CONTROL

ESSER
by Honeywell

Flexible solutions with the
modular fire detection system

FlexES Control

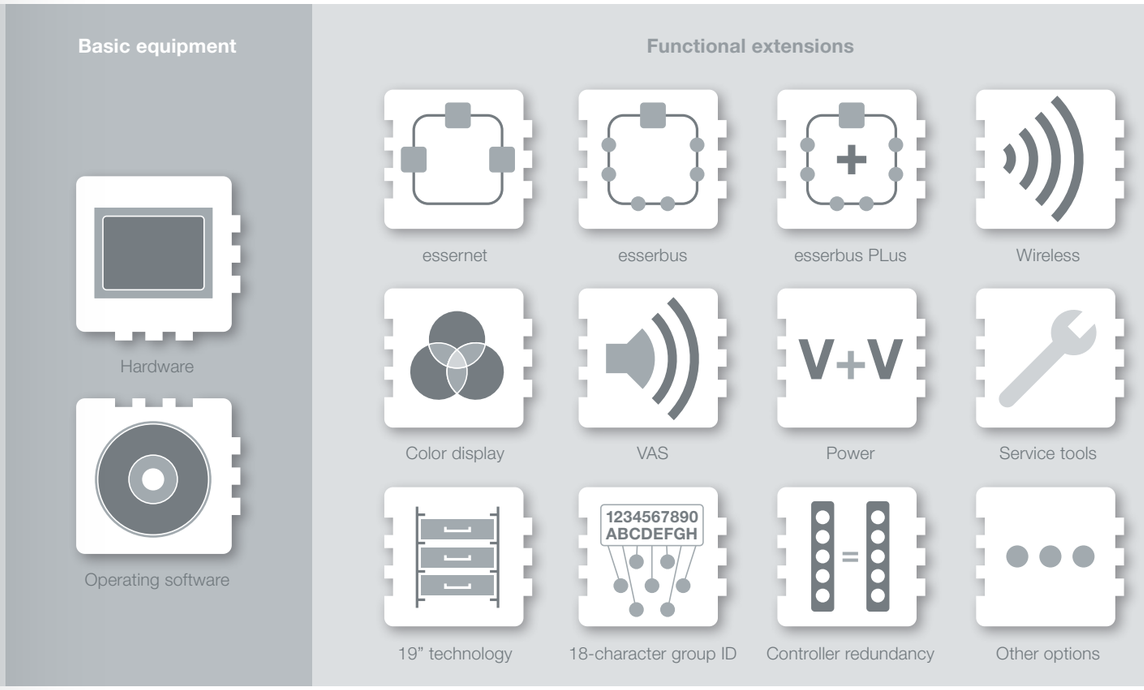
FlexES: new perspectives for the future

Fire detection systems that can adapt to the challenges of the future have to fulfill a wealth of complex requirements, including precise configuration, expansion to meet new demands, flexibility in adding new functions and components and backward compatibility. They should also feature good looks, ease of use and low life cycle and maintenance costs.

FlexES gives you more freedom in planning, autonomy in budgeting and flexibility in operation.

Its modular hardware and software design lets you put together a fire detection system to meet your own individual specifications, and you can adapt it by adding modules which upgrade, extend and scale the system. With FlexES, we can give you exactly what you need, when you need it – solutions that aren't more than you require today but can be expanded tomorrow. Enjoy the benefits of our sophisticated FlexES product and service portfolio and plan cost-effective fire detection systems that are just right for you.

The FlexES concept: solutions for fire protection, individually designed from modular hardware and the right options



FlexES Control: options unlimited

The flexible central control unit is the basis of this pioneering fire detection technology.

Solutions for fire protection are as individual as the buildings they're planned for. With FlexES Control by ESSER, fire detection systems can be tailored precisely to user requirements.

The functions of the control unit are based on six different plug-and-play modules which are fast and easy to install, replace or expand. This modular concept means you get a full range of functions without a lot of costly hardware.

Its intelligent hardware architecture reduces inventory expenses, optimizes the availability of spare parts and lowers maintenance costs. FlexES Control offers different types of housings for every stage of expansion, from economical solutions for small premises to large extensions of the system with up to 18 modules.

The new standard for industrial use: 19"

The wide range of conditions that may prevail at large industrial facilities frequently call for special fire protection monitoring solutions.

FlexES Control responds to these challenges with a flexible upright cabinet design with sliding trays for use in complex industrial facilities. This design follows tried-and-true industrial practice for installation. The configuration and arrangement of connections can be varied depending on the facility's requirements. Trays in the 800 mm deep upright cabinet can be varied in placement to accommodate medium to larger size buildings.

A big solution in the smallest space

The FlexES central control unit housing comes in various sizes and modern designs. This gives you the option of keeping to a minimum of space or enjoying the most room for wiring. System expansions are supported with a number of housing and extension designs to operate from two to 18 modules.

Elegant and ergonomic, with intuitive operation

What's in it for you:

- Connection design optimized to reduce wiring
- Various housing designs, so you can economize on space or enjoy the greatest ease of wiring as well as 19" upright cabinet designs with sliding trays
- Modular, cascadable power supply design with increased availability
- Integrated redundancy principle in design, adapted to your requirements and including redundant controllers when needed
- Intuitive, easy-to-use operating display panel with action-based background lighting and an operating menu adapted to the premises
- Remote touchscreen display and operating panel in night design
- Extended group offset for up to 18 items
- Calculator for offline project planning

Choose the look that works

Experience the ease of use and sophisticated design of FlexES Control

With night design, the control elements are limited to those relevant to the functions required, so even novice users can work intuitively without errors. Variable function keys provide extra convenience for operations such as lighting control. The FlexES Control panel can also be used for remote operation, providing comprehensive remote control functions for central control units and networks. But it‘s not just functional – with such attractively designed housing and compact dimensions, FlexES Control can even be used in public areas.

Flex ES Control is available in three sizes:

- **FlexES Control FX2**
  The smallest unit, which offers sufficient space for wiring despite its small dimensions.
- **FlexES Control FX10**
  The medium-sized solution for monitoring up to 60,000 m^2.
- **FlexES Control FX18**
  The largest design offers all the space you need for expansions up to 18 modules.

Features of the FlexES Control models

- 2/10/18 module slots
- Night design
- Mixed mode operation esserbus/esserbus PLus
- Loops are started in parallel
- Plug-and-play hardware modules
- Designed for modular expansion
- Single-person inspections
- Cascadable power supply modules
- Software options
- Controller redundancy (except for the FX2)
- Color display
- Wireless communication device

»FLEXES CONTROL OFFERS PROFESSIONALS A CUSTOMIZED SYSTEM FOR COMPREHENSIVE BUILDING PROTECTION THAT IS INNOVATIVE, FLEXIBLE AND ECONOMICAL.«

Thorsten Koerting, planner

The FlexES concept

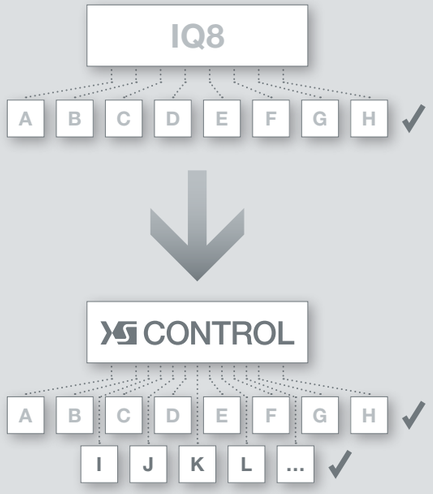
Customized fire protection solutions with modular hardware and a variety of software options

The innovative design enables the hardware in the fire resistant housing to be used even in stairwells and emergency escape routes free of fire danger. The FlexES system features an innovative hardware architecture and a software platform which supports modular expansion of the scope and functions at any time. The operating software is based on a standard solution for industry, so you enjoy the benefits of upgrades, add-ons and expansions with greater speed, stability and application to current requirements and have the best possible system at all times.

Don‘t replace—expand!
Software options at a glance:

- essernet for connecting multiple control units
- esserbus for integrating up to 127 bus devices per loop
- esserbus-PLus for connecting bus-powered alarm devices
- Certified technology for integrating wireless components
- Power systems dimensioned to handle system extension as needed
- Interface for voice alarms
- Controller redundancy for the greatest reliability and system security
- Service tools for optimal maintenance

Simple integration of existing systems



Ready for the future

The FlexES system lets you plan exactly as you need to and adapts to any stage in changing conditions, such as when additions are made to the facility. The modular expansion concept and the economical options for installation and maintenance mean cost savings and transparency for you over the system‘s entire life cycle.

- Precise system configuration with flexible options for conversion and upgrades
- System expansion up to 18 modules
- Mixed mode operation of esserbus and esserbus-PLus make migration easier
- Backward compatibility supports integration of existing systems
- Controller redundancy if additional safety is required

Remote display and operating panel

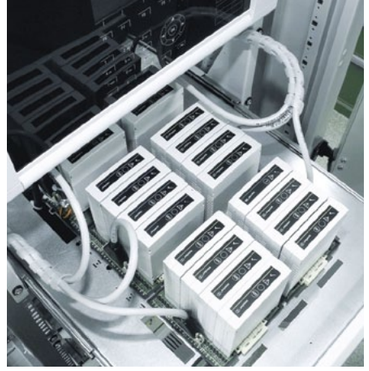
The remote operating unit for FlexES Control represents the latest generation of touch panels and is a convenient solution for operating the fire alarm control panel where you need to. This innovative device is also ideally suited for control on a network, so all operating processes and conditions on an essernet with multiple FACPs can be managed from one point.

The user interface is similar in design to the FlexES Control and is quick and intuitive to operate. The touch panel has a 16:9 widescreen format with WVGA resolution. Different levels of access managed by corresponding authorization codes enable hierarchical control based user rights. The remote operating unit can be used at distances up to 1000 meters from the fire alarm control panel. This ensures great flexibility in the distribution of information relevant to operation and notification on the premises. It can be surface- or flush-mounted. Languages available for the user interface are German, English, Cyrillic and French. The language can be switched during operation. Additional languages will be available soon.

19” components:

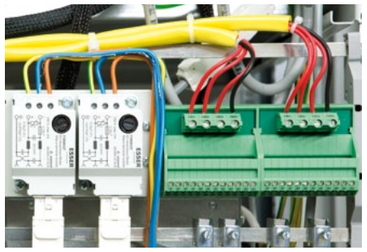
Plug-in modules

All FlexES modules are plug-and-play, enabling fast and easy installation, replacement or expansion. The peripheral connection is easily accessed in the lower part of the cabinet.



Well-organized cabling

The area for connecting peripherals is placed close to the floor with preassembled plug connections.



Protected cable routing

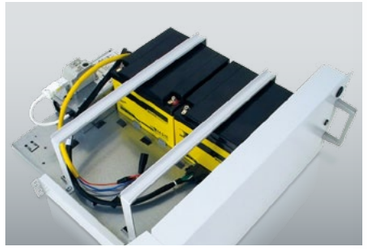
The structured design of the FlexES enables cables and wires to be run in a clearly organized and safe manner.

Operating panel

To ensure intuitive, error-free operation, when an event occurs the user display on the panel illuminates only the buttons intended to be used for the necessary functions.

Cascadable power supplies

Depending on the size of the system, up to three power supply inserts can be used and connected in series.



Greater availability

Power is supplied to the fire detection system via a ring-shaped cable carrying the necessary energy. This ensures that the central control unit continues to work even if a power supply module fails.

A structured concept for wiring ensures that connections can be made very quickly with FlexES Control. Various options for cabling (flush- or surface mounted, through cable ducts or in conduit designed to maintain function) provide the greatest flexibility for industrial applications.

We make it so easy

Tray technology: easy to install

Details make all the difference in installation, especially to the one doing the work. ESSER has thought of everything with FlexES Control. The optimized design of the upright cabinet makes it simple:

- The optional service tray for laptops enables simple maintenance
- Plug connections are used instead of terminals
- The operating panel swivels and is particularly easy to wire

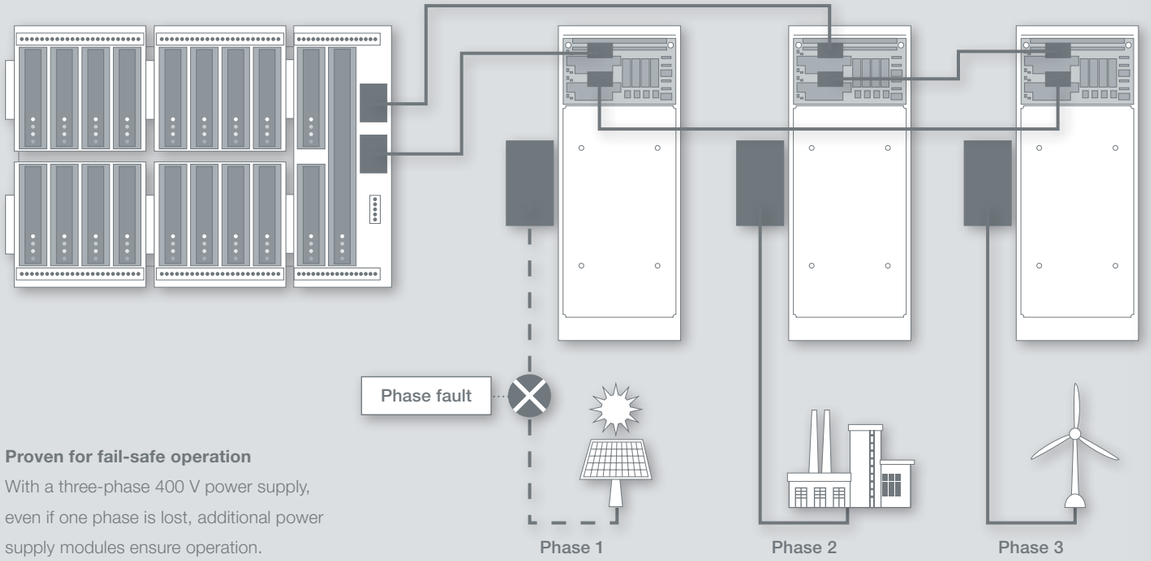
Cascadable power units and redundant power supply

The most important part of the tray arrangement is the chassis for the central components, which contains the loop modules, the control module and the operation and display panel. Another tray holds the power supply module and batteries. Depending on the size of the expansion, up to three power supply inserts can be used and connected in series. This enables the system to achieve a total power of 450 W and monitor battery capacity not exceeding 144 Ah/24 V. The power supply modules can be connected in a loop with the central logic board to increase the availability of the power supply. Should a power supply module fail, two additional modules ensure continued operation of the fire alarm control panel.

Rugged design

The heavy-duty trays in the cabinet run on ball bearings and can be removed during operation for easy maintenance and repair. The upright cabinet design is even approved for earthquake safety in industrial applications that require it.

Greater reliability and functionality



Proven for fail-safe operation
With a three-phase 400 V power supply, even if one phase is lost, additional power supply modules ensure operation.

Reliable in every phase

The FlexES Control is the only central control unit on the market which has integrated, VdS-approved emergency redundancy. Maintaining important functions even if the master CPU fails enhances the operational capability of the system. This enables monitoring of up to 48,000 m² or more than 512 detectors without controller redundancy.

Redundancy for greater availability

Redundancy of the control modules provides additional reliability and security. If the master control module fails during operation, the slave control module takes over all operations of the fire alarm control panel in almost no time.

Fast self-configuration

Automatic transfer of the system parameters from the master module ensures that the slave module assumes its role in the system with no further action required. After the autoconfiguration is concluded, the fire alarm control panel is ready to handle the greater demands for operation.

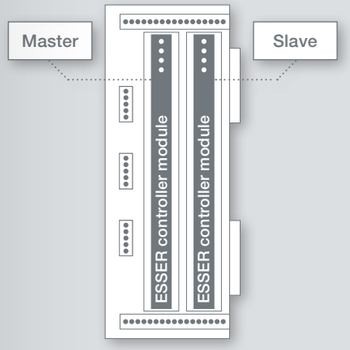
Three times secure for the power supply

The FlexES Control power supply is particularly well protected against failure. It is designed to handle three phases in a loop. If one power supply module fails or a phase fault occurs, the remaining two power supplies ensure uninterrupted operation.

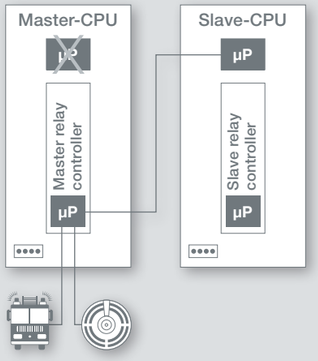
Individual key assignments

The F1 to F4 function keys on the FlexES Control can have individual switching functions assigned at three access levels. This assignment of functions can vary at the different levels. For example, if the F1 function key is configured for “Buzzer off” at the first access level, it can be used for “Defined shutdown” at the second level. Organizational controls of the central unit can be provided with a simple button for authorized persons at various levels of access (such as the installer or service level).

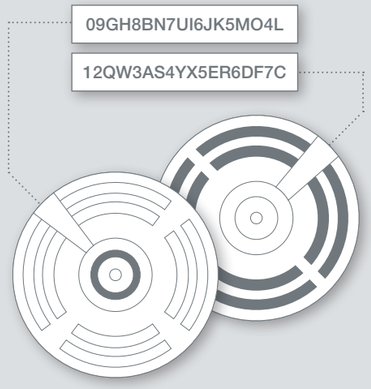
Standards-compliant redundancy
If the master control module fails, the slave module assumes all operating functions of the fire alarm control panel.



Switching for emergency operation
If the main CPU of the master module fails, the main CPU of the slave module can assume the function of the master relay controller.



Multi-character group number
The group offset now enables simultaneous expansion to as many as 18 alphanumeric characters.



Facility-specific function key assignment

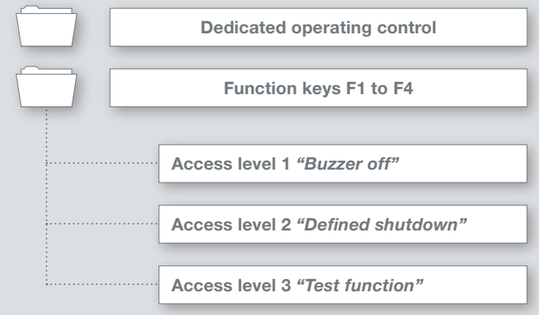
All switching and control functions which could previously be managed via control inputs are now available directly on the FlexES Control using the function keys and can be linked to a facility-specific text.

Dedicated operating menu

Each FlexES Control can have a dedicated operating menu created using tools 8000. It can be defined and used as required at each access level.

- Facility-specific operation controls
- Control functions, for example for sensors, detectors, zones and primary lines (on/off test)
- Enabling/disabling of signal templates for alarm devices

Application example for the three access levels



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