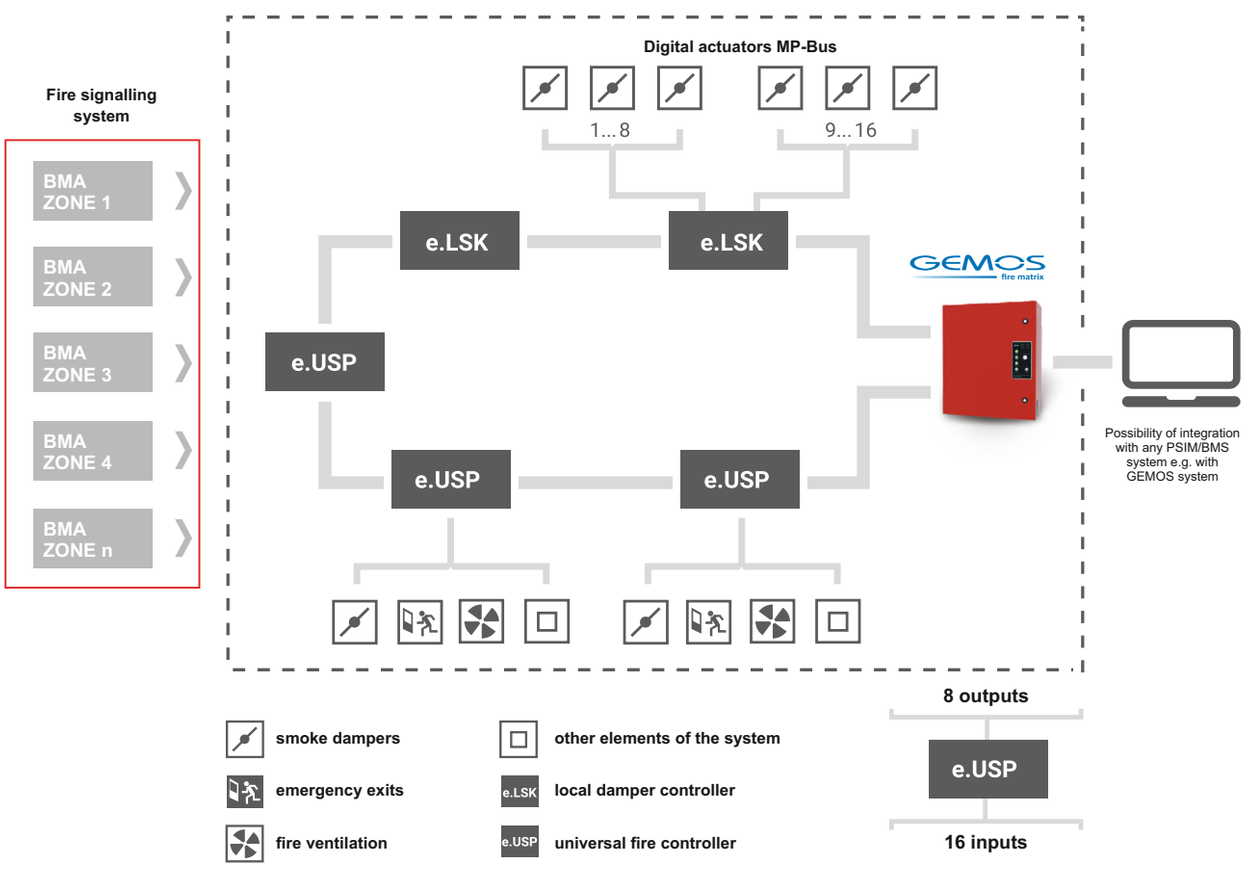
What is GEMOS fire matrix?

Solution guaranteeing safety during a fire

In times of tightening safety regulations in building industry and increasing costs of fire protection, we offer the integration of all elements of the building's infrastructure which operate under fire scenarios through GEMOS fire matrix system.



- GEMOS fire matrix is a modular device designed to control and supervise the operation of equipment and systems in a building that will be activated in the event of a fire hazard.
- GEMOS fire matrix allows for integrated management of devices of different manufacturers used in the rescue and fire-fighting operations, such as: fire ventilation systems, fire detection systems, evacuation support systems, etc.
- GEMOS fire matrix provides control over all devices involved in the fire scenario, thus increasing the fire safety level of the building.
- GEMOS fire matrix works as an independent device control system, taking part in the rescue and fire-fighting operation and can be integrated with GEMOS.

How does GEMOS fire matrix work

GEMOS fire matrix innovative system for monitoring and controlling fire protection system

GEMOS

It is a certified integrating system consisting of hardware and software. It provides visual monitoring of the system operation and "manual control" of processes during the fire, e.g. opening the door at the request of the person in charge of evacuation.

GEMOS fire matrix CONTROL PANEL

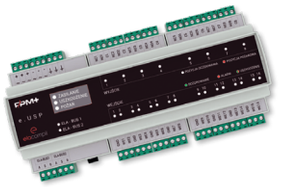
A central device that allows to control and supervise the functioning of devices and systems in a building. Individual controllers are connected to the control panel.

e.LSK CONTROLLERS

Local fire damper controllers. They are responsible for closing digital fire dampers.

e.USP CONTROLLERS

Universal fire controllers. They enable connection to the GEMOS fire matrix system and control of devices working in the rescue and fire-fighting operations.



ELEMENTS OF THE SYSTEM

GEMOS fire matrix allows to monitor and control any fire protection equipment.

- Fire dampers
- Elevators, escalators and travelators
- Doors with access control
- Emergency exits
- Fire ventilation
- Fire signalling control panel
- Conventional fire sensors
- Manual smoke alarm and red call point buttons
- Sensors of pressure, temperature, wind direction and force, presence of voltage
- Electromagnetic holders
- Audible warning systems
- Fixed mining devices
- Other building automation devices
- Contactors, inverters, switches
- Smoke dampers and curtains etc.

Who is GEMOS fire matrix for

The success of **GEMOS fire matrix** results from looking at the fire protection system from the perspective of various groups of users: designers, installers, administrators and protected people.

FOR DESIGNERS:

- BIM library (Building Information Modelling)
- CAD friendly (CAD tools)
- Case by case approach

FOR INSTALLERS:

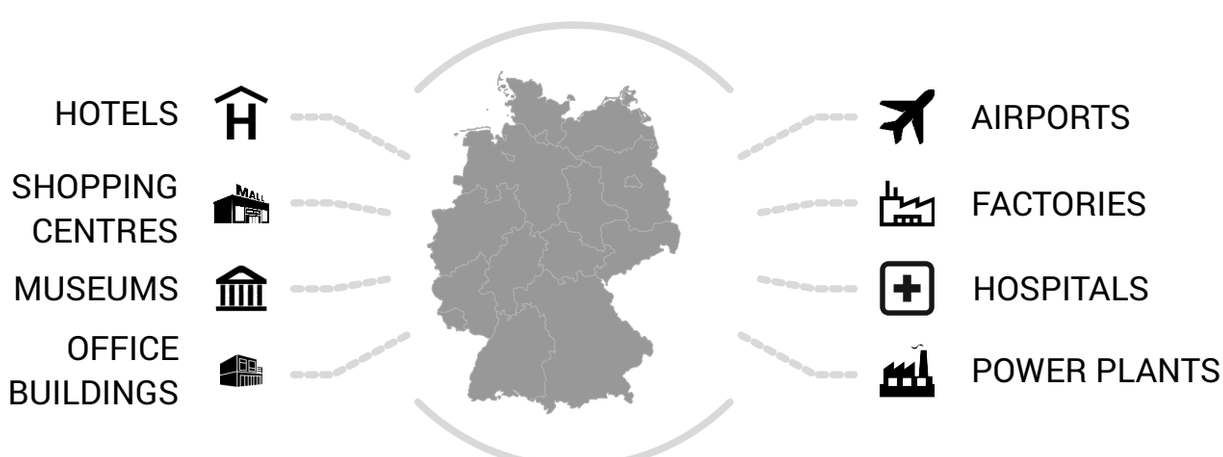
- Shorter and simpler creation of fire protection matrix - faster building acceptance
- Our support at every stage of implementation

FOR ADMINISTRATORS:

- Central control of dispersed infrastructure
- Possibility of manual control during the fire
- Full documentation of fire devices and scenarios in one place

FOR PEOPLE IN THE BUILDING:

- speeds up evacuation
- stops fire from spreading
- minimizes false alarms



What is GEMOS fire matrix program for?

1. configuration of GEMOS fire matrix system devices (monitor and control centre)
2. configuration of all modules such as e.LSK, e.USP, LSK, EPSCUS
3. sending and receiving configuration to / from controllers
4. monitoring devices connected to the system – view of bus continuity, view of the entrances and exits
5. testing fire scenarios by simulating the activity of a particular zone
6. testing the control of module exits - manual start-up of an exit
7. manual start-up/ controlling (opening and closing) of digital actuators working in the MP-BUS (actuators for fire dampers)
8. presentation of the entrances / exits in a graphical form, the location of fire damper divisions in the animated form.
9. development of fire control matrix - the ability to import / export the matrix to a format acceptable by MS EXCELL
10. two possibilities of configuring the control matrix
    a) directly in the program
    b) in MS EXCELL and then export to the program
11. generating reports including system configuration with any filtering level allowing for the tests
12. generating a report with a complete system configuration in the form of as-built documentation

Hardware & Software