



Public Address and Voice Alarm System

Application Note

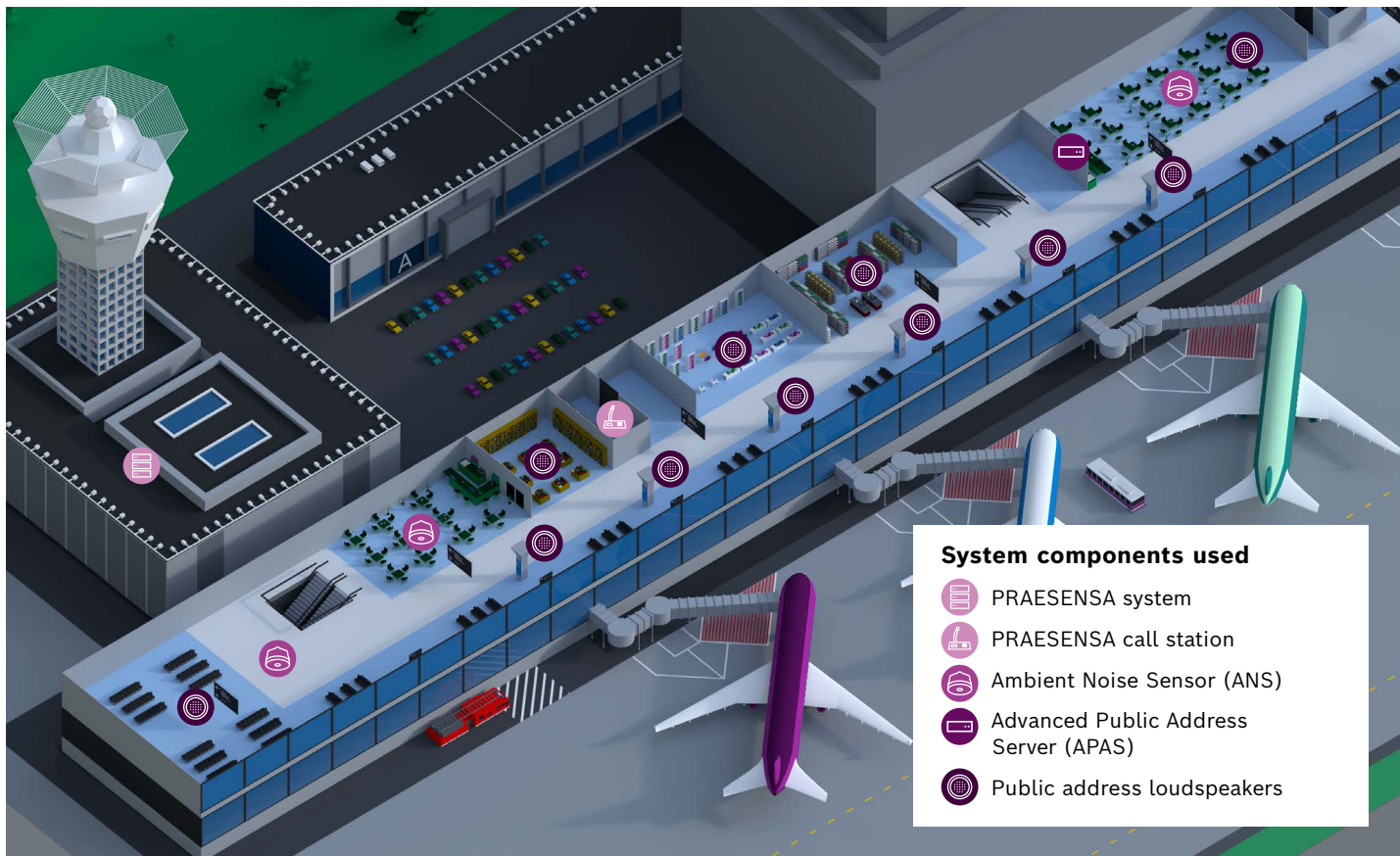
Airports

Informing passengers and improving the ambience in a smart, intuitive way at airports






At airports, the focus is on passenger safety and a positive overall experience. From entering the airport until takeoff, travelers must feel secure, informed and comfortable. Clear announcements, high-quality background music in bars and restaurants, and reliable security notifications are all key elements in creating an environment that is both safe and enjoyable for everyone in the complex, including airport and airline employees. Expanding or updating these functionalities at new or refurbished locations is also an easy way to enhance efficiency and enjoyment.

Our solution

PRAESENSA by Bosch is an IP-based public address and voice alarm system. The distributed architecture of IP components is future-proof and allows higher flexibility than classic public address systems like PRAESIDEO, and also requires less wiring. The built-in OMNEO IP architecture fully supports the latest protocols and standards for audio and control, including Dante, AES67 and AES70. Compliant to the highest standards, it is a scalable, fit-for-purpose solution dedicated for all kind of airport requirements.



System components used

-  PRAESENSA system
-  PRAESENSA call station
-  Ambient Noise Sensor (ANS)
-  Advanced Public Address Server (APAS)
-  Public address loudspeakers

Designed with ease-of-use in mind

PRAESENSA offers straightforward installation and integration, delivering superior audio quality with an easy-to-use interface. The combination of IP-connectivity with a smart, failure-safe power concept and integrated redundancies collectively provide an extremely cost-efficient solution that is equally suited to centralized and decentralized airport topologies. Smart components can be added to the PRAESENSA system, such as the Ambient Noise Sensor (ANS), Advanced Public Address License/Server (APAL/APAS) and third party solutions interfaced via open IP standards. These additions can, for example, solve audio challenges in reverberant spaces by using state-of-the-art technology to maximize intelligibility and maintain comfortable sound levels in every corner of the airport, or offer staff intuitive audio management for scheduled messages and background music to PRAESENSA driven loudspeakers in their shop, bar or restaurant.

PRAESENSA is fully based on an IP-architecture that allows the use of open standards and the integration with third party solutions from certified Bosch partners for even more functionalities featuring highest intelligibility, multi-language announcements, message scheduling, message automation based on the latest flight information, flexible audio zone assignment camera integration, and more.

The benchmark in public address and voice-alarm

The PRAESENSA system's wide range of proven functionalities – and its ability to seamlessly work together with dedicated third-party applications for airports – offer the highest flexibility for the system design, making it possible to solve airport-typical challenges with comprehensive, failure-safe public address and voice-alarm solutions.

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

- ▶ Airport terminal
- ▶ Airport shops
- ▶ Bar and restaurant areas

Main benefits

For the system integrator/installer:

- ▶ Straightforward installation of IP based components such as amplifiers, power supplies, ANS and APAS due to the PRAESENSA IP-architecture
- ▶ Full integration possibilities with existing airport information and management systems

For the operator/owner:

- ▶ Create an optimal ambience and passenger experience in airport terminals, shops and bar/restaurant areas
- ▶ Schedule natural sounding automated text-to-speech messages with Amazon Polly or Microsoft Azure

For the passengers:

- ▶ Have relaxed travelers as they are well informed about their itinerary whilst being entertained with suitable background music
- ▶ Being able to inform passengers in local languages