuation (PAVA) system. Following the highest network security approach, it is a key asset in commercial buildings. In case of an emergency, people need to clearly hear the messages to be quickly and safely guided to the right exits via the public address and voice evacuation system. In addition, the PAVA system must be protected from external infringements or unauthorized access and feature network redundancy options to ensure flawless operation.

Our solution

PRAESENSA by Bosch is an EN 54-16 certified, fully IP-based public address and voice alarm system. The distributed architecture of IP components is future-proof and allows more flexibility than the PRAESIDEO public address system by Bosch with less wiring. The built-in OMNEO IP architecture fully supports the latest protocols and standards for audio and control, including Dante, AES67 and AES70. All data is secured by state-of-the-art encryption. Designed with ease-of-use in mind, PRAESENSA offers straightforward installation and integration, delivering superior audio quality with an easy-to-use interface.



Designed with ease-of-use in mind

PRAESENSA ensures reliability from the moment of installation, with redundancy incorporated throughout the whole system. The combination of IP-connectivity with a smart, failure-safe power concept collectively provides an extremely safe and trustworthy solution. It is a no single point of failure concept with built-in redundancy including all devices and network connections, critical signal paths and functions, which can all be constantly supervised. IP also allows for redundancy concepts that will automatically bypass a faulty device to always maintain full system functionality. All system devices use dual ethernet ports, supporting RSTP, which automatically recover should a network link break. An integrated additional spare amplifier channel automatically takes over in case of a failing amplifier channel. Together with the battery backup facilities of the PRAESENSA power supplies, the entire system is practically immune to mains failures.

Due to the IP architecture, PRAESENSA can be easily expanded, both in centralized and de-centralized network topologies, without compromising the overall system security. The system fully supports the smart integration of functions and backup facilities, with encryption and authentication offering complete protection against eavesdropping and hacking.

The benchmark in public address and voice-alarm

PRAESENSA's wide range of proven functionalities, security features and integrated redundancies offer the system designer a highly flexible and well-protected solution for a multitude of installations in commercial buildings, making it possible to solve all security challenges with a failure-safe public address and voice alarm system.

Bosch Security and Safety Systems

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For specifications and design tools visit [boschsecurity.com/consultants/pava/](https://www.boschsecurity.com/consultants/pava/)

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Application areas

- ▶ Commercial buildings

Main benefits

For the system integrator/installer:

- ▶ Straightforward installation and integration due to IP
- ▶ EN-certified public address and voice alarm system including all system components
- ▶ Full support of Dante audio and AES67/AES70
- ▶ Easy system expansion for both centralized and de-centralized network topologies
- ▶ Redundancy options supporting RSTP
- ▶ Battery backup facilities

For the operator/owner:

- ▶ Futureproof technology secures investment
- ▶ Highest system availability by integrated redundancies
- ▶ Best protection by state-of-the-art encryption
- ▶ Intuitive, easy-to-use user interface
- ▶ Superior audio performance ensures highest intelligibility
- ▶ Proven reliability in a multitude of installations