



Public Address and Voice Alarm System

Application Note

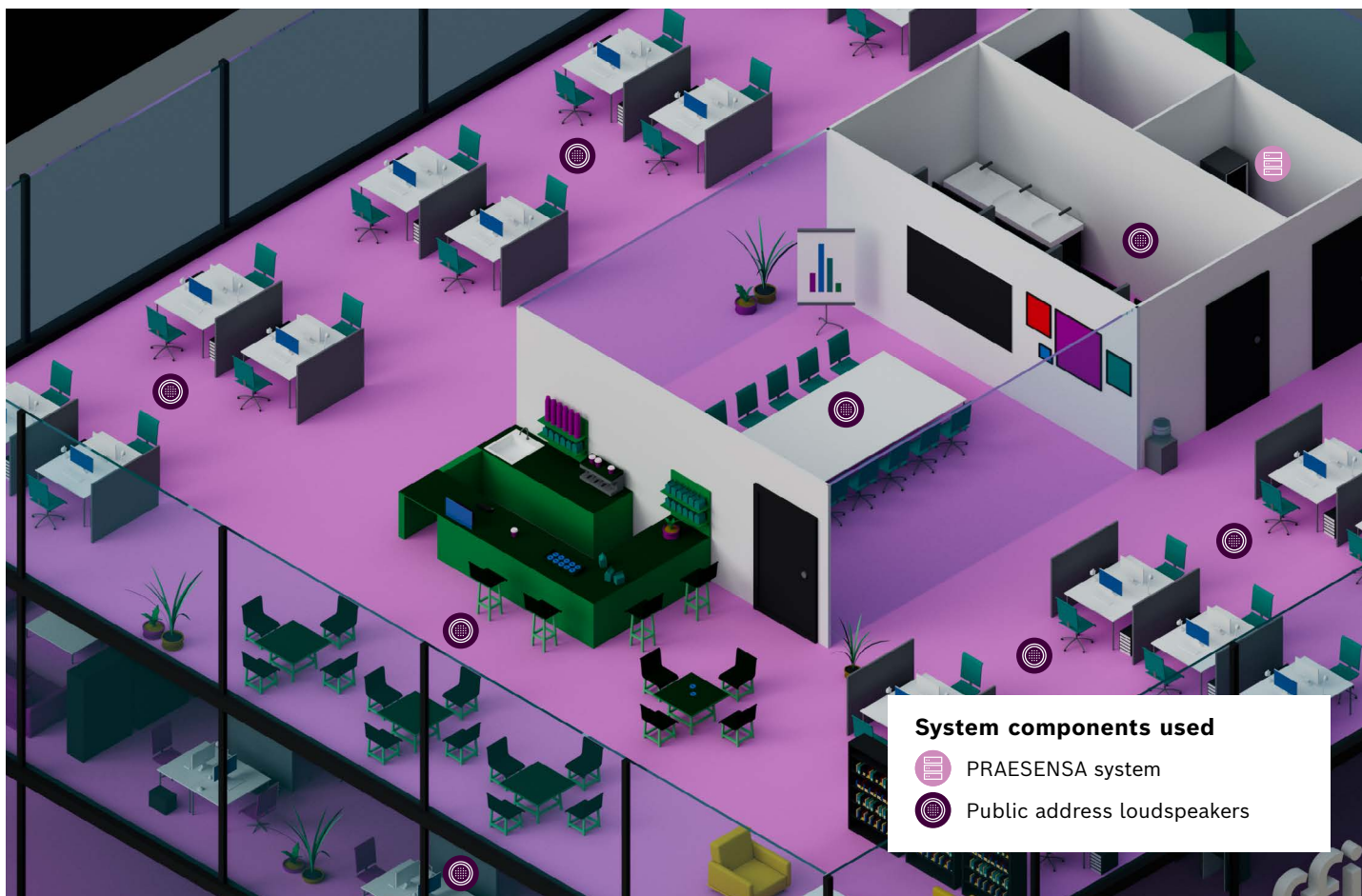
Commercial buildings

Maximize efficiency and performance, minimize energy consumption

Lowering the energy consumption of commercial buildings is becoming an increasingly important driver when it comes to renovation or new property development. For many commercial owners and renters – and for governmental institutions – a building with a low carbon footprint is essential. Besides standard utilities such as heating and light, IT hardware and safety and security systems are among the highest electricity-consuming elements in a building. A public address and voice evacuation system that runs 24/7 with very low energy consumption can be a valuable contributor to lowering a building's carbon footprint.

Our solution

PRAESENSA by Bosch is an EN 54-16 certified, fully IP-based public address and voice alarm system. The modular architecture of IP components is future-proof and saves initial investment. PRAESENSA works with a smart power concept to ensure the most efficient utilization of available power, significantly reducing the carbon footprint, equipment/operating costs and rack space. The flexible power utilization lowers energy consumption by adjusting the amount of output per channel in real time according to system requirements. Designed with ease-of-use in mind, PRAESENSA offers straightforward installation and integration, delivering superior audio quality with an easy-to-use interface.



Designed for low cost of ownership

Thanks to advanced technologies, PRAESENSA by Bosch has one of the lowest total energy consumption in the market while adhering to the highest operational standards. This is achieved by integrated standby amplifiers that reduce the cost – especially for cooling – and rack space while also providing an effective redundancy measure. Due to its IP architecture, PRAESENSA can be cost-efficiently expanded, both in centralized and de-centralized network topologies, and fully supports the smart integration of more functions.

The system achieves a low energy footprint via smart power partitioning across the amplifier channels. It adapts intelligently to different loudspeaker loads, dividing the available output power across all channels to a maximum of 600 Watts. As a result, overall power usage over the system's lifetime is lowered, especially in the idle state where most systems spend most of their time.

In addition to high energy efficiency, PRAESENSA also offers the possibility of remote diagnosis and maintenance via internet. System integrators can work remotely with customers, minimizing costly on-site visits and effectively reducing travel and CO² emissions.

The benchmark in public address and voice alarm

PRAESENSA, the advanced and cost-efficient public address and voice alarm system also makes a statement for sustainability: It saves energy and reduces carbon emissions. The key hardware devices are controlled by custom software solutions, resulting in a system that is feature-rich and future-ready, with the potential for further capabilities to be added over time. This safeguards the investment and supports its longevity.

Bosch Security and Safety Systems

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Application areas

- ▶ Commercial buildings

Main benefits

System benefits:

- ▶ Lower your operational costs and contribute towards achieving your corporate carbon-emission goals
- ▶ Expand existing installations cost-efficiently as you need due to PRAESENSA's future-ready IP architecture ensuring maximum flexibility
- ▶ Make the most of the available amplifier power due to flexible smart power partitioning, also reducing the need of additional power amplifiers and rack space and battery backup capacity
- ▶ Monitor and control the entire system remotely to save on travel costs and carbon emissions
- ▶ Safe operation due to PRAESENSA's integrated redundancies