



ADDRESSABLE FIRE ALARM SYSTEM

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Fire Alarm System

What do you need to consider when choosing a Fire Alarm System?



Reliability is key to save lives and assets.

False alarms interrupt business activities, generate costs due to unnecessary evacuations and may even lead people to ignore the early warning of a smoke alarm.

The **faster** a fire is detected, the less time it has to cause damage.

Extensions are necessary as well as **replacements**. Also, **technology** develops fast making systems obsolete.

Planning and **maintaining** a fire alarm system can be challenging and time consuming.

Fire Alarm System

Why a FIR Alarm System from Bosch?

You can rely on an early and accurate detection

It adapts to your current and future needs

You can profit from additional services to improve your operations and reduce costs

Fire Alarm Systems

Rely on accurate and early detection



Early and accurate detection



Minimal false alarm rate



Using elaborate and innovative technology for fire detection like **AI** and **smart sensor technology**

Benefits

Protect people and prevent material damages

Ensure business continuity

**BUILDING
THE
POSITIVE**

**Can a fire alarm system
contribute to sustainability?**

YES.

**If it adapts to your needs of
today and tomorrow.**

Fire Alarm Systems

Adapts to your needs of today and of tomorrow



Tailor the system



The panel set-up as core of the system is **fully modular**



Add technology, extensions or replacements



The entire system offers fully **backwards and upwards compatibility**



High **quality products made to last**



Decades of **experience in R&D** and extensive **testing** in own labs beyond normative requirements



Benefits

Keep your invest

Profit from the latest technologies

Fire Alarm Systems

Profit from services to improve your operations and save costs



Plan your system easily



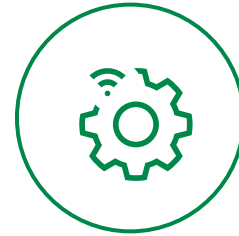
Intuitive system planning tool including compatibility check and tender templates



Extensive technical trainings and technical support



Wide range of product trainings and **multi-tiered tech support**



Manage the system remotely



e.g. access onsite data before visiting the site, create automated maintenance reports or provide additional service to customers



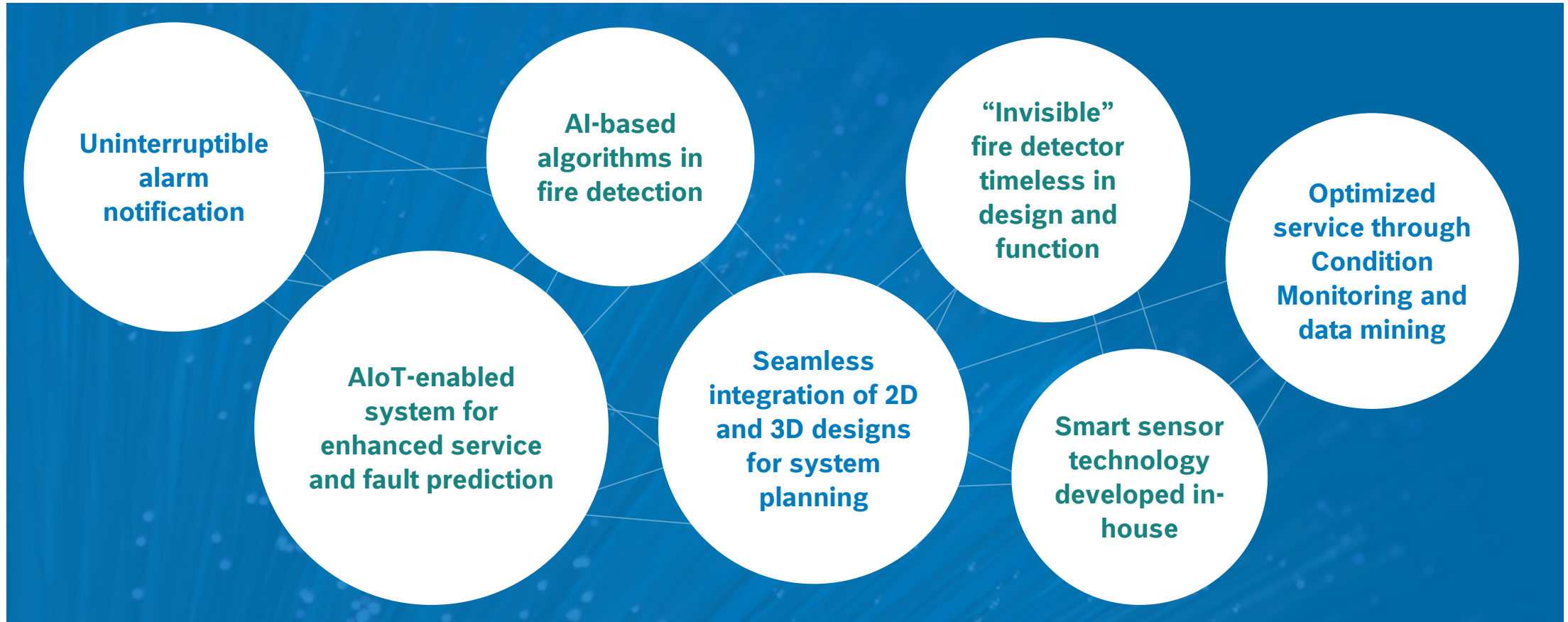
Benefits

Improve efficiency and save costs

Provide better and additional services

Fire Alarm System

Driving innovation to fulfill our partners' needs

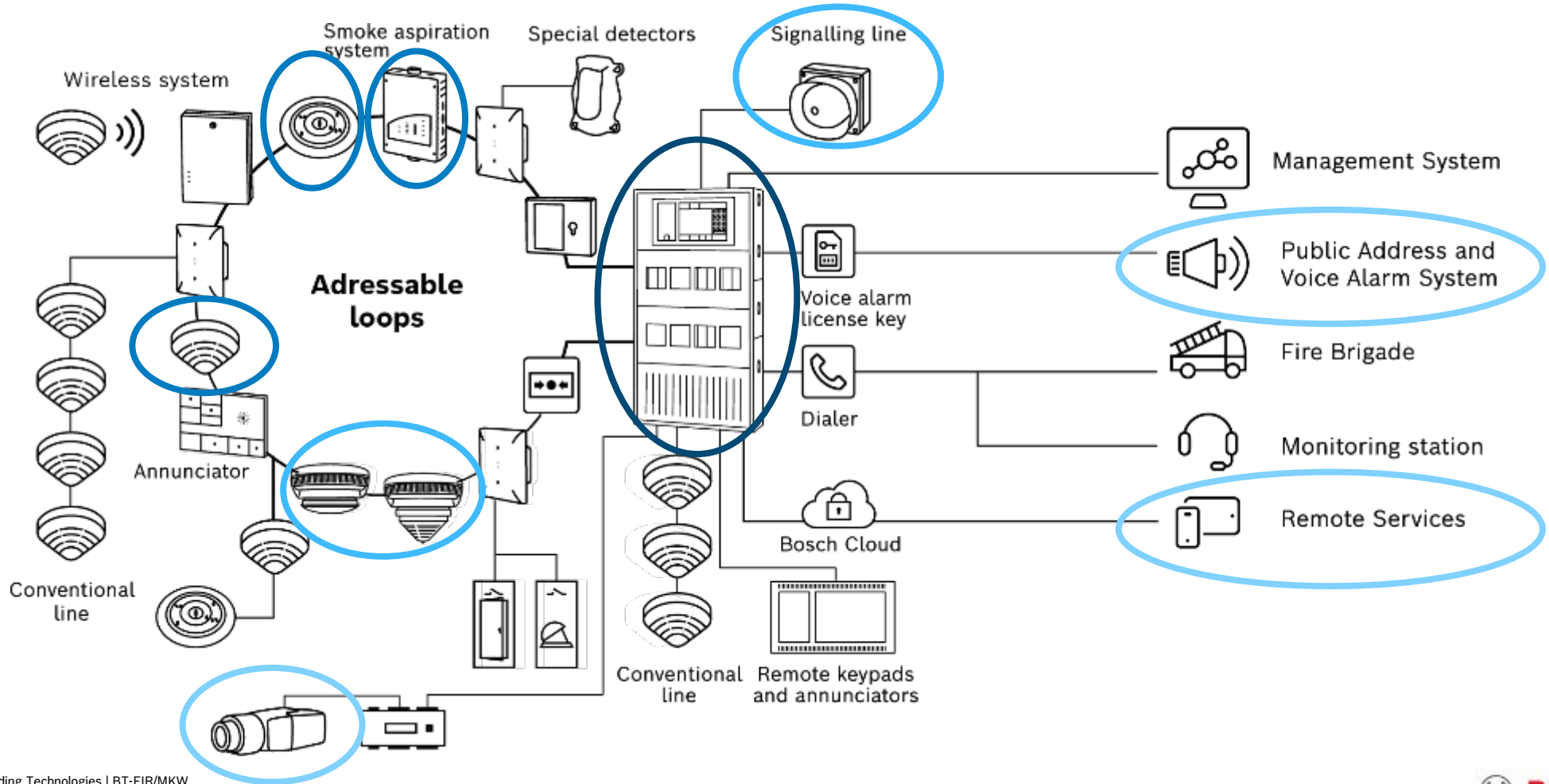


SYSTEM OVERVIEW



Fire Alarm System

Comprehensive product offer to build up your system



Resource efficiency

Fire alarm systems contribute to sustainability



Fire detection solutions prevent harmful emissions especially in case of fires with dangerous substances



Backwards compatible alarm systems help to safeguard existing infrastructure and secure precious investments



Resources are conserved thanks to durable products combined with future-proof technology



Remote monitoring and access to customer fire system minimizes travels and saves time, energy and CO₂ emissions

BUILDING THE POSITIVE



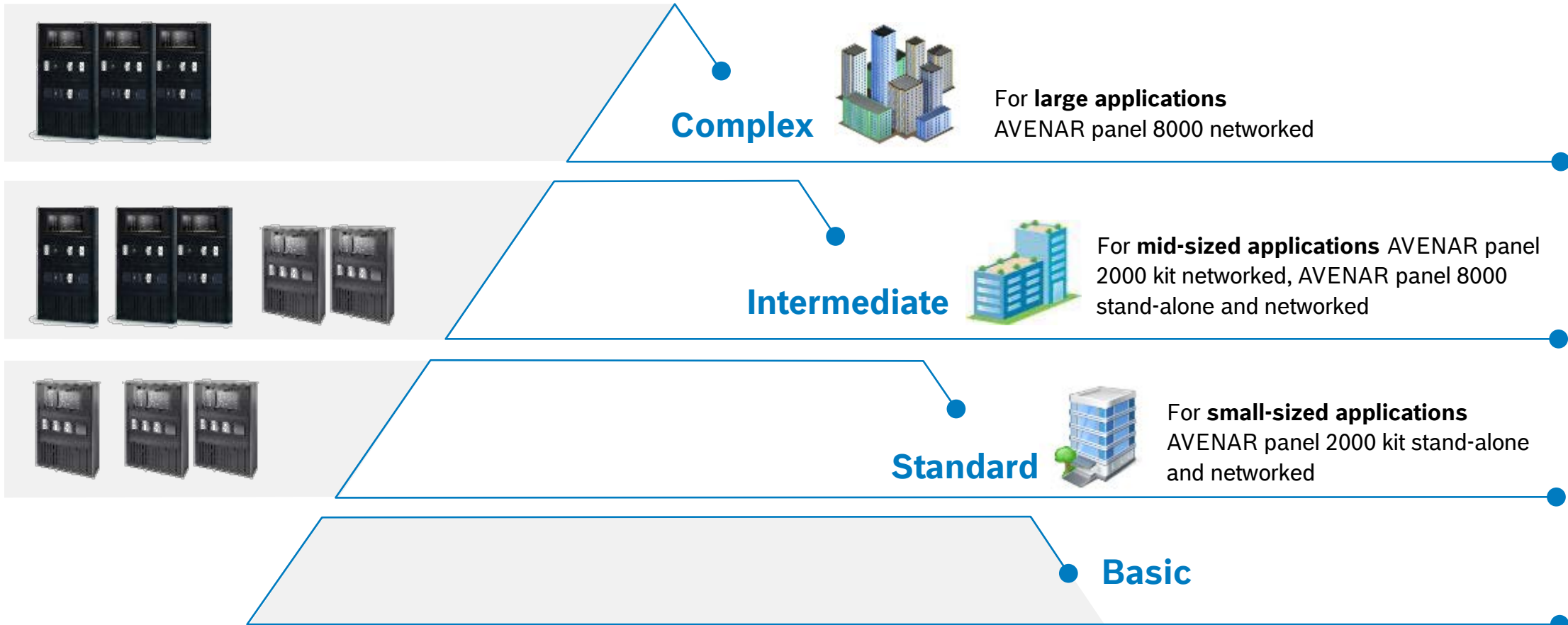
[Link to website](#)

FIRE ALARM PANEL



Fire Alarm System

AVENAR panel works in all application sizes



Fire Alarm System AVENAR panel



AVENAR panel
8000
with up to **32 loops**

AVENAR panel
2000
with up to **4 loops**

HIGHLIGHTS

Flexible and tailored system

Fully modular or compact modular as panel kit

Cost-effective extension

Fast processing thanks to strong computing power

Clear feedback and full control over your safety system

Open for integration to services and external systems

No additional devices needed for integration thanks to integrated Ethernet switch

Intuitive and easy-to-use for the end customer thanks to clear and language-neutral status LEDs

Fire Alarm System

AVENAR panel – Components

01

Panel controller

Including a hard-coded license for premium and standard version.



03

Enclosures

Different sizes of enclosures for wall and frame-mount installations.



05

Power supply and accessories



02

Loop modules

Variety of loop modules for various functions.



04

Remote keypad

For remote operation in any place inside the building, or for use as redundant panel controller.



FIRE DETECTION HIGHLIGHTS



Fire Alarm System

AVENAR detector 4000



Monitors environment on
electromagnetic influence for
fast root-cause analysis

HIGHLIGHTS

Available as single-, double- and multi-sensor versions

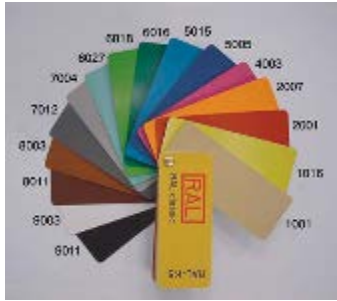
Earliest detection of lightest smoke with dual-optical versions (Dual-Ray technology)

Highly reliable and accurate thanks to Intelligent Signal Processing (ISP)

Condition Monitoring enabling extensive data analysis

Automatic and manual address setting

Fire Alarm System Detector 500/520 series



Timeless, **ultra-flat** design with smooth and **easy-to-clean** detector surface

HIGHLIGHTS

Available as **scattered-light smoke detector** or as a **multi-sensor detector** with additional **gas sensor**

Choice of 16 RAL colors for individual color matching with your surroundings

Condition Monitoring enabling extensive data analysis

Fire Alarm System

Aspiration smoke detectors



Direct connection to the
LocalSecurityNetwork (LSN)

HIGHLIGHTS

Complete range of aspiration smoke detectors for
various special applications

Condition Monitoring enabling extensive data analysis

Airflow monitoring including single-hole monitoring
detects obstruction and breakage

Exact location of the fire can be identified

ALARM NOTIFICATION HIGHLIGHTS



Fire Alarm System

AVENAR all-in-one 4000



Up to **125 devices in a loop**
opens new possibilities and
considerable savings potential

HIGHLIGHTS

Single-point solution for applications when both visual and audible alarm signaling is required

Visual alarming **complies** with **EN54-23** and acoustic alarming with **EN54-3**

Condition Monitoring enabling extensive data analysis

Installation with or without detector

No additional external **power** supply needed

Low power consumption

Fire Alarm System

Uninterruptible sounders



Fast, **uninterruptible alarms**, even if line is damaged or entire wiring is destroyed during fire

HIGHLIGHTS

Uninterruptible alarm signaling – even in LSN stub

- ▶ AVENAR all-in-one 4000
- ▶ 420U Sounder series
- ▶ 420U Base sounder series
- ▶ 420V Voice sounder series

Immediate synchronization

Sounders continue signaling for 30 minutes if separated from loop on both sides

ENHANCE YOUR FIRE ALARM SYSTEM



Fire Alarm System

AVIOTEC AI video-based fire detection



Fast and reliable visual smoke and flame detection **directly at the source**

HIGHLIGHTS

Ideal solution beyond your traditional fire detection system

- ▶ **Early detection** within seconds

Suitable for

- ▶ Places with **high fire load**
- ▶ Difficult environments with high levels of **dust** and **humidity**, **high ceilings** or **low visibility**
- ▶ **Sheltered outdoor** areas

Fire Alarm System

Voice evacuation



Smooth integration of own Voice Alarm solutions via 1-cable connection known as **Smart Safety Link**

HIGHLIGHTS

Reliable and secure fire detection and evacuation solution from one supplier

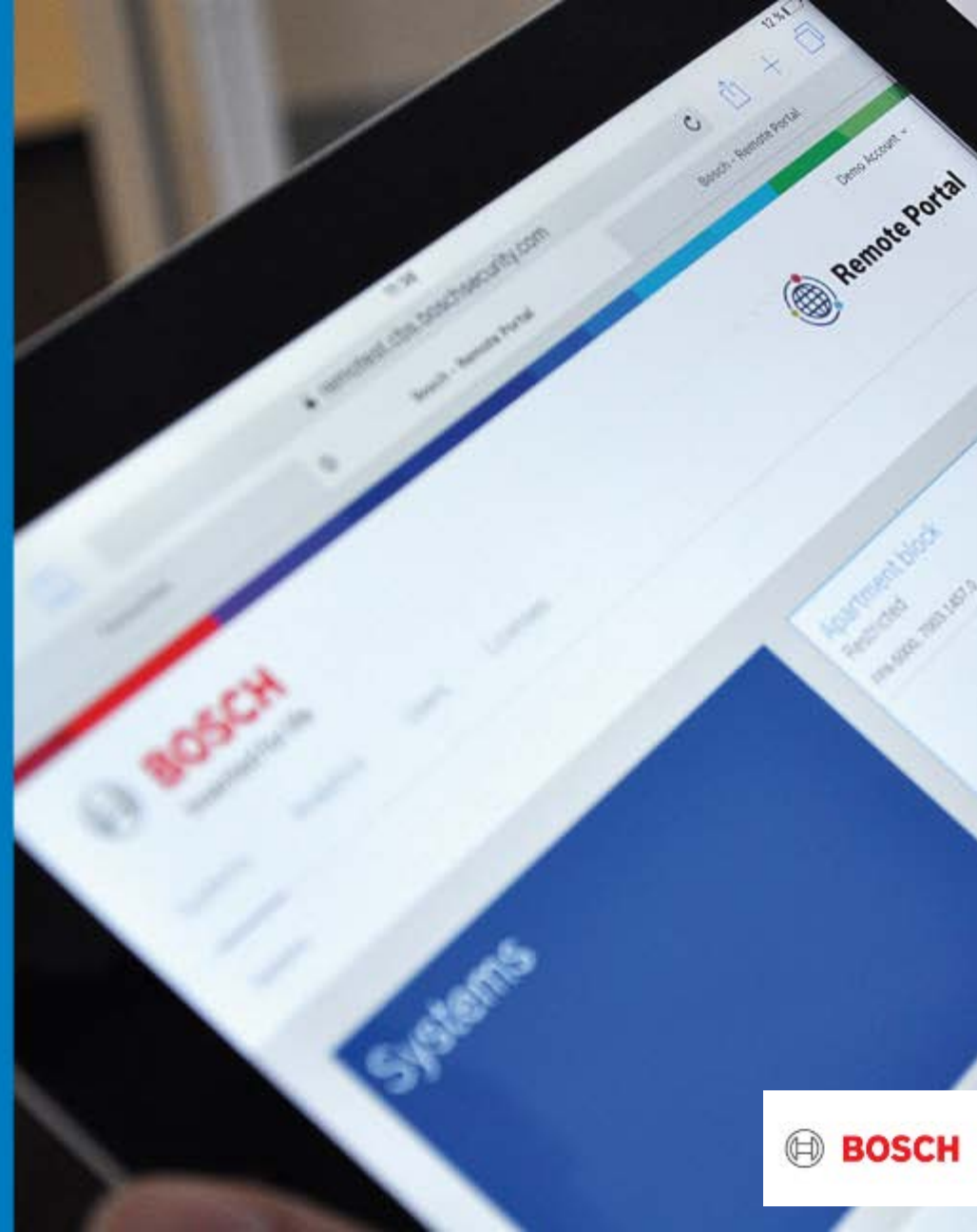
1 cable no matter how many messages and zones

Easy and error free wiring resulting in **less installation time**

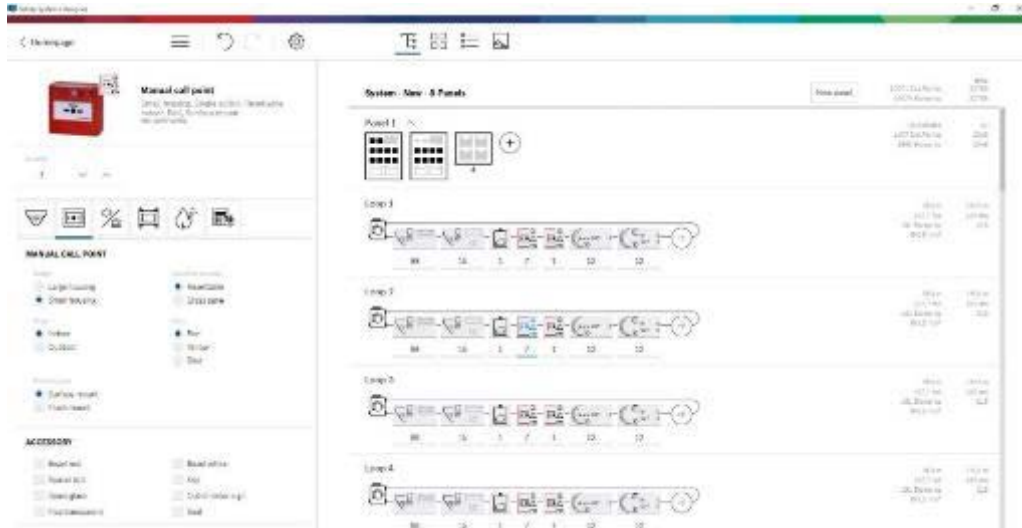
Alarm triggers are handled by the fire system; **no additional interfaces needed** between Voice Alarm Network Controllers

Multi-stage evacuation

SERVICES TO IMPROVE YOUR OPERATIONS



Fire Alarm System Planning with Safety Systems Designer



Time-saving configuration of fire alarm system minimizing planning errors

HIGHLIGHTS

Quick installation

Constant plausibility check of the system limits

Intuitive user interface with immediate visual feedback on the configured products and system overview

Neutral and detailed terminology

Available in 16 languages (user interface and outputs)

Fire Alarm System Remote Services



Highly secure live connection to all installed systems to **improve operations and save costs**

HIGHLIGHTS

Remote connection of your fire system for configuration, maintenance, troubleshooting and alert notification

Condition Monitoring enabling long-term analysis

Installation in less than 30 minutes

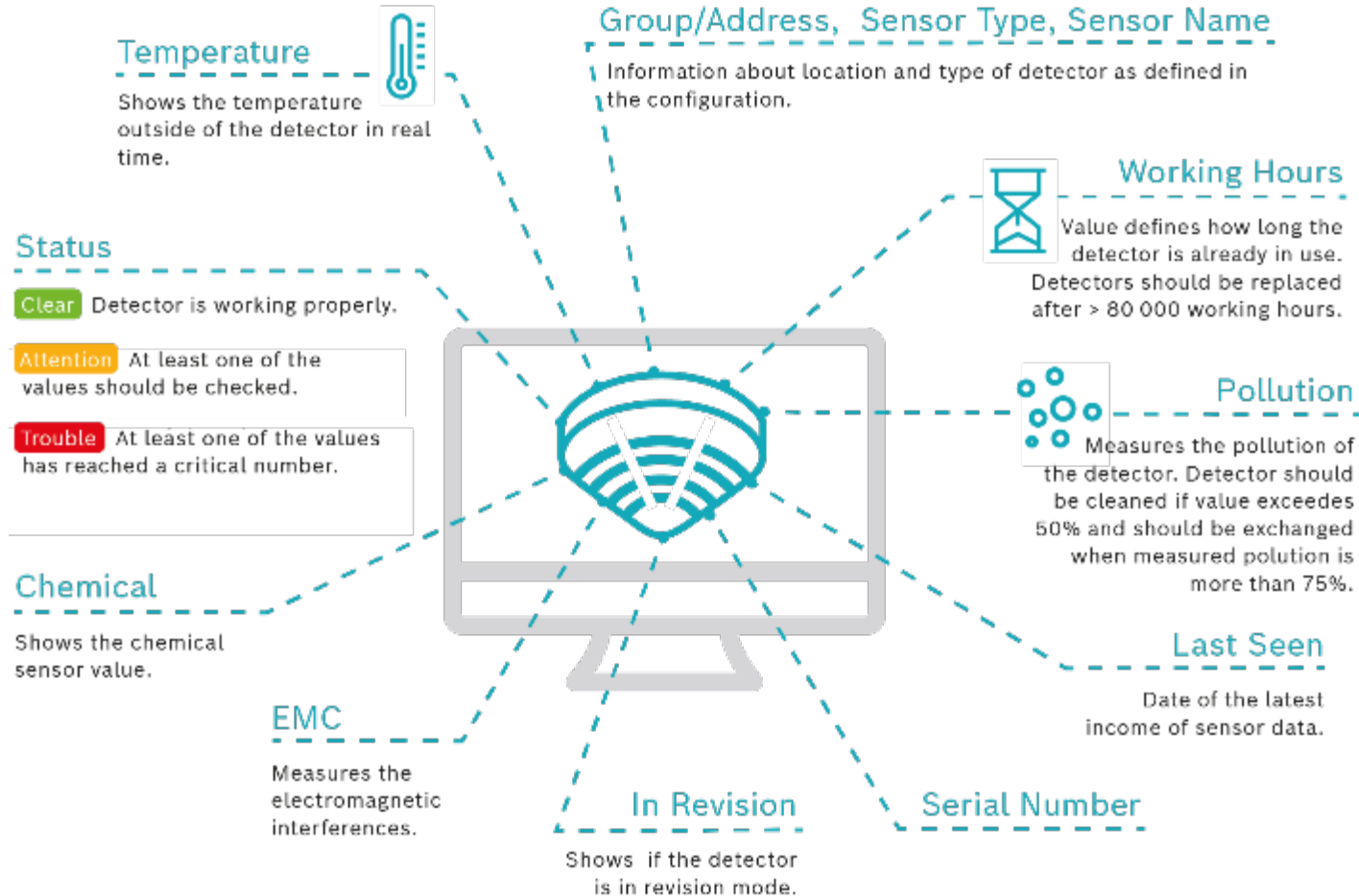
No special IT knowledge

Plug and play Ethernet connection to fire panel

Only router including trial license is needed

Fire Alarm System

Easy access to live system data with Remote Services



REFERENCE CASES



Fire Alarm Systems

Robi Axiata, Bangladesh



Robi Axiata Bangladesh

Robi Axiata, the 2nd largest mobile network operator in Bangladesh, installed Bosch addressable panels in all their sites

Major challenge

- ▶ To install a connected fire alarm systems across multiple sites that can instantly notify when incidents occur
- ▶ Integration with SMS via API commands

Customer Benefits

- ▶ Centralized fire incident monitoring across more than 40 sites (corporate office, warehouses, regional offices etc.)
- ▶ Stable and reliable fire alarm system that meets strict requirements
- ▶ Convenient SMS and Email alerts
- ▶ Quicker response time when incidents occur

Solution

- ▶ Building Integration System software for centralized fire alarm system monitoring
- ▶ BIS 4.4 licenses: Basic, operator, email notification, SMS notification
- ▶ Bosch addressable panel installed at approximately 42 sites. Connected via WAN, these panels communicate with BIS via OPC interface
- ▶ 2 OPC servers to distribute system load
- ▶ Aue 4.4 ADDITIONAL 1000 Detector Points

Fire Alarm Systems

Casa Sollievo Bimbi, Italy



Casa Sollievo Bimbi (Vidas association), Italy

Casa Sollievo Bimbi opened in 2019 and now serves young patients and their families as a 'green'-certified, six-story building with comprehensive support on a total area of 6,400 square meters

Objectives

- ▶ Provide the customer with a single solution that includes all the safety and security systems
- ▶ Give part of the system for free as donation to the foundation
- ▶ Provide the customer with a single software management system

Customer Benefits

- ▶ Donation of PA and fire system
- ▶ One-stop supplier for safety and security solutions
- ▶ A partner the client can rely on
- ▶ A control management software provided by a valuable IPP partner (Alesys) which supervises fire system, access control, intrusion control and video system

Solution

- ▶ 1 redundant addressable fire panel, 1200 AVENAR detectors, aspiration smoke detectors and manual call points
- ▶ 1 PRAESIDIO voice alarm system and 300 LC1 countertop diffusers, 30 LP1 diffusers
- ▶ 50 video surveillance cameras
- ▶ 1 Intrusion control unit G9512.
- ▶ APE 3.7 access control with about 10 controllers and 15 gates
- ▶ 1 security control software management

“Collaboration with Bosch has been valuable, effective and efficient.”
Giorgio Troisi, Segretario Generale Vidas

Fire Alarm Systems

Mactan-Cebu Airport, Philippines



Mactan-Cebu International Airport is one of the most important airports in the Philippines, with 12 million passengers walking through its doors annually

Major challenge

- ▶ Replacing the old fire system without interruptions to the airport operations
- ▶ Ensuring fire safety during replacement

Customer Benefits

- ▶ Expandable and modular fire system for future needs
- ▶ High security and safety standards are met
- ▶ Efficient monitoring and control
- ▶ Precise locating of fire incidents

Solution

- ▶ Networked addressable fire alarm panels
- ▶ 400 heat detectors in offices
- ▶ Fire Monitoring system

Fire Alarm System

Contact us

Akshay Jangam
Sales & Marketing - Fire Systems (West)

Contact: 95943-66462
Mail: akshaymanoj.jangam@in.bosch.com

Your Bosch contact

 Name, title
Lorem Ipsum Dolor

 Email
Lorem Ipsum Dolor

 Phone number
Lorem Ipsum Dolor

 Website
www.boschsecurity.com

