The 8000 fire alarm system
The concept with unlimited possibilities
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence and responsibility</td>
<td>04</td>
</tr>
<tr>
<td>Our stars</td>
<td>06</td>
</tr>
<tr>
<td>Our concept—performance on demand</td>
<td>08</td>
</tr>
<tr>
<td>Made-to-measure configuration and design</td>
<td>10</td>
</tr>
<tr>
<td>esserbus®—safety plus flexibility</td>
<td>12</td>
</tr>
<tr>
<td>essernet®—concentrated intelligence</td>
<td>16</td>
</tr>
<tr>
<td>Forward-looking cost concept</td>
<td>18</td>
</tr>
<tr>
<td>It pays to have good connections</td>
<td>20</td>
</tr>
<tr>
<td>Safety plus</td>
<td>24</td>
</tr>
<tr>
<td>International presence and references</td>
<td>28</td>
</tr>
<tr>
<td>All about service</td>
<td>30</td>
</tr>
</tbody>
</table>
Competence and responsibility

Innovative fire detection technology using products that set standards. With system solutions that provide greater flexibility, cost-efficiency and operating reliability. Systematic safety, competently planned and implemented.

Novar, provider of a complete range of ‘building services systems’, with the emphasis on safety and security, communications and building control, has achieved a leading market position with the ESSER product brand.
For more than a quarter of a century the successful development of the ESSER product brand has been characterised by competence, innovative flair and consistent market and customer orientation.

More than 1,100 qualified employees carry out research, development and production at three locations to ensure comprehensive personal and product safety.

In the field of fire detection technology, for example, Novar supplies an extensive range of products, all of which conform to the concept of full system integration. A made-to-measure total fire detection system can be created for every individual application by integrating appropriate elements. The products are perfectly geared to one another, so that they harmonise like the members of a good orchestra.
Our stars

Perfectly tuned to one another. Perfect in themselves. Our series 8000 fire alarm control panels coordinate all the activities of each individual ‘member’ of the safety system. These systems are geared to practical situations and provide exact performance to match demand. The loop technology ensures a maximum of flexibility and operating reliability. The modular construction leaves room for future upgrades and ensures the system is freely configurable. Versatile functionality and connectability to the latest detection technology. Cost-efficient in terms of operating and follow-up costs.

Whether in stand-alone mode or as part of a complex system in the ultramodern essemer, this versatile range of systems opens up a whole world of opportunities when it comes to realising economical, made-to-measure, reliable, all-encompassing fire protection systems for every type of building. Just as individual as they need to be.

<table>
<thead>
<tr>
<th>Features</th>
<th>8008</th>
<th>8000 M</th>
<th>8000 C</th>
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</thead>
<tbody>
<tr>
<td>Modular construction</td>
<td>•</td>
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<tr>
<td>Freely configurable</td>
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<tr>
<td>Can be combined with esserbus® via spur loops</td>
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<tr>
<td>Networking of up to 31 control panels</td>
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<td>•</td>
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<tr>
<td>Compliance with national and international standards and regulations</td>
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<tr>
<td>Plain text display</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Error diagnosis via PC, also remote</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Simple installation and commissioning</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Fire service key box and operating pad</td>
<td>•</td>
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<td>Extinguisher system control via standard extinguishing interface</td>
<td>•</td>
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<td>•</td>
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<tr>
<td>Direct extinguishing system control via bus-operated electrical control facilities</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Number of loops</td>
<td>40</td>
<td>7*</td>
<td>2</td>
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Fire alarm control panel for every purpose and every occasion. Progressive system solutions, whose components harmonise perfectly with each other. For effective fire protection with a maximum of flexibility and upgradability.

Fire alarm control panel 8000 C
The economical, high-tech control panel for smaller buildings.
• Up to 2 esserbus® loops
• Cost-efficient
• Compact
• Smaller buildings with up to 254 fire detectors, in which protection must be provided for public access areas and/or valuable commodities, e.g. kindergartens, small shops and offices, theatres or residential care homes

Fire alarm control panel 8008
The all-purpose, high-tech control panel for large buildings.
• Up to 40 esserbus® loops
• Full redundancy through the use of a second CPU
• For large building complexes with more than 512 fire detectors, e.g. hotels, industrial or office complexes or hospital centres

Fire alarm control panel 8000 M*
The flexible, high-tech control panel for medium-sized buildings.
• Up to 7 esserbus® loops
• Maximum flexibility for existing or changing building requirements
• Multi-storey buildings with up to 889 fire detectors, e.g. commercial office buildings, hotels, schools or small to medium-sized industrial buildings

*Up to 7 loops and 889 detectors or esserbus®-compatible devices can be connected to the 8000 M fire alarm control panel. In Germany, the VdS planning and installation guidelines and DIN VDE limit the number of loops to 5 and the number of detectors to 512.
Our concept—performance on demand

Innovative control panel and housing concept means made-to-measure solutions can always be provided to satisfy individual demands—now and in the future.

Complex wiring paths are avoided by opting for a decentralised structure.
Modern fire alarm control panels and their modular device structure always enable us to offer our customers qualitatively outstanding products in terms of economic efficiency and upgradability. The compact size, many and varied functions and upgrade options of the series 8000 fire alarm control panels, together with their attractive price-performance ratio, make them absolute all-rounders for comprehensive fire protection.

All ESSER-brand fire alarm control panels are based on the powerful and interrupt-tolerant loop technology. The system philosophy behind all our products allows us to create a perfectly coordinated fire alarm system at the project planning stage and to adapt this system to any new demands that may subsequently be made on it. New components are not incorporated until they are needed and are always performance-related and geared to demand.

This concept does not require any prefinancing of fire alarm system features and wiring that may be needed for subsequent upgrades or expansion.
Made-to-measure configuration and design

Perfectly tailored to individual requirements. Exceptional quality. The right fire alarm control panel for made-to-measure system design. All planning advantages are there from the start, as well as the assurance of flexibility to accommodate future changes. Whether comprehensive fire protection has to be provided for a complete building immediately or whether capacity for future expansion is needed, free configurability and modular design are systematic from us. These are the requirements that bring economic benefits and yield savings in time, personnel, materials and costs.

A change of function or a subsequent restructuring of an industrial building can be easily realised with a flexible ESSER-brand fire alarm control panel. Our loop and control panel technology allows an existing fire alarm control panel to be quickly and optimally adapted to the new requirements.

In this variant there are open-plan offices on the first and second floors and a storage area on the ground floor.
After restructuring there are individual offices and meeting rooms on the 1st and 2nd floors and the ground floor has been converted into a showroom.

Always the right decision for the individual requirements of a specific building. The fire alarm control panels from Novar are designed for different categories of buildings but they all satisfy the same high standards of safety technology.
esserbus — safety plus flexibility

**esserbus**—the spinal cord of the fire protection system. Ensures reliable operation even if a detector fails. For fast, problem-free commissioning. For economical and simple maintenance.

Complete operating reliability manages short circuits, cable breaks, sabotage or device malfunctions.

### A comparison of cable lengths

<table>
<thead>
<tr>
<th></th>
<th>Industrial standard</th>
<th>Example 1</th>
<th>Example 2</th>
<th>esserbus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up to 1,000 ft</td>
<td>955 ft</td>
<td>955 ft</td>
<td>Up to 2,000 ft</td>
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<tr>
<td>achievable with</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
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<tr>
<td>industrial standard</td>
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<td>not achievable with</td>
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<tr>
<td>industrial standard</td>
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The maximum length of an esserbus loop is 2 km, twice the industry standard. The esserbus provides assurance in the planning and installation phase as well as maintaining capacity for future extensions.
Comprehensive safety can be realised quickly and reliably at any point. The ideal basis for a fire protection system.

esserbus® delivers all the benefits of loop technology: maximum operating reliability and the greatest possible flexibility when it comes to planning and alterations. The decentralised intelligence of the detectors and built-in isolators reliably prevents the failure of a complete system. Planning alterations or future upgrades can be implemented without difficulty at any point on the system.

esserbus® efficiently and flexibly solves the problems of complex fire protection systems extending over several storeys or buildings several kilometres apart.

The total number of esserbus® devices can be easily increased at a later date to a maximum of 127 per loop. The esserbus® transponder concept is used to install controls and additional inputs where needed, with a minimum of wiring.
The new esserbus®-PLus is a major step towards facilitating controlled evacuation of buildings in line with the degree of urgency. Moreover it is the most economic and safe solution for operating alarm devices on a loop.

In contrast to previous practice, alarm devices on the esserbus®-PLus are fully integrated onto the open circuit-resistant esserbus®. They are therefore directly addressable and can be programmed to produce a variety of alarm signals with different meanings. In an alarm the esserbus®-PLus provides both the control signals and the operating power to the alarm devices. They operate at the same performance levels that previously needed separate control circuits from the fire alarm control panel to the alarm device or a separate power supply. The esserbus®-PLus therefore enables savings to be made in material, time and costs, as it is no longer necessary to install numerous cables and transponders.

Loop wiring with esserbus®-PLus.
The cost-efficient networking of sensors and activators on the two-wire loop minimise the amount of wiring needed. Radial spurs can be created from any point on the loop without the need for additional components, delivering further cable efficiencies while all devices on the spur remain addressed.
essernet®—concentrated intelligence

A combination of flexibility and high performance. Safety module linkage. The essernet® links several computers and other display and alarm units to create a non-hierarchical network. For economical and convenient monitoring of large-scale building complexes.

It is possible to operate the essernet® with a wide range of cable types, depending on local conditions. Up to 31 users can communicate in the network. Due to the modular structure, all changes (e.g. extensions) can be programmed rapidly and easily from a single point.

Synergy and symbiosis: both fire and intruder alarm control panels can be combined and communicate over the same essernet® and display their messages on a joint display and operating panel for integrated hazard alarm systems.

Distances in the essernet®

With the aid of telecommunications cables and a data rate of 62.5 baud, distances of up to 700 m between users can be bridged. If twisted-pair data cables are used, distances of up to 1,000 m can be bridged, even at a data rate of 500 kbaud. Up to two repeaters can triple the distance between users and if glass fibre and the appropriate converter are used, distances of up to 20 km between two users are feasible.
The 8000 fire alarm system

The essernet® is the cost-efficient safety network for large buildings and complex requirements.

Repeaters can amplify the signal even over a distance of kilometres.

The I-Y(ST)Y telecommunications cable is an economical alternative to the standard cable.

The essernet® micromodule—the basis for creating a network of up to 31 devices.

The joint fire and intruder alarm operating and display panel.
Forward-looking cost concept

Versatile software tools, such as TEDIS remote diagnosis, reduce maintenance costs, which make up almost 50% of the total costs of a fire alarm system.

Cost per detector point over the entire lifespan

The diagram shows that the greatest potential for savings is in the area of maintenance.
Lower costs, higher quality. This is formula for success. We have taken a close look at the price of a fire alarm system throughout its entire operational life. The result: maintenance costs are the major factor, accounting for almost 50% of the total cost.

For this reason we have developed a cost reduction concept for all maintenance providers and fire alarm control panel operators. A wide range of suitable tools were developed. High-performance aids such as TEDIS (Tele-diagnosis system) have been consistently introduced, as well as installation and commissioning measures. This makes our fire alarm control panel especially cost-effective for maintenance providers and operators, from the initial investment in hardware to their subsequent installation, operating reliability and all-round service.
It pays to have good connections

The more complex an alarm system becomes over time, the more important it is to collect all important information at one location. The events registered at all control panels are focussed by the WINMAG hazard management software in a clear, user-friendly and meaningful manner. With its active control options, WINMAG also offers the user the option of initiating suitable measures immediately. WINMAG thus facilitates the targeted prevention of any further risks.

Alongside dynamic graphics, tables and imaging at several operator panels, WINMAG provides video overlays, so that you can view live pictures of the hazard scene. WINMAG’s modular design makes it both economic and flexible. Depending on the user’s requirements, the necessary modules are simply added on. As it has an open system architecture and is freely programmable, it can be optimally adapted to local circumstances. The result is always a made-to-measure, cost-efficient system.

A cost-effective coalition of standard, diagnostic and analogue detector technology using esserbus® transponders or 4-group fire alarm panel module.
The most economically efficient solution involves the integration of older detector series as well as the flexible WINMAG management system, the Gateway to the integration of older panels, and the essernet® interface to bridge large distances.

WINMAG: events on the whole network at a glance.
Investments with long-term value. The concept of incorporating ‘former’ generation computers into new systems is made simple reality using Gateway. The integration of an older panel generation in the essernet® through the Gateway therefore presents no difficulties.

For example, the esserbus® transponders can connect conventional detectors with high-tech 9200 series detectors. Thus fire alarm control panels offer planning assurance over decades while always remaining abreast of the latest technology.
The serial essernet® interface bridges long distances without difficulty.

- Long distances; short paths. The serial essernet® interface can connect remotely located control panels reliably via modems, facilitating convenient operation of the total system.
- It integrates especially complex connections to the 8000 fire detector system in a technically superior but simple manner.
Safety plus

All-round emergency protection. Extensive, active fire protection is possible with a wide range of control options. Fire can be controlled and prevented from spreading, thus reliably limiting the damage.

In emergencies, targeted lift control can prevent people from putting themselves in life-threatening situations.
Detect and report. Control and activate. Systematic fire protection depends on more than just detection. This is why a wide range of control options is provided in the total 8000 fire alarm system. This starts with elevator/lift control in case of fire, includes the automatic sealing of fire doors and the active deployment of on-site extinguishers.

The spectrum of control options is wide. All ESSER-brand fire alarm control panels are provided with digital inputs for control systems. Technical alarm modules designed for the collection, transmission and control of every signal from a technical alarm create a significant link to other building service areas in many applications.

Immediate sealing of automatically controlled fire doors prevents the spread of smoke and fire.
Practical example 1

The loop-compatible fire alarm and extinguishing panel 8010 sets new standards in terms of cost-effective and flexible operation. An integrated solution using electronic extinguishing system control provides cost-efficient answers to both simple and complex questions of fire protection.

A perfect system of safety
The 8008 fire alarm control panel with the esserbus® and its associated 8010 fire alarm and extinguishing computer for tackling fires directly where they occur.

In this application each extinguishing area is controlled via an 8010 fire alarm and extinguishing panel. Both extinguishing areas have automatic and non-automatic detectors connected to an acoustic alarm. However, both extinguishing areas use the same extinguishing medium container.
The different types of alarm signal, for example in a 4-storey hotel, inform the guests and staff of the level of danger and can aid controlled evacuation.

In emergencies, time-controlled alarm signalling helps with the orderly evacuation of streams of people and avoids panic. This is especially true of large building complexes such as major hotels, airports, railway stations, shopping malls and sports arenas or other venues. What all these buildings have in common is the fact that the average visitor usually has little or no knowledge of the location’s layout and in an emergency is totally dependent on guidance systems for his or her escape. Complex building evacuation plans can be easily realised with the esserbus®-PLus, addressable warning devices and their variably programmable warning tones.
Quality is a word that gets around. High performance is in global demand. Our excellent, worldwide reputation for producing quality products and individually tailored systems is reflected in our collection of international certificates of approval and our long list of references.

Our 8000 C, 8000 M and 8008 fire alarm control panels have all been tested and approved to the European standard EN 54 (part 2, controllers and part 4, power supply units).

The detector series 9100 and 9200 are also certified to EN 54. This makes Novar a supplier with national and international approvals for its entire range of fire protection products.

Technically demanding and far-reaching projects are being implemented throughout the world with our fire alarm technology. This success is due to our innovative and adaptable products and the excellent technical support we provide to our partners in finding the optimal system for each individual application.
The 8000 fire alarm system

International certification and prestigious references underline the fact that Novar is one of the best addresses when it comes to cutting-edge fire protection systems.

Zurich-Kloten Airport, Switzerland.

Fire alarm systems with worldwide approval.
All about service

For Novar, partnership and service mean comprehensive customer service. We support our partners from planning and project design right through to the successful completion of the project. Our long experience and know-how guarantee our partners the success they demand.

The wise use of media: information, training, planning and work support with the most suitable media. Printed, digital, on CD-ROM or the Internet from: www.novar.de.
An ear to the market. Fulfilling customer wishes. In competitive markets, service is a major contributor to success. Service should be supplied, as it were, as a part of every product or system. This is why, for us, the term service has wide implications.

It includes the joint development of building-specific systems, the telephone hotline, the provision of information on the Internet or technical help and sales support. And it goes without saying that we are always ready to listen to any suggestions our partners may make.

Our service staff provide a comprehensive network of technical expertise at home and abroad—always ready to support our planners and installers in word and deed.

Classroom: we are at the disposal of our customers at all times with a full range of support services, including marketing support.

All the training courses given in Germany are also available to our international partners. After all, highly qualified staff and partners are essential when dealing with quality products.
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