IQ8

Safety is a question of system

Flexible fire prevention concepts with the **IQ8**System

▶ Fire detection systems

Reliable prerequisites: competence and res

Competence, innovation, as well as market and customer orientation have formed the successful development of the ESSER product brand for more than a quarter of a century. We are the market leaders in fire detection technology and our qualified employees develop and produce products and solutions for the all-encompassing safety of people and goods.

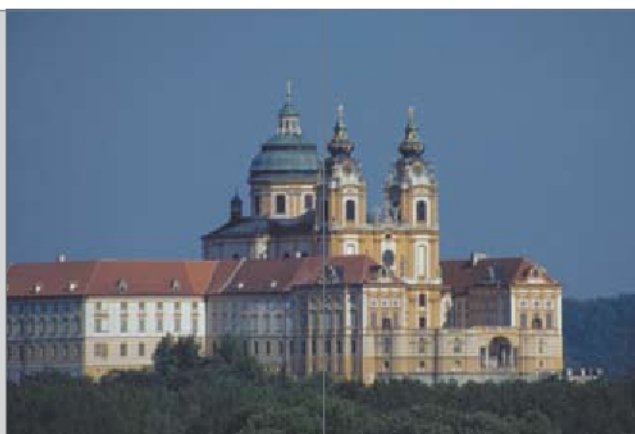**HighLight Munich Business Towers**

Henkell Lobby
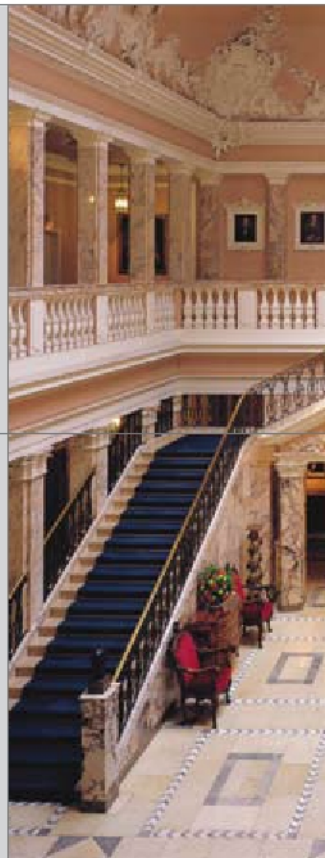
Albertina Vienna

...ponsibility

Melk Monastery
in Lower Austria

Castle Hotel
in Münchhausen

Subway
in Prague

Safety in system. There is an overall vision in our extensive product range: full system integration. A customized overall concept of fire prevention can be planned and realized from separate, individually integrable system performances for every requirement with products optimally aligned with each other: with system solutions which enable more flexibility, economic efficiency, and operational safety.

Quality: the word gets around. Performance is in international demand. International certifications and demanding reference objects show that we have earned ourselves a world-renowned reputation with quality products and powerful system solutions.

And thus our **IQ8**Control C, **IQ8**Control M and 8008 fire alarm control panels as well as all detector series are tested and licensed according to European Standard EN 54 regulations.

This makes ESSER a vendor with national and international licenses for the entire product range in fire detection techno-logy. With our innovative and adaptable products and system solutions, technically demanding and large-scale projects are successfully implemented. At the same time we always offer our partners the best possible technical support and work together to create the optimal system solution for every application.

IQ8System: safety that pays off

An optimally configured system makes full use of its entire potential. The use of every single component aims not only at simply extending one's own possibilities but also that of the other system components. So the **IQ8** fire alarm system increases its value as time goes on.

IQ8 Control

IQ8MCP

IQ8 Alarm

IQ8 Quad with alarm signaling device

IQ8 Wireless

IQ8 Quad

IQ8System consists of:

- the economical bus systems: esserbus-PLus or esserbus
- the multi-functional speech-enabled **IQ8**Quad detectors with alarm signaling device

- the **IQ8**Control fire alarm control panel
- the universal detector base for using various fire detectors (T, O, OT, OT^{blue}, O^{2}T, OTG)

- the **IQ8**MCP
- the innovative **IQ8**Wireless components

Thanks to this constellation, the **IQ8**System is more flexible than any other fire prevention system. Its detectors pick up on all known criteria and moreover possess alarm functions—also including speech alarm. The base construction and its easy detector replacement additionally enable an uncomplicated adjustment of the fire detection unit to changing environmental conditions and object specifications at any time.

The control units: systematic control

Being perfectly aligned with each other, the 8008 and **IQ8**Control fire alarm control panels coordinate all system component activities. As practice-oriented systems, they offer the highest degree of flexibility and operational safety via loop bus technology, modular design for future upgrades, free configurability, multilateral functionality, and connection possibilities to the latest detector technology. At the same time, they are extremely economical due to low operational and follow-up costs, whether in stand-alone operation or as a complex system in the technologically advanced essernet. Innovative software documents events to the second and enables exact analysis of all incoming reports. This diversified system selection opens all possibilities of realizing a customized and reliable overall fire alarm system for every object.

8008 Fire alarm control panel

- The universal, high-tech control unit for large objects
- Up to 40 esserbus loops
- Full redundancy via the usage of a second CPU
- For large building complexes with up to 4,680 fire detectors – i.e. hotel, industrial, or office complexes, clinics

IQ8Control M*
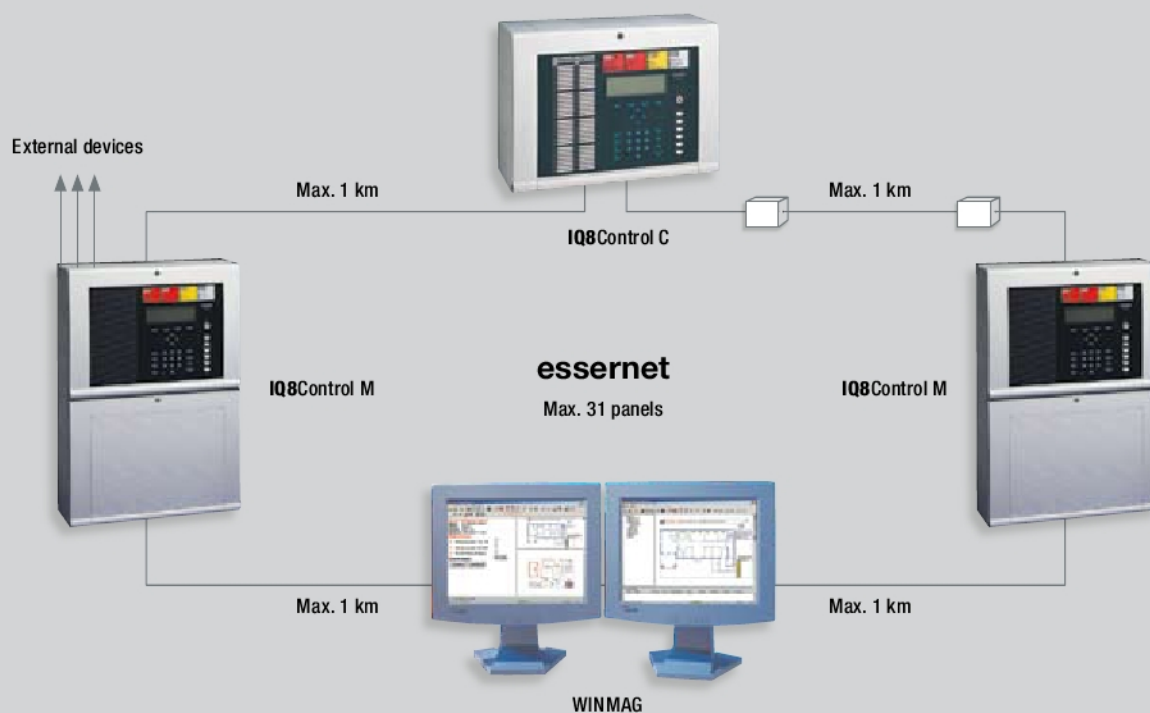### Fire alarm control panel

- The flexible high-tech control unit for mid-sized objects
- Up to seven esserbus loops
- Highest flexibility in already existing or changing object specifications
- Multilevel buildings with up to 889 fire detectors – for example administration and office buildings, hotels, or small to mid-sized industrial objects

IQ8Control C
Fire alarm control panel

- The low-cost high-tech control unit for smaller objects
- Up to two esserbus loops
- Economical
- Compact
- Smaller objects with up to 254 fire detectors where many people and/or valuables are to be protected, for example kindergartens, institutions, car dealerships, or galleries

Properties	8008	IQ8Control M	IQ8Control C
Modular design	■	■	■
Free configurability	■	■	■
esserbus-compatible with spurs	■	■	■
Networking of up to 31 control units	■	■	■
Conformity to standards and regulations, national and international	■	■	■
Display in plain text	■	■	■
Error diagnosis via PC, also long-distance	■	■	■
Easy installation and start-up	■	■	■
Fire department key box and operating panel	■	■	■
Extinguishing system control via standard interface "Extinguishing"	■	■	■
Direct extinguishing system control via bus-driven electric control systems	■	■	■
Number of loops	40	7*	2

Fire alarm control panels for every purpose: advanced system solutions in which all components are optimally aligned with each other. For effective fire prevention with the highest degree of flexibility and future security.

* One can connect up to seven ring loops and 889 detectors or esserbus terminals with the **IQ8**Control M. Due to German planning and installation guidelines (VdS and DIN VDE), there is a limit of four ring loops and 512 detectors.

External devices

Max. 1 km   Max. 1 km

IQ8Control C

IQ8Control M   **essernet**   IQ8Control M

Max. 31 panels

Max. 1 km   Max. 1 km

WINMAG

The essernet – flexible and powerful

The essernet connects multiple control units and other display and alarm devices to one non-hierarchical network for economic and convenient monitoring of extensively arranged building complexes. Depending on the object conditions, the essernet can be operated using all types of cable. Up to 31 panels can communicate in the network.

Because of the modular design, all changes can be quickly and uncomplicatedly programmed from one point. Synergy and symbiosis – multiple fire alarm control panels communicate via essernet and visualize their reports on one joint display and operating panel for integrated alarm systems.

Left: Repeaters amplify the signal even over distances stretching kilometers.

Right: As a standard cable, the I-Y(ST)Y communication cable is a low-cost alternative.

essernet ranges

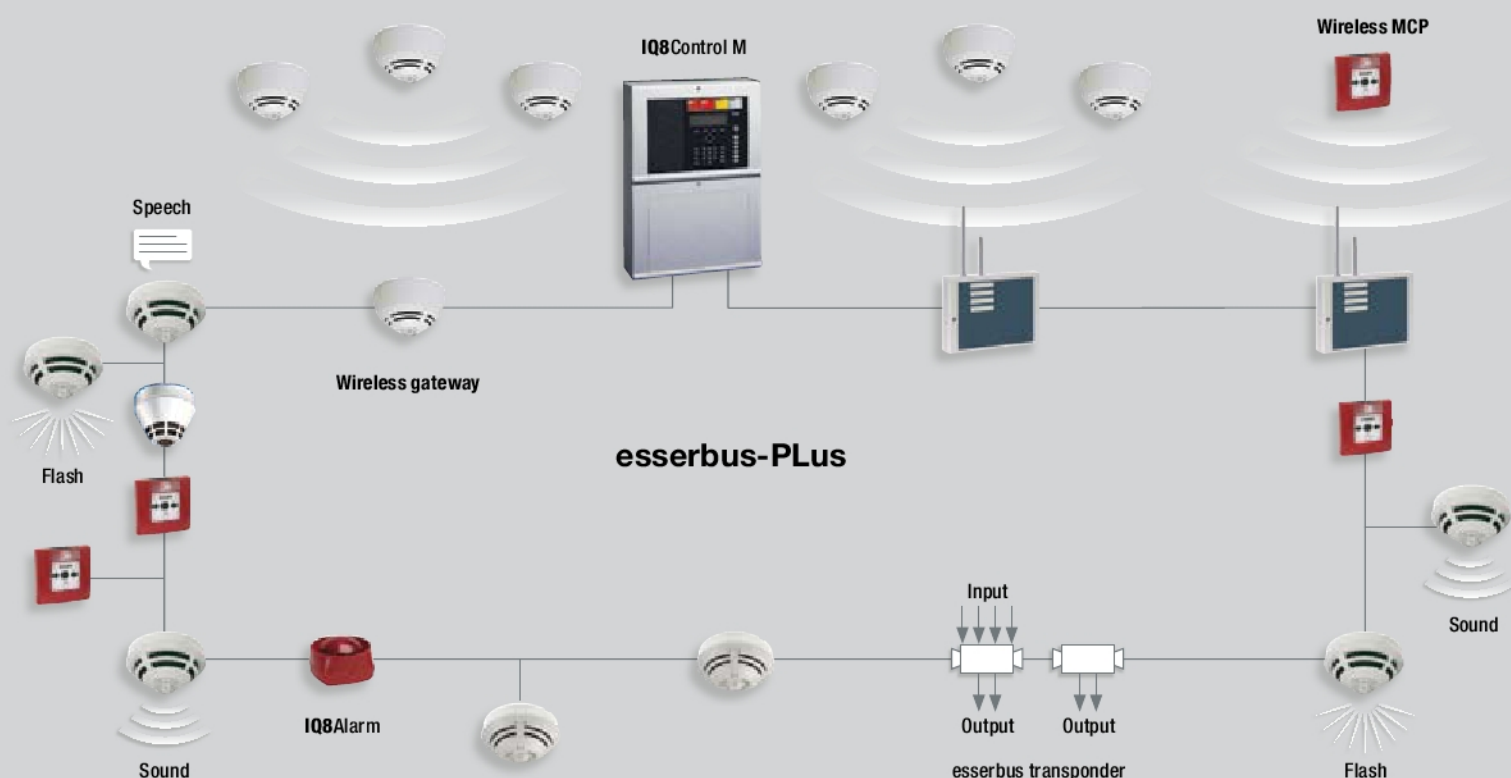Distances of up to 700 m between two terminals can be bridged via a communication cable and with a data rate of 62.5 kbaud. With twisted-pair data cables, up to 1,000 m can be bridged: and with a data rate of 500 kbaud. Through the usage of two

repeaters, the distance between the terminals can be tripled. Even distances of up to 20 km between two panels can be realized by using fiber-optics and corresponding converters.

The loop: esserbus and esserbus-PLus

The esserbus-PLus is currently the most secure and economic form of alarm system. It follows a simple principle: all system components are not located on various spurs as is the usual case, they are exclusively and fully addressable on the ring bus. The ring bus also feeds the alarm devices directly from the double-wire analog ring loop; this feed can tolerate short circuits and interruptions. Additional components are not necessary. Up to 48 alarm devices can be operated on one loop.

Wireless MCP

IQ8 Control M

Speech

Wireless gateway

esserbus-PLus

Flash

Input

Sound

Output **Output**

IQ8 Alarm

Sound **Flash**

esserbus transponder

Almost all of the advantages of the **IQ8**System – except for the alarm signaling – can also be realized with the reliable esserbus. The number of esserbus devices is subsequently expandable up to 127 with little effort. With the esserbus-Transponder Concept, controllers and additional ports are installed where they need to be, and with minimal wiring.

- Up to 127 terminals on the ring bus
- 9200 series and **IQ8**Quad detectors on one loop
- Reduced installation effort
- esserbus-PLus, esserbus length: 3.5 km

Transponder

Manual call point to EN 54

Manual call point to EN 54, small

Manual call point house alarm

Gas extinguishing system

IQ8Wireless

OT detector

Optical/heat/gas detector

OT detector

Optical/heat detector

Heat detector

Optical/smoke detector

Ex. detector

Air duct detector

Flame detector

Linear smoke detector

Linear heat detector

Aspirating system

Laser aspirating system

SPECIAL DETECTOR

DETECTOR

Bus color

Visual/audible alarm conventional

IQ8Alarm – voice alarm device

IQ8Alarm – combined alarm device

IQ8Alarm – optical alarm device

IQ8Alarm – acoustic alarm device

Bus-serviced alarm devices

IQ8Technical Alarm Module

Fire door control system

Wireless transponder for extinguishing systems

Standard interface for extinguishing systems

esserbus® transponder with 4 detector zones

esserbus® transponder with 12 inputs

esserbus® transponder, 4-channel

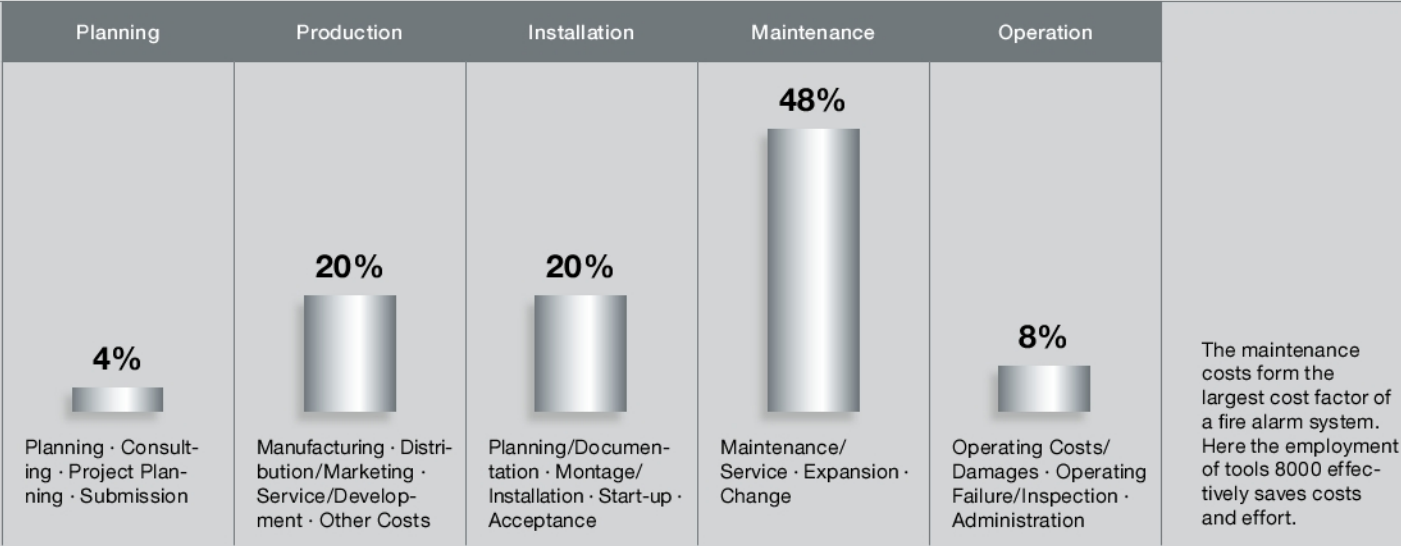# Visionary system: compatibility, control, and mainte

tools 8000

With tools 8000, you can act independently of place and time. You program your alarm system where and when you want to. After you have defined all configurations entered, you can easily transfer the data on site into the panel and to the bus devices via the loop, respectively. Thus tools 8000 is both customer data editor and service software in one. It replaces three previously needed programs in Windows and additionally supports importing of old data created with the DOS editor. It raises the user comfort considerably and offers quick and concise programming – from installation to maintenance. With tools 8000, you not only configure the control unit, you also configure the ring. Even individual diagnosis and parameterization of the detector are possible. Especially convenient: you hardly notice that you are sitting at the PC, as tools 8000 recreates the original control panel view on-screen and graphs all system components on a standard user interface. tools 8000 complements the **IQ8** fire alarm control panel and accompanies an alarm system through all of its life cycle phases.

Thus, using tools 8000, it is possible at any time to check and restore the configured desired state of a fire alarm control panel already in operation. From maintenance – including a user-friendly event log – to preventative field strength measurement for wireless components, tools 8000 does not leave any wish unfulfilled in terms of system care and optimization.
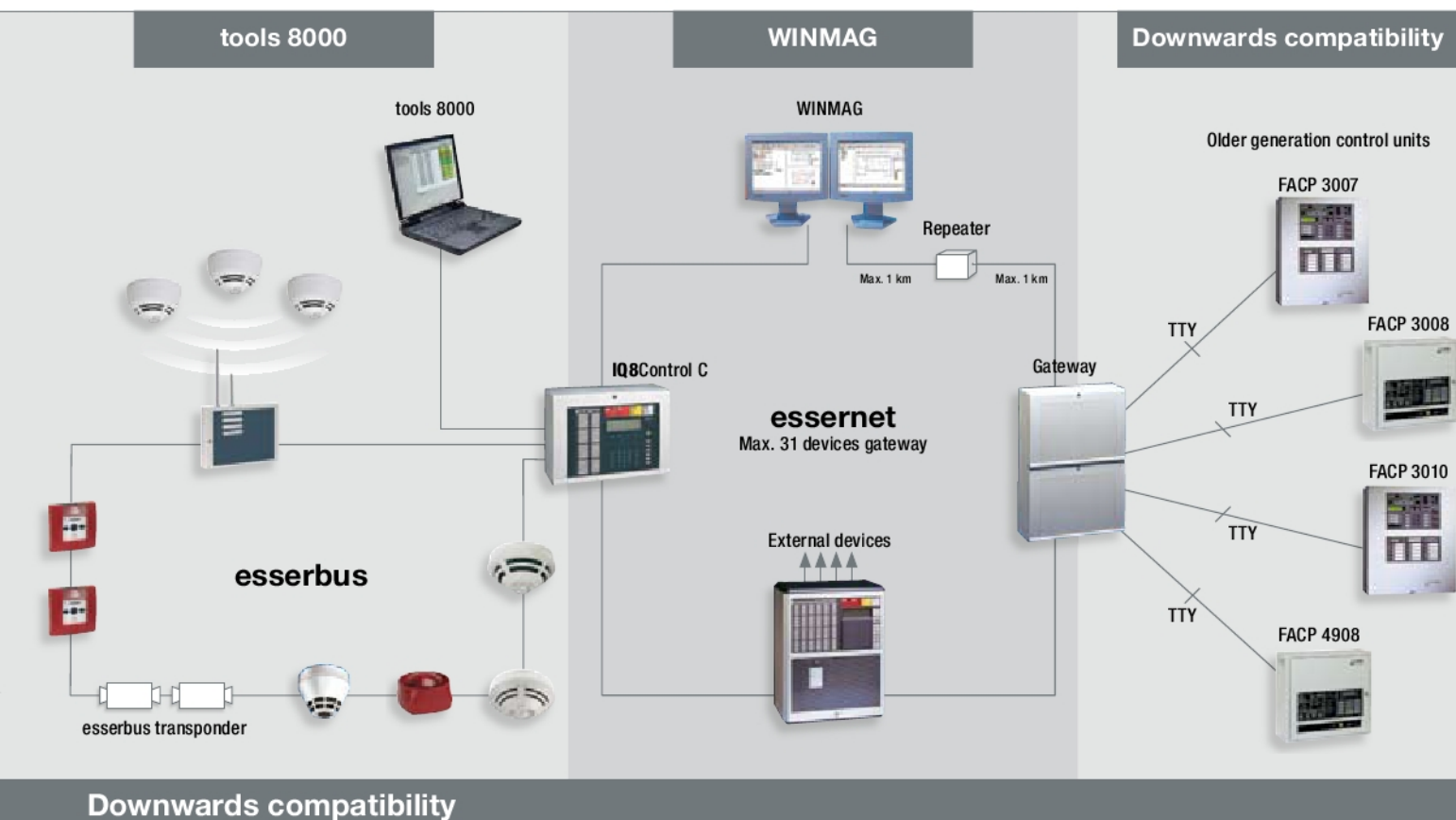
Cost per detector call point throughout the entire life cycle

Planning	Production	Installation	Maintenance	Operation
4%	20%	20%	48%	8%
Planning · Consulting · Project Planning · Submission	Manufacturing · Distribution/Marketing · Service/Development · Other Costs	Planning/Documentation · Montage/Installation · Start-up · Acceptance	Maintenance/Service · Expansion · Change	Operating Costs/Damages · Operating Failure/Inspection · Administration

The maintenance costs form the largest cost factor of a fire alarm system. Here the employment of tools 8000 effectively saves costs and effort.

nance

WINMAG

The more complex an alarm system becomes over the course of time, the more important it is to gather all required information into one place. All control units events are bundled by the hazard management system software WINMAG – in a clear, concise, and user-friendly fashion. Moreover, WINMAG offers the user the possibility to immediately initiate the proper measures with active control possibilities. In this way, the software specifically prevents further dangers. Furthermore WINMAG offers video

insertions in addition to dynamic graphics, tables, and visualizations, and also on more than one operator station. Because of its modular design, WINMAG delivers on both cost-effectiveness and flexibility. Necessary modules can simply be added depending on the user's application. Via its open system architecture and free programmability, it optimally adapts to the respective local environment. Thus the system can always be both customized and economical.

tools 8000	WINMAG	Downwards compatibility

tools 8000

WINMAG

Older generation control units

FACP 3007

Repeater

Max. 1 km   Max. 1 km

IQ8Control C

Gateway

FACP 3008

essernet
Max. 31 devices gateway

TTY

TTY

esserbus

External devices

FACP 3010

TTY

TTY

esserbus transponder

FACP 4908

Downwards compatibility

This economical solution encompasses the connection of older control unit series as well as WINMAG, the flexible management system which is the gateway to integrating older control units, as well as the essernet interface for the bridging of large distances.

Long-term investment protection
Our concept of also connecting older generations of control units to newer systems is realized quite simply using the gateway. esserbus transponders are expansion components which are used for the controlling and monitoring of external devices or for the connection of standard, diagnostic, or special detectors with

their freely programmable input and output ports. Thus, ESSER fire detection systems offer decades of planning reliability, yet are still always state-of-the-art.

Large distances, short ways
The essernet serial interface can securely connect to each other in control panels separated by large distances and at the same time enable a convenient operation of the entire system. Thus it integrates especially complex connections in a technically demanding yet simple way.

The plus in safety: recognize, report, and extinguish

Practical example 1
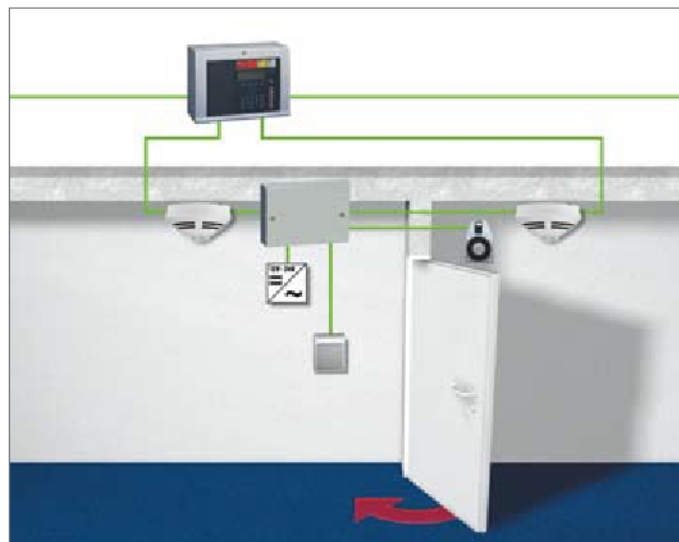
Above: Swift closure of automatically controlled fire protection doors prevents the further spreading of smoke as well as the spread of fire.

Left: Targeted elevator control helps to prevent life-threatening situations in case of emergency.

Recognize and report. Control and activate.

It takes more than just plain reporting for systematic fire protection. Therefore various control possibilities are included in the overall **IQ8** fire detection system. In case of fire, these begin with the controlling of elevators and continues with automatic closing of fire protection doors further to the active on-site application of an extinguishing agent. There is a wide range of controlling options. All ESSER fire alarm control panels are equipped with digital controlling ports. Technical alarm components, designed for the acquisition, forwarding, and controlling of various technical alarm reports, form an important link for many applications to other maintenance groups in building services engineering.
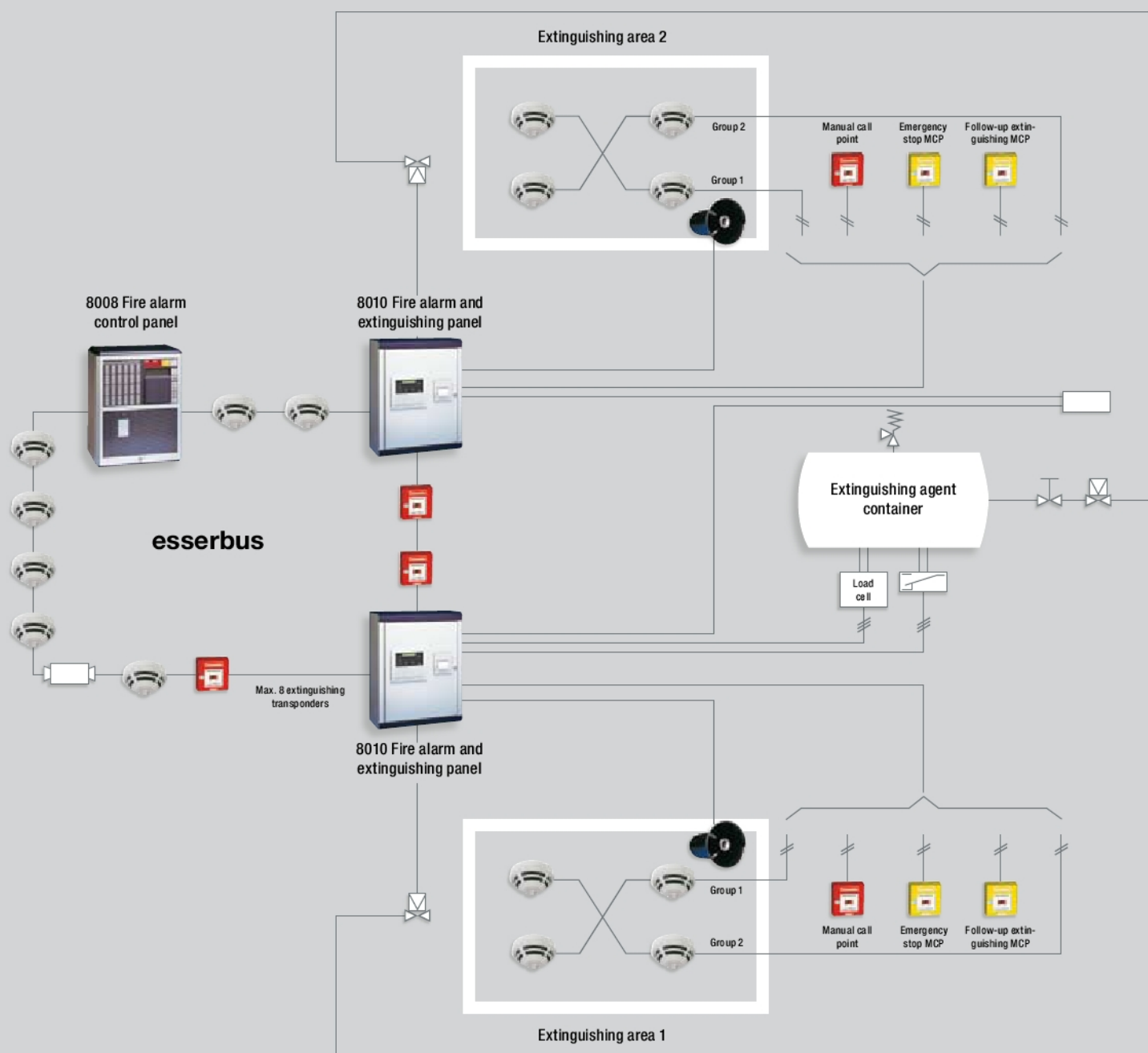
All-round protection in the case of emergency. Advanced active fire protection can be provided with multilateral control possibilities. The spread of fire is slowed down systematically and greater damage is reliably prevented in this manner. Timer-controlled alarm signaling helps in emergency cases to orderly evacuate streams of people and to avoid panic. This is especially true for large building complexes, for example large hotels, airports, train stations, shopping centers, and sporting venues, as well as exhibition/event halls. All of these buildings have one thing in common: the average visitor usually possesses little or no knowledge of the local layout, and is thus reliant on directed guidance for his/her escape during emergencies. With esserbus-PLus, addressable alarm devices and their various programmable audible alarms and voice messages (**IQ8**Alarm), even complex evacuation plans can be put into action in a simple way.

Practical example 2

The 8010 fire alarm and extinguishing panel is ring-bus-compatible and sets the standards for economical and flexible usage. With this integrated solution, simple and complex fire prevention tasks are dealt with via electronic control systems for extinguishing systems at low costs. A perfect safety system: the 8008 fire alarm control panel with the esserbus (which includes the 8010 fire alarm and extinguishing panel) for direct on-site extinguishing.

In this application, each extinguishing area is controlled via one 8010 fire alarm and extinguishing panel. Both extinguishing areas are equipped with automatic and manual detectors in connection with an acoustic alarm device, but together use only one extinguishing agent container.

Extinguishing area 2

Group 2

Group 1

Manual call point

Emergency stop MCP

Follow-up extinguishing MCP

8008 Fire alarm control panel

8010 Fire alarm and extinguishing panel

Extinguishing agent container

Load cell

esserbus

Max. 8 extinguishing transponders

8010 Fire alarm and extinguishing panel

Group 1

Group 2

Manual call point

Emergency stop MCP

Follow-up extinguishing MCP

Extinguishing area 1

Your specialist:

Imported/Distributed by :

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