

For decades, security systems by Labor Strauss have been associated with innovative technology and highest quality, serving safety. All steps of the value-adding process – including market analysis, development, manufacturing, distribution and customer service – are united in one company. The products of the Austrian family business ensure safety – in many parts of Europe and the world.

MEP – the safety specialists. Apart from the development and manufacturing of innovative electromechanical components – such as manual call points, fire brigade control units and sabotage-monitored key safes – the company offers complete solutions around the topic „Fire Protection“.



## Fire Detection System Series FI750 / FI700

Intelligent fire detection for manifold applications:

- Loop Fire Detectors
- RF Fire Detectors
- Design Detectors DECORLINE



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# INTELLIGENT LOOP TECHNOLOGY

## State-of-the-art fire alarm technology

The product family FI750 / FI700 comprises a vast number of intelligent loop components that represent the state-of-the-art of fire alarm technology. The Series FI750 / FI700 product lines include automatic fire detectors, manual call points, input and output modules, sounders and strobes as well as a complete RF fire detection system. For each task, very well matched products are available.

## Outstanding features

For the bi-directional loop communication, the digital Labor Strauss protocol is used, whose innovative functions and manifold possibilities go far beyond fire detection. The efficient data exchange with the fire detection control panel ensures permanent verification of all components and quick detection of alarm situations or faults.

240 devices can be addressed on the loop. Thus, even large systems are realised with minimum cabling efforts. The addresses of the detectors, modules and signalling devices can be programmed manually or they can be assigned automatically by the AUTO-addressing function of the fire detection control panel. In addition, the order of the components on the loop is detected by means of the AUTO-mapping function.

All Series FI750 and FI700 devices are equipped with a bi-directional short circuit isolator. Thanks to that, malfunctions on the loop are reduced to a minimum.

## Automatic fire detectors

Three different detector types are available for automatic fire detection:

- The optical smoke detector has a new type of sensing chamber that responds to different kinds of smoke and makes it more difficult for dust and insects to ingress. Several sensitivity levels allow flexible adjustment to the ambient conditions.
- The optical-thermal detector combines a smoke sensor and a heat sensor, which makes it a universally suitable detector for a variety of applications. Reliable fire detection and high immunity to deceptive alarms is achieved through the evaluation of both measured values by means of the integrated comparison of characteristics of fire.
- The heat detector can be used either
  - as rate-of-rise detector with 58°C alarm temperature or
  - as maximum heat detector with an alarm temperature of 78°Cwhich allows it to be optimally adjusted to the application.



## Manual call points

By means of the manual call points in the two versions according to EN 54-11/A and EN 54-11/B, the fire brigade or the emergency personnel can be immediately alarmed in case of danger.

Manual call points are also available with different colours and labellings. They can be used, for example, to actuate extinguishing systems, to open fire dampers or to raise in-house alarms. The manual call points for extinguishing systems have been tested and certified according to EN 12094-3.

## Modules for various functions

A wide range of input and output modules facilitates the monitoring of system parts or the actuation of external equipment. As a result, a variety of devices can be integrated into the fire detection system. For more complex tasks, combi modules with several inputs and outputs are available.

Different mechanical versions of the modules can be supplied for wall mounting, for integration in external devices or for DIN rail mounting.

## Sounders and strobes

Once that the dangerous situation has been detected, sounders and strobes acoustically or optically warn of the dangerous situation or make sure that the area in question is evacuated.

The Series FI750 and FI700 comprise sounders with several tone types, strobes and combined signalling devices. For use under harsh environmental conditions, sounders with protection class IP66 can be supplied.

When activating the sounders, the fire detection control panel can also select the tone – depending on the alarm situation. In this way it is possible to acoustically distinguish, for example, between alarming and evacuation.

The automatic synchronisation function ensures that the warning tone is uniform if several sounders are active within one area.

## Certified quality

The fire detectors, modules and signalling devices of Series FI700 and FI750 have been tested and certified by LPCB, BSI or VdS, as required by the Construction Products Directive CPD or the Construction Products Regulation CPR, according to the standard EN 54.



# RF FIRE DETECTION SYSTEM FI720/RF

In some fire detection systems, cabling the detectors is not possible because of the architectural, technical or organisational situation, it affects the visual appearance or it involves high costs and therefore is uneconomical. A fire detection system based on the RF fire detection system FI720/RF can very well be installed later without changing the installation of the building.

Historical buildings, churches, museums and modern architecture are among the typical applications. Thanks to the easy linking to the fire detection control panel, it is also possible to equip only individual areas of a system with radio detectors, if necessary.

The RF fire detection system FI720/RF combines the latest developments in the field of fire alarm technology with safe radio transmission technology and an attractive design. Thanks to pioneering technologies, completely new possibilities in the field of fire detection present itself, and, as a result, an effective combination between architectural requirements and modern fire alarm technology is created.

## Extensive product family

The bi-directional communication between the fire detection control panel and the RF components is converted by an RF interface. The loop RF interface is integrated into the detector loop and can handle up to 32 RF components. The secure digital RF protocol allows transmission of analog measured values and controlling functions of the RF components. For systems in conventional technology, there is also an RF interface with relay outputs.

The radio transmission range can be increased by means of RF expanders. By cascading expanders, a multi-stage RF system can be created which can cover distances of more than 3 kilometres.

The extensive portfolio of RF components includes automatic detectors and manual call points, input and output modules, a remote indicator as well as sounders and strobes. The long battery life of 8 years ensures long-term operation and keeps the maintenance costs low.



## Convenient commissioning

With the supplied PC software, configuring the RF system FI720/RF becomes child's play. Through a graphic menu, all detectors, modules or signalling devices are selected and provided with device addresses. In addition, detector-specific settings such as the response sensitivity of the optical smoke sensor can be parameterised.

## Test and analysis functions

The transmission behaviour of all RF components is continuously verified by the RF interface. By means of the PC software, electrical parameters such as signal strength and noise are analysed and graphically represented on the PC. In this way, the radio transmission quality can be evaluated easily and conveniently. As a result, possible error sources can be detected and ruled out during commissioning or maintenance.



# AESTHETICS AND SAFETY

Modern fire protection often contradicts architectural requirements and aesthetic demands. A fire detector is supposed to effectively detect a fire, but at the same time its appearance has to be discreet – especially in historical or modern buildings a white detector may seem irritating.

The design fire detectors DECORLINE are available in several attractive decor versions. So the detector can be optimally matched to the architecture and the material of which the ceiling is made – no matter whether it is a wooden ceiling, a metal construction or a historical vault.

## Different detector technologies

The special version in DECORLINE design is available for the automatic fire detectors of the following series:

- fire detectors in conventional technology – Series FC650
- intelligent loop fire detectors – Series FI700 / FI750
- RF fire detectors – Series FI720/RF

The design fire detectors in loop technology are intended for connection to compatible LST fire detection control panels. With the appropriate connection, the fire detectors in conventional technology as well as the RF fire detectors can also be used together with systems of other manufacturers.

## Various designs

The design fire detectors DECORLINE are available in 16 different designs. There are various kinds of wood, marble and stone decors, metal surfaces, patterns and special colours to choose from. The matching detector bases are delivered with the detector in the same design.

Ash | Durmast | Oak | Cherry | Alder | Briar Root | Carrara Marble | Obirho | Green Alps | Green Marble | Black Marble | Gold | Black | Carbon Fibre | Gold Fibre | Aluminium | Pink

