Completely safe

Sinteso – the comprehensive fire protection system
Protection of people and assets, reliable fire detection – with Sinteso

Sinteso™ is the result of decades of accumulated fire protection expertise from Siemens. This expertise supports you throughout the life cycle of your system, starting with a thorough risk analysis and extending from fast, reliable service all the way to individual extension and modernization solutions for existing fire protection systems.

Thanks to modern technology, Sinteso provides the best possible protection against all fire hazards. It incorporates innovative safety functions, including ASAtechnology™ for reliable and deception-free signal interpretation, carbon monoxide detection, degrade mode and standby function. Full network capability and extendability through a cluster-backbone network ensure the highest degree of investment protection.
Everything you need, from simple to complex

From detectors to control panels – it is all one family
Safety is a deep-rooted, fundamental need. That’s why solutions that reliably protect people, assets and processes against fire, smoke and carbon monoxide play such a crucial role. Sinteso comprises a comprehensive range of products – including fire detectors with maximum reliability and immunity to deception, a complete range of peripheral devices, floor repeater displays and control panels. The offering also includes visualization software and an app for remote system access.

A forward-looking solution for every need
Buildings are expanded, and the use of a room can change – so it’s a good thing that Sinteso is flexible and scalable. For example, S-LINE fire detectors can be adapted to new room uses simply by changing the parameter set. The system can be extended during ongoing operation, and the control panel networks can be adapted to any structural surrounding by combining multiple clusters (FCnet/SAFEDLINK) with a backbone (FCnet/LAN).

From fire detection to danger and building management
In addition to fire risk, there are other situations when you must protect your personnel, customers, buildings and assets. Sinteso is designed so that it can be integrated into a danger management system or the Desigo CC™ building management platform from Siemens. In this way, security personnel can operate the Sinteso fire protection system together with intrusion detection, access control and other integrated systems from a central point – and with the right app from anywhere.

Flexible extension or modernization – with Sinteso Move
With the Sinteso Move extension and modernization solution, you can extend your existing fire protection system from Siemens step by step with Sinteso detectors and control panels, or switch fully to the new Sinteso technology – depending on your needs and as your budget allows. We will also support you with attractive financing models.

Optimal life safety – through innovations
High availability, sophisticated detection and reliable alarming – Sinteso’s innovative functions offer a unique level of protection. The degrade mode and the standby function of the control panels ensure system availability at all times. Redundant sensors and monitoring of CO concentration provide increased detection reliability. Reliable alarming with Sinteso means: alarm sounders and floor repeater terminals remain operational even in the event of power outage or short-circuit. In addition, clear voice messages ensure safe evacuation.

Award for Sinteso
ASAtechnology made the difference: market research institute Frost & Sullivan awarded Sinteso the “2010 European Fire Detection Equipment Market Product Line Award.”

Highlights
- Customized safety against all types of fire
- Reliability of the most experienced solution provider in the field of fire safety
- Open-ended solution through simple upgrades and extendability
- Dependable fire identification with all functions for fire, smoke, heat and CO detection
- Solutions and services for all applications, whether simple or complex, large or small
- Comprehensive protection through communication with other safety systems
- Efficient extension and modernization possibilities for existing fire protection systems
- Complete system access via smartphone, tablet or PC – on site or remotely
Everything in view – and under control

The requirements regarding fire control panels vary depending on the size and extent of buildings. That is why Sinteso offers various FCnet stations, all of which can be networked.

Control panels and terminals for any application
Sinteso offers networkable fire control panels for various-sized applications – supplemented by fire terminals for remote operation.

Ease of handling guarantees correct responses
In the event of an alarm there are just a few seconds to make the right decision. That is why Sinteso control panels and terminals feature simple operation and clearly show all important information. They have clear function key assignments, comprehensive scroll lists and user-friendly menu navigation. Intervention texts with instructions serve to facilitate correct responses.

Comprehensive networking for higher safety
Since all Sinteso stations, i.e. control panels and terminals, are networkable, they can be networked via clusters. Depending on the configuration, a cluster can have up to 32 stations. Numerous detectors and peripheral devices can be connected to each control panel via FDnet; for example, up to 5,000 devices per FC2080.

Sinteso is also the first fire protection system to use EN 54-approved industrial LAN technology, enabling the networking of multiple clusters (with up to 16 stations each) by fiber-optic backbone. This means that the system can have up to 64 fire control panels or terminals and thus protect also large facilities. The large number of individual clusters make it possible to adapt the overall system to structural requirements very quickly.
Fast system availability through auto configuration
For simple applications, the auto configuration function of the control panels is all you need to activate the Sinteso fire protection system. For more complex installations, each network station can be configured and easily controlled via a central access point. This can also be done via remote access, which ensures reliable on-site service and fast troubleshooting.

Everything on the screen, everything under control – in every situation
If a control panel should fail due to a fire or as a result of construction work, the control panel’s degrade mode is automatically activated, ensuring that alarm messages of connected FDnet devices are forwarded via the FCnet. This could be to other programmed control panels or fire terminals or to a management platform from Siemens. These then automatically take over the display and user interface functions of the failed control panel.

If Sinteso is integrated into a management platform, the security staff can still operate the fire protection system in case of a platform failure from a central location – via a fire terminal programmed as a standby operating unit or a control panel.

Fast system configuration optimizes safety
Because different requirements are placed on the system depending on the time of operation, Sinteso permits rapid switching between the “manned” and “unmanned” modes – an ideal way to automatically adapt alarm signaling, intervention sequences and detector sensitivity to the specific situation. For instance, detector sensitivity can be set to a higher level when no one is present.

Extension of existing fire protection systems
Existing fire protection systems can be extended with the extendable FC2030 and FC2060 control panels and the modular FC2080 control panel. These can replace many existing non-networked individual panels if they lack the capacity for additional detectors.

Additional detector lines can then be connected to the chosen Sinteso control panel. The corresponding line cards can be used to connect existing addressable and collective detector lines. The Sinteso control panel can also be networked with other Sinteso control panels.

Highlights
- Control panels for any application – large, small, simple, complex, or distributed buildings
- Safe reactions also under stress thanks to consistent menu-guided operation
- Networking of up to 64 stations to protect very large applications
- Remote system operation possible – via a fire terminal or floor repeater terminal, e.g. with the security staff
- Safety in the event of a failure of a control panel or the management platform through standby functionality
Stationary or mobile, on site or remotely: Sinteso can be operated from anywhere – easily, safely and conveniently. View events, faults, alarms and status messages and execute actions via PC, tablet and smartphone or use a terminal that is installed directly at the workplace.

Everything under control – on site and remotely

Operate your system remotely – via fire terminals
The fire terminals show the same information on their display as the fire control panels they are networked with. This is a practical function, especially when you add operating terminals away from the panels, for instance at the front gate. It significantly reduces the response time in the event of faults and alarms: the persons responsible can react directly from their workplace, without having to walk to the control panel. If the fire protection system is also connected to a management platform, the fire terminals can take over the fire-related functions in case the management platform should fail. An ideal backup for highest system availability.

Every FCnet stations, panels and terminals follow a consistent operating concept and are based on the same hardware and software platform. This reduces training effort while increasing operational safety.

Our classic terminal – FT2040
The FT2040 fire terminal is easy to operate. It offers a classic user interface, including a backlit plain text display with a menu button, soft keys and LEDs. A key switch and event printer are optionally available. Operation of the FT2040 is identical to that of the Sinteso control panels.

The touch screen terminal with color display – FT2080
Designed for medium-sized to large applications, the fire terminal (touch) FT2080 is also the ideal choice for smaller systems. With its touch screen and context-sensitive user guidance, it is easy and comfortable to use. You can operate the FT2080 with your fingertips, when wearing gloves or using a pen. In addition, you can conveniently read the screen contents on a 12” color display. The terminal also meets the highest safety standards in accordance with EN 54-2.
Gain remote system access – with SintesoView/Sinteso Touch

With the visualization software SintesoView and Sinteso Touch, you can operate your system from anywhere. Both run on PCs and tablets that are compatible with Windows. These devices serve as a virtual terminal, offering the same user interface and functionalities as the Sinteso control panels in the fire protection network. Besides viewing all events like warnings and alarms, you can also control the system status and the opening of fire doors, see past events and, if authorized, activate or deactivate fire zones.

SintesoView mirrors the user interface and functionalities of the FT2040 fire terminal and of various control panels. Sinteso Touch visualizes the FT2080 touch screen terminal on a PC or tablet.

Remote operation meets the highest communication safety standards: both PC and tablet can be connected to the Internet or the customer network via LAN, WLAN or mobile network operator. The signals are then transmitted to an Ethernet switch that connects to the backbone. This connection is protected against unauthorized access by a firewall. A license key provides access to the fire protection system.

The fire safety app – Sinteso Mobile

With Sinteso Mobile, you receive alarm messages from your fire protection system directly on your Android smartphone or tablet. You can also use the app to access your system and respond immediately to events. Of course, access protection ensures that only authorized users with registered devices gain system access. Depending on your user rights, the Sinteso Mobile app offers complete system access. Its user interface has a tabular design. Alarms and faults are displayed in different colors.

Highlights

- Remote operating options for safety and security personnel – with a classic or touch screen user interface
- Complete remote system access in real time – via smartphone, tablet or PC
- Increased safety through fast response and short intervention time in case of an event
- Maximum IT security thanks to access protection and firewall
Providing fire protection that sets the standards – the detectors.

Reliable detection – free from deception

Whether smoke, heat, or neural fire detector – Sinteso S-LINE detectors give you a major safety advantage: their reliability and immunity to deception let you react to situations earlier.

S-LINE – extreme vigilance for early intervention
The intelligent signal processing of the Sinteso S-LINE detectors almost entirely eliminates misinterpretations of deceptive phenomena – whether steam, dust, exhaust gases, or electromagnetic disturbances. Real-time interpretation and the dynamic influence of the algorithms enable a very quick and highly accurate assessment of whether a fire is developing. Even multiple detectors can be included in the alarm decision if needed.

Individual setting – maximum protection in every environment
ASA technology (Advanced Signal Analysis) means that safety can be customized to every environment. The ASA parameter sets are adjusted precisely to the types of fire and deceptive phenomena expected. ASA parameter sets can be switched according to the time or process, when for example, buildings are deserted at night or when the deceptive phenomena are changing.

Always the right detector with Sinteso – whether in harsh environments with frequent deceptive phenomena, in standard environments with moderate deceptive phenomena or in clean environments, where data and personal protection are the top priorities.
Genuine Alarm Guarantee – thanks to ASA technology

Every company has to prevent damages and downtimes that result from false alarms. Thanks to innovative sensor technology and ASA technology, the S-LINE offers unsurpassed detection reliability for all types of fire together with immunity to deception. We stand by it with our Genuine Alarm Guarantee.

Compatibility – for extension and modernization

With Sinteso Move and the S-LINE multi-protocol series, existing systems can be easily extended and old detectors from Siemens can be replaced without new cabling. The innovative sensor technology and measuring chamber thus also increase the safety of systems that are already in place.

Double protection – from fire and toxic gases

As the FDOOTC241 detects and intelligently evaluates the three fire criteria smoke, heat and combustion gas, it reacts very early to any fires that generate carbon monoxide (CO), such as mattress fires. It also detects ambient CO concentrations and thus reduces the risk of carbon monoxide poisoning in areas with a high level of exhaust gases or process- and production-related CO generation.

Comprehensive safety – including faster, more reliable CO detection

Sophisticated detection with Sinteso means: the world’s highest detection reliability and immunity to deception through ASA technology and multi-sensor detectors. Reliable detection of ambient CO concentrations. Highest detector availability through the use of redundant sensors. And detectors for any requirement.

High reliability – in all standard applications

Whether in hotels, schools, or office buildings, Sinteso C-LINE fire detectors are the first choice in normal environments where only occasional deceptive phenomena occur. Their reliable detection behavior is based on the newly developed detection algorithms (DA). They convert the signals recorded by a sensor into mathematical gradients and then evaluate them according to preset values.

S-LINE and C-LINE – a smart combination

Many buildings have mixed safety needs, for example C-LINE detectors in offices and S-LINE detectors for cafeterias, due to the higher potential for deceptive phenomena there. Both detector types can be combined on the same FDnet loop. If the use of a building or room changes, C-LINE detectors can be replaced with S-LINE detectors at any time, without new cabling.

Highlights

- Reliable and economical fire detection
- Genuine Alarm Guarantee based on highest detection reliability and immunity to deception thanks to ASA technology
- Fast adjustment to environmental conditions according to time or process
- Excellent detection response to all types of fire
- Simple extension and modernization of existing systems using multi-protocol detectors and Sinteso Move
- Use appropriate detection through the combination of C-LINE and S-LINE fire detectors on one loop
Sharpest perception, quick reaction

Sinteso detectors and peripheral devices have integrated turbo isolators. They ensure that alarms and messages reach the control panel without long delays even if a line is interrupted after a short-circuit – and that alarming occurs via alarm sounders, practically without interruption and synchronized.

A network that supplies everything
The FDnet is a multifunctional bus system for fast, reliable communication between the FDnet devices, such as fire detectors, input/output modules and alarm devices and the fire control panel. A special advantage is its use of this communication circuit to simultaneously supply the devices with power. That saves cable. In addition, it’s also easy to incorporate existing installations and cables. An FDnet loop can incorporate up to 252 FDnet devices.

Simple communication, confident response – at low cost
With the FT2010 floor repeater terminal and FT2011 floor repeater display, Sinteso also delivers information simply and clearly on site, for example directly on a hospital ward. While alarms, faults and shutdowns can be read clearly via the floor repeater display, the floor repeater terminal also allows events to be acknowledged and reset. The placement on the FDnet enhances safety: Both devices also function reliably if a line is interrupted or a short-circuit occurs. In addition, the floor repeater terminals can be programmed so they display alarms from the entire system.

See and hear alarms everywhere
Sinteso alarm sounders ensure that signals are generated loudly and clearly in halls, rooms, corridors and stairways when there is a fire. Depending on the device model, the alarm is signaled acoustically or both acoustically and optically at the same time.
For example, in areas with loud ambient noise or hearing-impaired persons, the EN 54-23-compliant FDSB228 sounder beacon interbase is the right choice: In an emergency it generates both an optical and an acoustic signal.

Everything integrated – from fire control to extinguishing
In the event of a fire, peripheral devices allow, among other things, on-site control of fire doors, fire dampers, elevators, etc. Fire dampers, for example, can be easily installed on and also monitored and controlled via the fail-safe FDnet. This also reduces costs and fire load, as less wiring is needed to connect the devices to the panel.

Extinguishing systems like the XC10 extinguishing control unit can be networked to the FDnet in the same way. In case of an emergency, it acts as an autonomous system and independently triggers the automatic extinguishing in the area it is protecting. At the same time, it transmits all relevant data to the connected Sinteso control panel. XC10 is highly flexible and can be combined with all types of automatic extinguishing systems.

Safety for highly sensitive environments
The aspirating smoke detectors FDA221 and FDA241 can be installed on the FDnet to protect demanding application areas. They continuously draw air samples and evaluate these in their patented measuring chamber for the presence of smoke particles, using the deception-free optical dual-wavelength detection technology with blue and infrared wavelengths. You can also integrate a highly sensitive, deception-free S-LINE detector into the EN 54-27-compliant FDBZ290 air sampling smoke detection kit.

Wireless technology for maximum protection and highest flexibility
Fire protection without affecting the aesthetic value and historic integrity of a structure: with its wireless devices, the SWING radio fire detection system is the ideal solution to protect rooms or buildings of historical value, with aesthetic or architectural restrictions or for temporary installations. SWING can be easily integrated into the Sinteso system.

Reliable protection for Ex zones
Explosion-hazardous areas require a unique Ex solution: the multi-sensor detector with ASAtechnology ensures earliest and deception-free detection in the Ex zones 0, 1 and 2 (gas). The manual call point can additionally be used in the zones 20, 21 and 22 (dust).
The intelligent move for system extension and modernization

With Sinteso Move into a new dimension – for long-term optimal fire protection.

With Sinteso Move, you can extend the life cycle of your existing fire protection system from Siemens. Intelligent extension and modernization solutions using the latest Sinteso technology can be combined with attractive financing options – so you don’t have to scrimp on safety.

New perspectives with Sinteso Move
Our Sinteso Move extension and modernization solution is the ideal way to extend or modernize your existing fire protection system with the latest Sinteso fire detection technology. You thus benefit from deception-free and reliable fire detection with ASAtechnology, innovative safety functions, future-oriented networking capabilities – and better protection for your employees, customers, company and processes.

Investment protection – today and tomorrow
Low start-up costs and distributed investments: Due to the step-by-step modernization with Sinteso Move, you can stagger your investments and calculate them better. What’s more, your investment stays protected over the long term: Switching to Sinteso, you extend the life cycle of your system – because Sinteso is based on future-safe technology and backed by comprehensive service.

Attractive financing – for intelligent growth
Improve your liquidity and gain additional room for further investments, with our tailored financing solutions. With our leasing and rent-to-own models, you can extend or modernize your system even without an initial investment. You pay only the costs for use and obsolescence of the technology – and you can make use of purchase, return, or extension options as needed. So you don’t need to use your credit line at your main bank, you can plan your budget better and you receive different fire protection solutions and financing options.
Flexible system extension – the way you need it
Do you need your fire protection to grow with your company? No problem. Whether you’re building another structure, adding an extension, or changing the way you use existing space – with Sinteso Move, you can extend your system exactly as needed. Sinteso Move offers several ways to extend your system. Depending on the system, you extend it:

– In a smart way, with individual Sinteso Move detectors or additional loops
– Comfortably, with Sinteso Move control panels; an ideal basis for the integration into the Desigo CC building management platform
– By combining the old and new fire protection systems by networking the Sinteso control panels/clusters with the existing control panel network

Modernization for increased safety
Often, older systems no longer meet the safety requirements currently prescribed for new installations. As time goes by, they also require increasingly intensive maintenance. Additionally, many factors change within your company – whether products, services, or working methods and procedures. These aspects affect your safety needs, which is why your fire protection system requires a timely modernization.

With Sinteso Move, you can modernize your system easily and cost-efficiently, in three phases:

– In the first phase, your detectors are replaced with Sinteso Move detectors, either individually or as a complete loop, for example in the course of a scheduled maintenance call. Old detectors, even ionization smoke detectors, are professionally removed and recycled.
– In the second phase, your network will be modernized – by updating your danger management system and, depending on the fire protection system, also with a network integrator in your control panel cluster.
– In the third and final phase, your fire control panels are replaced with convenient Sinteso control panels. This also gives you the benefits of ASAtchnology.

Continual operation – with virtually no disruptions
Sinteso Move detectors can be quickly and easily integrated into your system as multiple protocol detectors. Sinteso control panels can also be integrated with minimum interruption and maximum system availability. As a result, your employees, visitors and business processes will be almost entirely unaffected by a system extension or modernization.

Highlights

■ Economic modernization in three phases
■ Fast device replacement and integration without interfering with operations
■ Long-term investment protection through open-ended technology
■ Low maintenance needs and high spare parts availability
■ Increased safety thanks to deception-free fire detection
■ Increased operating comfort due to latest control panel technology
Plan together – for a long-term relationship

With Sinteso, you get not just the latest technology, but you can also benefit from a wide range of services that maximize the safety of your employees, your company and your system. From the analysis of existing fire risks, fire load, value concentration and room geometry to maintenance and remote service – we are happy to support you.

Customized services
We offer you a complete service program for your fire protection system as part of Advantage™ Services from Siemens. Benefit from optimum operation, safety and added value throughout the entire life cycle of your plant. Thanks to the modular service concept, we can tailor the scope and type of services precisely to your needs – around the world, and with consistent quality of service.

Service agreements – individually tailored
We work together with you to determine which service contract you need and define everything in a tailored agreement. A service agreement provides you with many advantages, such as:
- Protection of assets
- Compliance with rules and regulations
- Prolonging of system lifetime
- Predictability of budget and reduction of avoidable costs
- Prevention of business disruptions and productivity losses
- Peace of mind

Siemens Remote Service – every minute counts
Our Remote Service provides you with the following advantages:
- Faster response time
- Early error detection before larger problems can arise
- Simpler troubleshooting
- Increased system reliability
- Help with system operation

All diagnosis data such as error messages and event logs from your fire protection system are accessed remotely and checked. Proactive system checks allow deviations to be recognized before they can affect system integrity. And fewer failures mean fewer unscheduled interruptions and greater system reliability – which means better fire protection for you.

The established Siemens Remote Service Platform ensures maximum data security. This internationally proven technology from Siemens protects your system against all dangers, from viruses to access by unauthorized persons.
Sophisticated authentication and authorization procedures and modern encryption technologies ensure that only authorized service technicians are granted access to your system.

**Sinteso Detector Revision – extends the life of your system**

As part of the maintenance program, you can also benefit from our revision service for your fire detectors. The reliability of your fire protection system rises and falls with the condition of the detectors, so we inspect and replace them regularly. As a result, you can use your fire detectors at full capacity for a considerably longer period.

**Monitoring centers – a safe bet**

Greater safety for your employees, visitors, assets and business processes: If you desire, our monitoring centers will look after system-specific events, faults of all kinds and fire alarms quickly and competently according to a defined action plan that meets your needs – 24 hours a day or just at night.

**Services of experts – use information**

Naturally, you also benefit from our expertise: We make our many years of experience and our comprehensive knowledge of fire protection available to you with respect to your applications, for example, and suitable products or country-specific regulations. In addition, we retrain your employees very quickly on Sinteso and provide you with practical tools for system management and operation.

**Other possibilities – upon request**

We’d be happy to advise you in detail on these and other services related to fire protection and your fire protection system.

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**Highlights**

- Individually agreed services – at consistently high quality around the world
- Greater system reliability – thanks to faster response through Remote Service
- Longer life cycle of the system – based on Detector Revision
- Greater safety for employees, visitors, assets and business processes – through our monitoring centers
- High operational safety – using services of experts such as application experience, operator training, etc.
Look forward – strike a new path

An investment is safe if a solution can grow in every direction. Regardless of whether you want to expand a building or add another floor, change the use, or upgrade your fire protection solution to a higher level of convenience – as a fully scalable and networkable system, Sinteso delivers maximum flexibility.

Flexible for future extensions
Sinteso permits comprehensive fire protection that can be extended at any time: By networking the various control panels and the fire terminal, the fire protection system can be extended to cover subsequently built extensions and buildings. Often, up to 32 control panels and terminals can be networked. The distance between two stations can be up to 2,000 m with repeaters. Fiber-optic cables extend this distance to up to 40 km. And a cluster can be further extended via the Ethernet connection of the control panels.

Using the EN 54-approved industrial LAN technology, Sinteso opens up new possibilities for the growth of your company. Sinteso can be extended to up to 64 control panels or terminals. Via the fiber-optic backbone, multiple clusters can be connected with up to 16 stations each. Each cluster is connected to the backbone via two independent, EN 54-compliant Ethernet switches, which ensures highest system availability.

Beyond the FCnet to a central management system
Sinteso can be conveniently integrated via Ethernet into a danger management system or the Desigo CC building management platform from Siemens. Operating the management platform in your network requires appropriate cyber security protection. To protect the EN 54-compliant Sinteso network against unauthorized access and other cyber threads, a firewall needs to be installed between your network and the Sinteso network.

This means that several FCnet clusters and fire protection systems can be monitored from a central location – clearly and conveniently thanks to the enhanced graphical and workflow-driven user interface of the Desigo CC building management platform. During the event handling, the assisted treatment guides the operator through predefined procedures in a simple and intuitive way. In addition, messages can be automatically forwarded to security personnel by e-mail, SMS or pager. All events and operator actions are logged, which can facilitate later analysis.
Trend-setting synergies for fire protection
Integration of Sinteso into a danger management system or the Desigo CC building management platform from Siemens means that security personnel cannot only operate the fire protection system more conveniently, but they can also use other integrated systems to support and enhance the fire protection capabilities. For example, video surveillance makes it easy to keep an eye on a danger zone. With access control, escape routes can be checked and doors can be opened or closed quickly.

The right apps from Siemens allow you to remotely control and operate all integrated systems via smartphone or tablet – anywhere and anytime.

Fire protection means security for the future, too
According to a current study, over 70% of companies hit by a major fire were forced to discontinue their business within three years. The most frequently cited reason was the interruption in operations, through which valuable customers were lost.

We support you wherever you need us
International solution and service expertise: Thanks to our presence in over 50 countries, you can take advantage of our services wherever you are – in Europe, the United States or Asia. Our dense service network ensures you extremely fast supply and support anytime, day or night.

Highlights
- Extendability for future growth – thanks to extensive network capabilities
- Greater transparency and ease of operation – through integration into danger management systems or the Desigo CC building management platform from Siemens
- Better protection – thanks to additional safety functions in combination with other security systems
- Faster intervention – by using apps for remote control via smartphone and tablet
- Worldwide expertise in solutions and services at a consistently high level – thanks to our presence in over 50 countries
- Extremely fast supply and support anytime, day or night – due to our very dense, global service network
Your system for comprehensive fire protection

**Customer network**

Remote access with SintesoView/Sinteso Touch

Firewall

Ethernet switch (modular) FN2012-A1

Ethernet switch (modular) FN2012-A1

Ethernet switch (modular) FN2012-A1

Fire terminal (touch) FT2080

Remote access to management platform

Management platform from Siemens

**Backbone (FCnet/LAN)**

Ethernet* Cluster (FCnet/SAFEDLINK)

Fire control panel FC2060

Fire control panel FC2020

Fire control panel FC2020

Fire terminal FT2040

Fire terminal FT2040

**FDnet**

Manual call point FDM223

Alarm sounder FDS221

Sounder base FDS8291

Floor repeater terminal FT2010

Fire damper with actuator

Input/output module FDCIO222/224

Floor repeater display FT2011

En 54-23 Sounder beacon interbase FDSB228

ASA – Neural fire detector FDOOT241-A

Collective detector

ASA – Neural fire detector FDOOT241-A

ASA – Neural radio fire detector FDOOT271

ASA – Multi-sensor detector FDOOT241-A9

ASA – Flame detector FDF241-9

ASA – Linear smoke detector FDL241-9

ASA – Neural radio fire detector FDOOT271

ASA – Multi-sensor detector FDOOT241-A9-Ex

ASA – Flame detector FDF241-9

Aspirating smoke detectors FDA221/FDA241

Aspirating smoke detectors FDZ220/FDZ241

Air sampling smoke detection smoke detector ICAM IAS

Manual call point FDM221

Input module FDCI222

Radio gateway FDCW241

Radio manual call point FDM273

Stub line

Aspirating smoke detector ICAM IAS

Mimic display driver FT2001-A1

**Ethernet**

Fire terminal (touch) FT2080

Fire control panel FC2040

Fire control panel FC2040

Fire terminal FT2040

Extinguishing control unit XC1001-A

Extinguishing control unit XC1001-A

ASA – Neural fire detector FDOOT241-A9

Manual release

ASA – Neural fire detector FDOOT241-A9

Sinorix extinguishing solution

ASA – Flame detector FDF241-9

ASA – Linear smoke detector FDL241-9

**FDnet**

Ethernet* Cluster (FCnet/SAFEDLINK)

Ethernet* Backbone (FCnet/LAN)

* simplified drawing (without additional network hardware components)
## Solutions for all requirements

### Systems

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<thead>
<tr>
<th>Fire detection</th>
<th>Alarms and evacuation</th>
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<tr>
<td>Sinteso offers the ideal detectors for any requirement, e.g. S-LINE detectors with ASA technology for sophisticated applications and C-LINE detectors with detection algorithms for standard applications. Both S-LINE and C-LINE include optical, thermal and combined fire detectors. The S-LINE also has a multi-sensor fire detector for the detection of smoke, heat and CO. Special detectors such as flame detectors complete the product range.</td>
<td>With its range of sounder beacons, Sinteso allows fast acoustic and optical alarming. For noisy environments or if acoustic warning signals are hard to hear (due to headphones, ear protection or hearing impairment), Sinteso offers the EN 54-23-compliant sounder beacon interface. In combination with a voice alarm system, evacuation can be supported by voice messages – while the integrated control of fire dampers keeps the escape routes free of smoke.</td>
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### Extinguishing

Extinguishing systems like the XC10 extinguishing control unit can be integrated into Sinteso via the FDnet – easily, efficiently and with little cabling effort. Extinguishing is triggered automatically as soon as a Sinteso detector detects a fire within the protection area. | Sinteso can be integrated into a danger management system or the Desigo CC building management platform from Siemens – for enhanced safety and central monitoring and control of all safety and building control systems. |

### Operation

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<th>Mobile remote system access</th>
<th>Redundant operation for highest availability</th>
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<td>Sinteso allows safe, convenient system operation via PCs, tablets and smartphones: – Gain system access via a PC or tablet with SintesoView and Sinteso Touch – Access Sinteso control panels with the fire safety app Sinteso Mobile for Android smartphones and tablets – Access your management platform and the integrated Sinteso system with our apps for smartphones and tablets</td>
<td>Safety and security personnel can remotely operate the Sinteso system using a fire terminal, e.g. the FT2040 with classic user interface or the FT2080 with comfortable touch screen operation. Both mirror the display of the control panels, system-wide. Floor repeater terminals show messages from smaller monitoring zones and also allow operation.</td>
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<thead>
<tr>
<th>Automatic and safe fire control</th>
<th>Maximum safety for large installations</th>
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<td>The Sinteso control panels process all messages generated by the system and trigger alarm signals and complex control processes, e.g. closing the fire dampers on the FDnet following a fire control matrix. The easy and guided operation allows to quickly check the system status. The control panels are available in various models to match the different requirements of buildings and applications.</td>
<td>The network meets a broad range of requirements: – Depending on the configuration, up to 32 fire control panels and terminals can be networked via Fcnet/SAFEDLINK – Multiple clusters (Fcnet/SAFEDLINK) can be networked via the backbone (Fcnet/LAN) to create an EN 54-compatible overall system with up to 64 FCnet stations – All detectors and peripheral devices are powered by and connected to the control panel via the FDnet</td>
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### Applications

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<th>Highly sensitive applications</th>
<th>Industrial applications</th>
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<td>Sinteso enables highly sensitive solutions for application areas that require earliest and reliable fire detection. Multi-sensor detectors respond with extreme sensitivity to the smallest sign of fire thanks to special ASA parameter sets like “Super sensitive” or “Ultra sensitive”. Easy-to-integrate aspiration smoke detectors continuously draw air samples. In their patented measuring chamber, they evaluate the samples for the presence of smoke particles using the deception-free optical dual-wavelength detection technology with blue and infrared wavelengths. The EN 54-27-compliant air sampling smoke detection kit monitors ventilation ducts of air conditioning and ventilation systems for smoke.</td>
<td>For industrial environments and critical areas with explosion hazard, Sinteso offers a range of solutions for harsh environmental conditions and still triggers an alarm at the slightest sign of danger. The unique Ex solution is for the zones 0, 1 and 2 (gas). The robust heavy duty manual call point can be additionally set for zones 20, 12 and 22 (dust). With ASA parameter sets such as “Suppression” and “High Compensation”, S-LINE detectors ensure highest reliability even in the case of massive deceptive phenomena or soiling.</td>
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<th>Wireless applications</th>
<th>Applications with Genuine Alarm Guarantee</th>
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<td>The wireless detectors from the SWING radio fire detection system can be integrated into Sinteso to protect, e.g. temporary installations. They are also the ideal choice for areas where wiring is impossible or prohibited on aesthetic grounds or for reasons of conservation. SWING uses highly reliable mesh technology for secure wireless transmission.</td>
<td>For applications where the top priority is business continuity, Sinteso offers unique solutions that are so immune to deception that they will not trigger false alarms: e.g. the S-LINE and Ex detector with the patented ASA technology or the aspirating smoke detector with optical dual-wavelength detection technology. We even offer a Genuine Alarm Guarantee that includes financial compensation in the event of false alarms.</td>
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Great success stories

SiTeso has proven its reliability and immunity to deception in many reference systems all over the world. Here we present just three of many examples. Take advantage of the SiTeso fire protection system to reliably protect your employees, customers, company and assets.

SiTeso detectors for Westfield London

Westfield London is Europe’s largest downtown shopping center – a £1.6 billion project. It combines retail stores, restaurants, cafes, bars and recreational facilities on over 150,000 m² of retail space under one roof – and in total, the complex measures over 186,000 m².

The challenge: Installation of a fire detection and alarm system with maximum reliability and the certainty that no false alarms will be triggered. The aim is to avoid costly interruptions for tenants and disturbances for visitors.

Siemens supplied not only the public address and voice alarm system, but also the fire protection system: 5,000 SiTeso detectors ensure highest safety.

They work on the basis of automatic risk analysis, which has already proven its worth especially in the three-level underground garage of the shopping center – a demanding environment with a constant supply of fumes from fuels and exhaust.

ASA technology gives unparalleled detection reliability throughout Westfield London, backed by the unique Genuine Alarm Guarantee from Siemens.

SiTeso detectors for the Mövenpick Hotel Frankfurt City

The four-star business and conference hotel with 288 modern rooms is situated in the new European Quarter in downtown Frankfurt, Germany.

The challenge: Elimination of the typical knowledge base distinctions between electrical engineering and building automation in favor of a complete package at a more economical price. And a life cycle concept that takes into account the optimization of the technical systems over the entire life cycle of the building.
To meet this challenge, Siemens put together a “single-source” solution including fire protection, building automation, access control, power supply, installation technology – and the option to assume full responsibility for maintenance and services. An integral part is a fire protection system with 1,200 Sinteso fire detectors and the Genuine Alarm Guarantee from Siemens.

The high detection reliability and speed of the detectors combined with immunity to deception ensure that business, guests and hotel staff will not be disturbed by false alarms at the Mövenpick Hotel Frankfurt City.

Sinteso detectors for the AMTS
The Academy for Medical Training and Simulation (AMTS) on the premises of the Canton Hospital in Lucerne, Switzerland, is a leader in international, medical training and process simulation for locomotor system surgery and emergency medicine. 2,500 m² distributed over four floors house cutting-edge room and teaching facilities for the courses.

The challenge: Absolutely reliable and deception-free fire detection. Protection of sensitive and costly infrastructure in a wide variety of rooms, safety for visitors and employees and uninterrupted training and simulations.

That is why Siemens fitted out the AMTS with a Sinteso fire protection system. 400 Sinteso detectors provide intelligent, economical and reliable fire detection in the facility’s sensitive and business-critical space. In addition, the Sinteso system was seamlessly networked with the comprehensive monitoring system of the Lucerne Canton Hospital.

Sinteso prevents false alarms and the resulting disruptions and operational interruptions – while providing centrally monitored protection at the same time, benefiting the AMTS and its course participants.

Whether shopping megacenter, 4-star hotel, or international medical teaching facility – Sinteso sets a new standard in fire protection. It reliably protects employees, visitors and guests, as well as assets and business operations.

Highlights
■ Comprehensive fire protection for Westfield London, Europe’s largest indoor shopping center
■ Complete solution from fire protection to building automation for the Mövenpick Hotel Frankfurt City
■ Deception-free fire protection system for the Academy for Medical Training and Simulation in Lucerne, Switzerland
Practical examples with special requirements

**Sinteso and SWING for Tettnang Castle**
Tettnang Castle is one of the most beautiful castles in Germany’s Upper Swabia region and is currently used as a museum and event venue. The heritage-protected building has three floors spread over four wings. It dates back to the 18th century and has spectacular baroque rooms filled with impressive art and stuccowork.

The challenge was to provide reliable fire protection for visitors, employees and irreplaceable cultural heritage. In addition, the stuccowork and frescoes on the ceilings in the historic museum and office rooms had to be preserved and not damaged through cable ducts.

A clever combination of the Sinteso wired fire protection system and the SWING radio fire detection system was the ideal solution. At the heart of the solution is a Sinteso FC2040 fire control panel with four FDnet loops. The prestigious rooms were also equipped with 167 wireless SWING detectors that communicate with the control panel via ten SWING gateways. 133 wired Sinteso detectors were installed in the basement, the storage rooms and the attic, along with 13 wired manual call points. The signals from all detectors come together in the control panel, which is directly connected to the local fire brigade.

The original building structure remained untouched because no cabling was needed for the detectors in the museum and office rooms. It was also possible to perform the installation during the museum’s opening hours.

With Sinteso, you are well-prepared for all situations. As proof, we can offer a wide range of practical examples that include unusual requirements such as modernizing an existing fire protection system during operations.
Modernizing the fire protection system at Lisbon Airport with Sinteso

Portugal’s Lisbon Airport is one of the largest international airports in southern Europe and an important European transport hub. It’s about 8 km outside the city center and has two terminals. Every year an estimated 13 million passengers are handled here.

The challenge was to enhance safety for passengers, employees and assets with a reliable fire protection system that identifies dangers as early as possible – without negatively affecting airport safety during installation or disrupting airport operations.

In several steps, Siemens replaced the airport’s obsolete fire protection system with the latest generation of Sinteso, which offers unique safety functions such as ASAtechnology. A total of three Sinteso control panels, 2,500 Sinteso fire detectors and 200 FDOOTC241 neural fire detectors were installed to detect smoke, heat and hazardous carbon monoxide.

To minimize the impact on airport safety and operations, the modernization with Sinteso was performed in stages. Now, sophisticated fire detectors improve the safety for passengers, employees, equipment, baggage, etc. and prevent false alarms and disturbances of airport operations.

Highlights

- Combination of wired and wireless devices with equally high availability and reliability for Tettnang Castle
- Step-by-step modernization at Lisbon Airport using state-of-the-art Sinteso technology

Sinteso also meets very special requirements – including invisible fire detection in historic buildings and modernizing a fire protection system at an airport during daily operation.
Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

"We are the trusted technology partner for energy-efficient, safe and secure buildings and infrastructure."