Public Address and Voice Alarm System
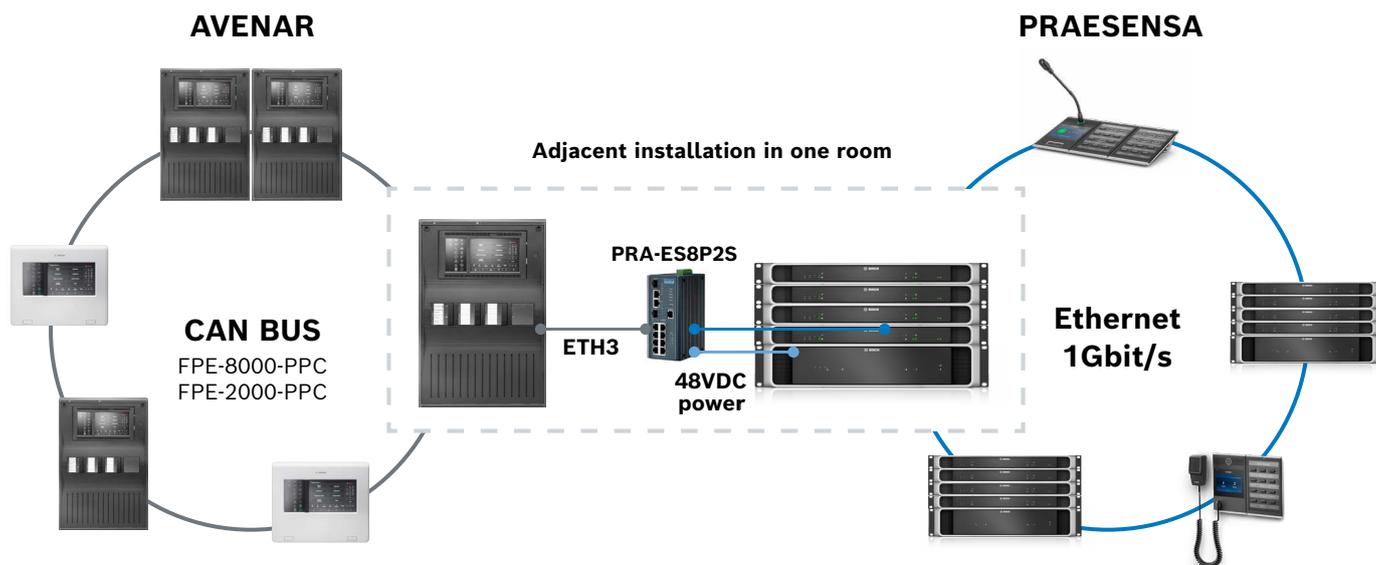Application Note

Real estate

Seamless integration of Bosch fire detection systems with PAVA solutions in real estate

Safety is vital in real estate projects, particularly for buildings occupied by multiple tenants. The important factors to ensure the safety of all residents are fire detection and alarm systems in combination with PAVA (public address and voice alarm) systems. These solutions are often designed as linked systems to be used together in a building. However, connecting these vital building technologies is often facilitated via classic I/O interfaces. This can make the job of interfacing the systems tedious, adding to the expense of an integration and will sometimes deliver only limited functionalities.

Our solution
AVENAR by Bosch is an adaptable, future-proof fire detection and alarm solution that can be linked over IP with Bosch's PAVIRO and PRAESENSA PAVA systems via Smart Safety Link – the most reliable and secure way to combine fire detection and voice alarm systems. Using Smart Safety Link is a safer and lower-cost integration method when compared to I/O integration. It also delivers flexible configuration to allow for different evacuation scenarios. Smart Safety Link also provides a supervised IP-connection, ensuring that zones can be activated to announce pre-warning or evacuation messages.

Solution principle

AVENAR

PRAESENSA

Adjacent installation in one room

PRA-ES8P2S

ETH3

48VDC power

CAN BUS
FPE-8000-PPC
FPE-2000-PPC

Ethernet 1Gbit/s

The most reliable and secure way to combine fire detection and voice alarm systems

Smart Safety Link is a reliable and secure interface between fire detection and voice alarm systems. Both systems – the fire detection system and the voice alarm system – are each EN certified and can be interfaced easily without having to install complex cabling. It offers a safer and more cost-efficient alternative to connect fire detection and voice alarm systems than classic I/O integration. The solution requires a single network connection regardless of the number of messages and zones. At the same time, the risk of incorrect cabling of the classic I/O contacts is eliminated, since only Ethernet connections are required.

Through a set of logic rules, Smart Safety Link enables the configuration of complex scenarios such as phased evacuation, thereby facilitating a highly effective approach to emergency situations with its easy support for multi-stage evacuation. This is supported by the easy read-out of evacuation zone triggers which can be manually modified thanks to eMatrix functionality implemented in the AVENAR panel GUI.

Smart Safety Link provides an elegant method to connect Bosch fire detection and voice alarm systems that each meet the highest standards for quality, safety and functionality, and also offers exceptional flexibility and options for expandability. This means that the scalable solution can be tailored to meet the needs of any real estate project.

Setting the standard 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 large real estate projects. PAVIRO is optimized for medium-sized projects and gives system designers the same benefits. This ensures that a fail-safe voice alarm system can address all security challenges, regardless of the installation size.

Bosch Security and Safety Systems

Visit **boschsecurity.com** for more information

For specifications and design tools visit
boschsecurity.com/consultants/pava/

System components used

- Bosch public address and voice alarm system (PAVIRO or PRAESENSA)
- PRA-ES8P2S switch (Only for PRAESENSA)
- AVENAR fire alarm panel (premium license)

Application areas

- Airport
- Retail
- Hotels
- Commercial buildings

Main benefits

For the system integrator/installer:
- Straightforward installation and integration due to IP connectivity
- Remains an EN-certified safety solution
- Easy system expansion for both centralized and decentralized network topologies

For the operator/owner:
- Future-proof technology secures investment
- Highest system availability by integrated redundancies
- Intuitive, easy-to-use user interface
- Proven reliability