



**FIRE ALARM**

# Schrack Seconet Fire Alarm Systems.

## Sales Training.

**FIRE ALARM**

***SCHRACK***  
S E C O N E T

## Integral IP system family.

- Common hardware platform
- Uniform firmware and PC tools
- For all system sizes
- Intelligent network structures
- Hard- & software redundancy
- Interfaces BACnet, OPC, MODBUS, etc.
- Intuitive operating concept
- Operation in national languages
- Forward and backward compatibility
- Made in Europe



## Integral IP system family.



### **Modular, decentralised construction**

- Hardware & Software redundancy
- TCP/IP interface
- can be networked
- **X**-LINE: up to 16 Loops
- up to 4.000 elements
- Multi zone extinguishing panel

### **Compact, decentralised construction**

- Software-redundancy
- TCP/IP interface
- can be networked
- **X**-LINE: up to 4 Loops
- up to 250 elements per loop
- Single zone extinguishing panel

### **Basic version**

- Software-redundancy
- TCP/IP interface
- can be networked
- **X**-LINE: 1 Loop
- up to 250 elements

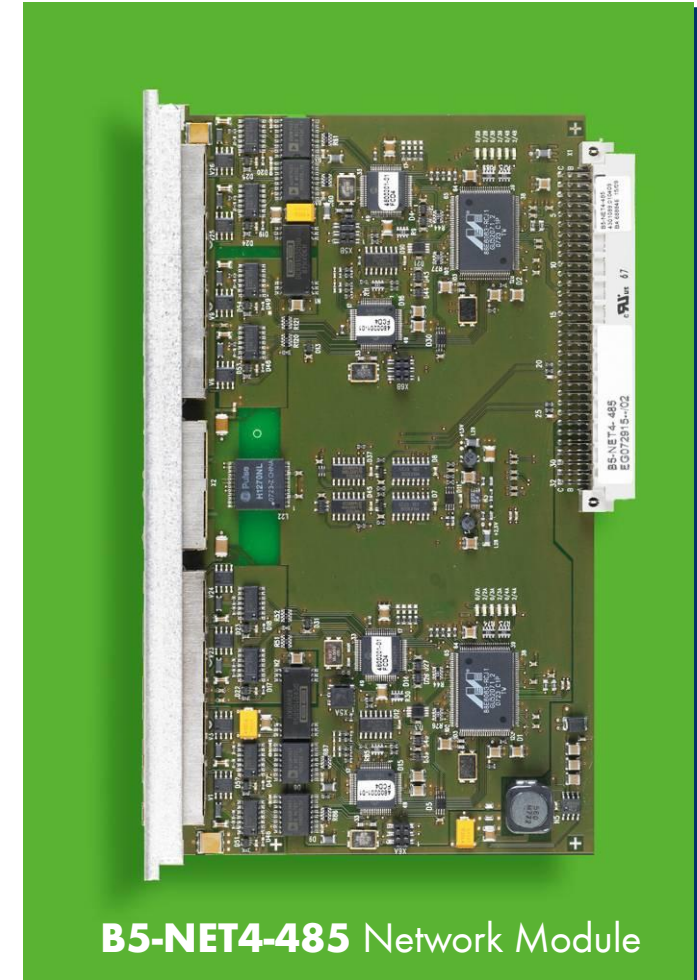
## Integral IP MX.

- fully redundant and modular fire alarm control panel
- decentralised system design
- could be networked from a single control panel up to large systems by using copper or fiber connections
- up to 16 loops (4000 elements) per control panel
- Event memory for up to 65,000 messages
- freely programmable inputs/outputs and algorithms
- remote access via network or internet
- various communication protocols for connection to management systems and higher-level systems
- 100% compatible to former systems
- multi-zone extinguishing panel



## Double security thanks to real redundancy.

- Two identical systems work constantly in "Hot-Stand-By-Operation"
- Not only the microprocessor structure, but all other system structures, components and parts are also duplicated
- The occurrence of a fault in the active section of the system causes the system to be automatically switched over to the second side of the system and for a system fault to be indicated
- All functions, such as detection, triggering of alarms, plain text indication and controlling of fire alarm devices etc. remain unaffected

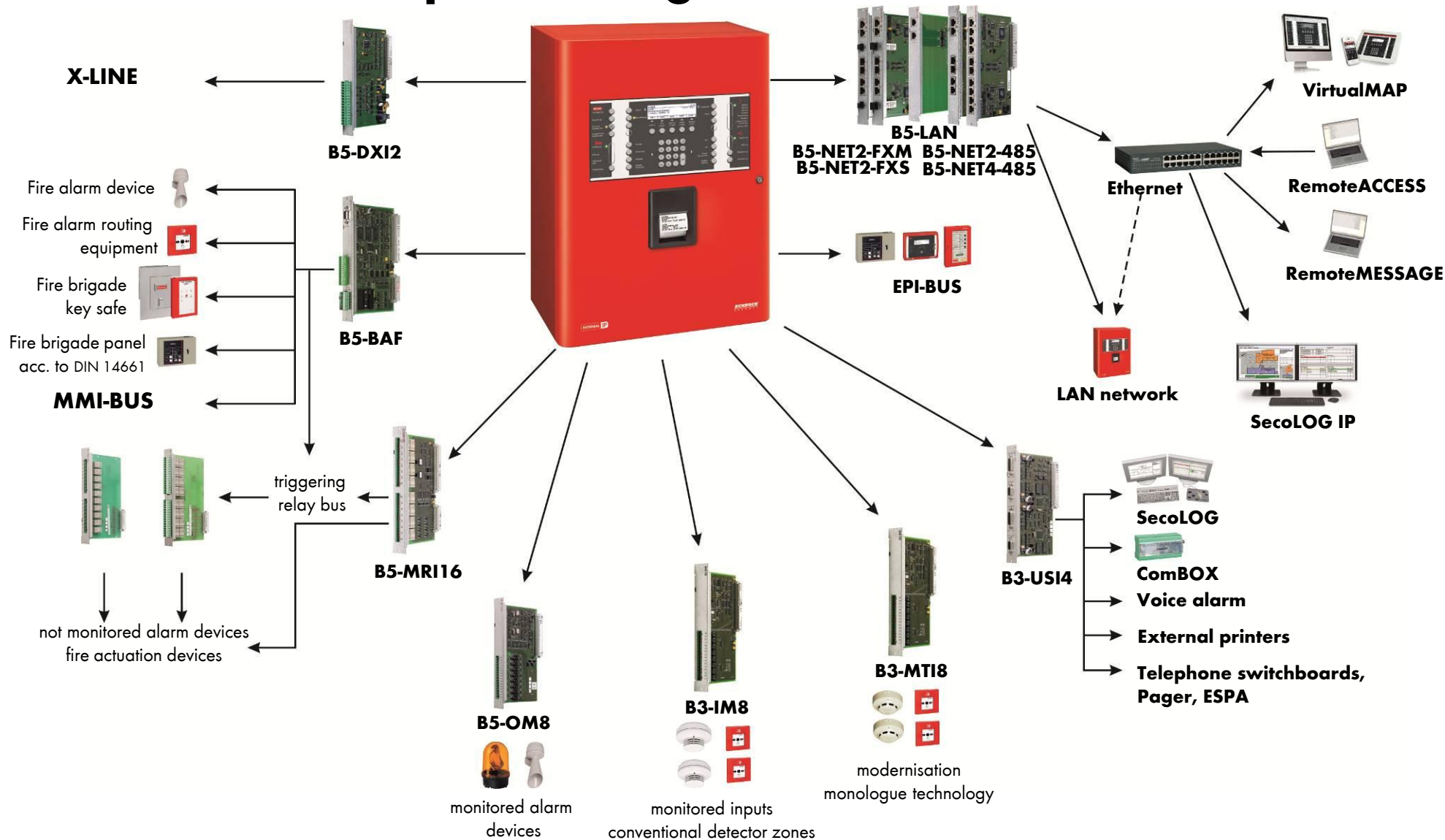


## Integral MAP operating panel.

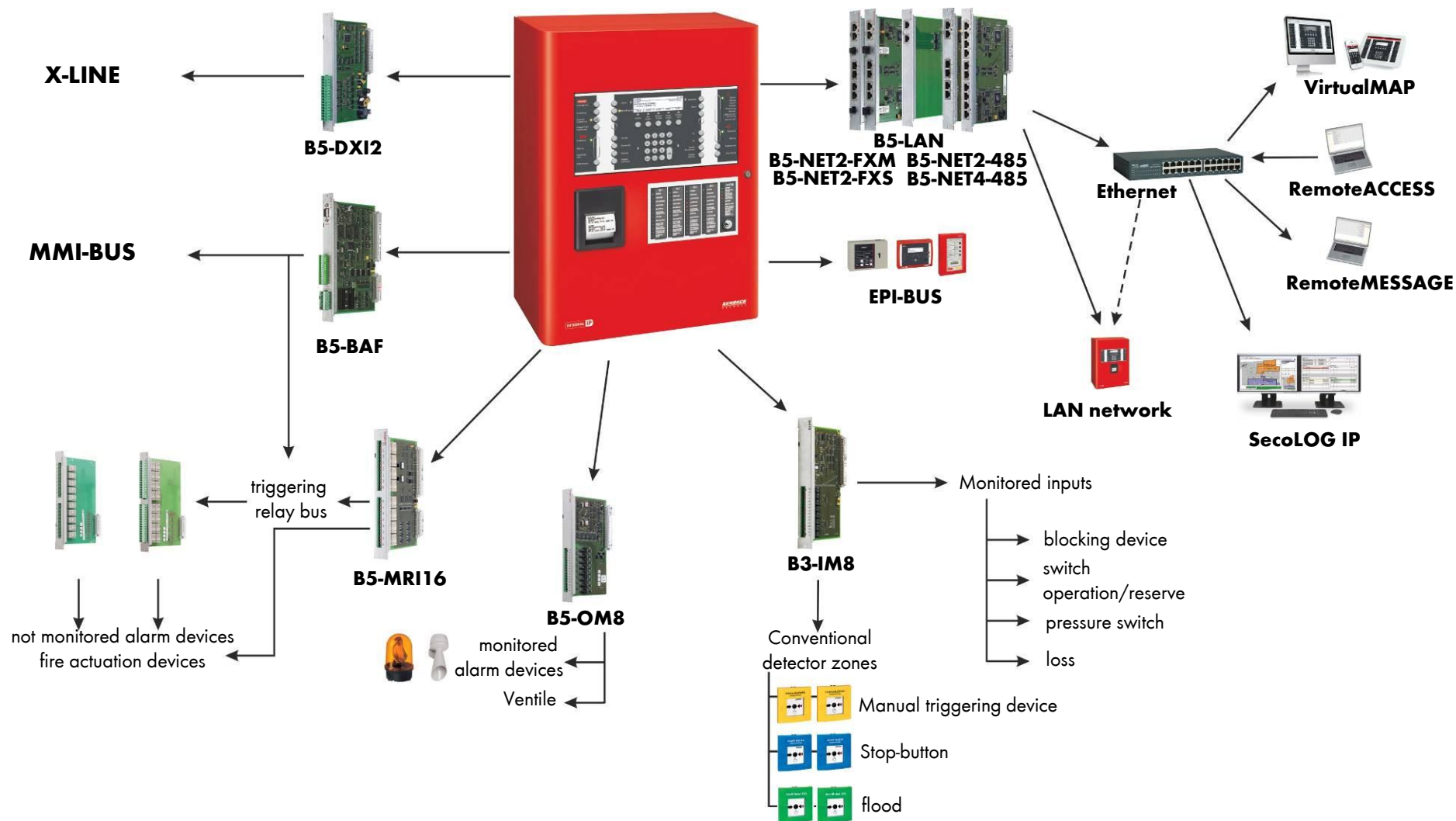


Membrane keypad and plain text display currently in more than 20 languages

## Fire alarm control panel Integral IP MXF.

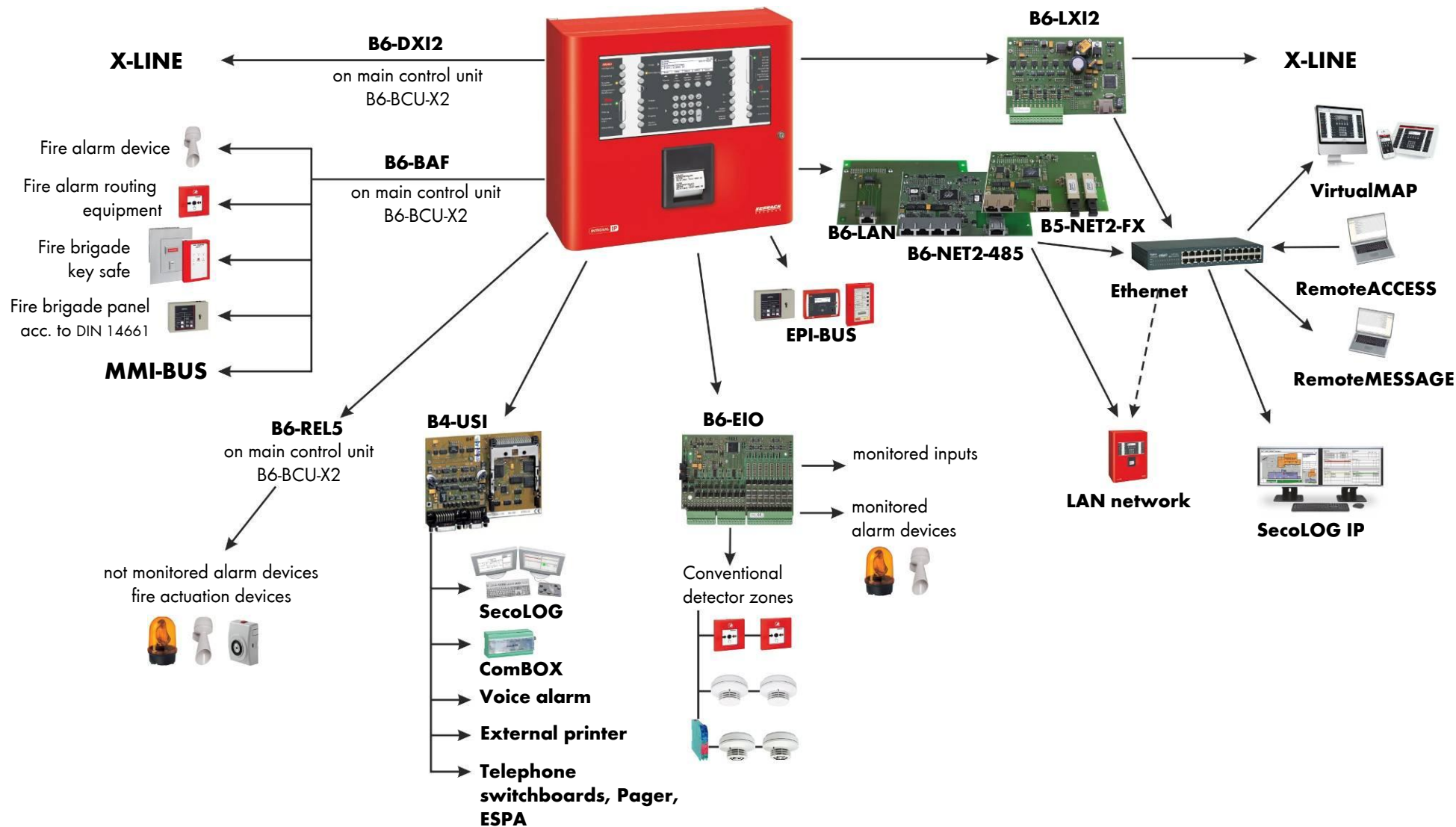


## Multi-zone extinguishing panel Integral IP MXE.

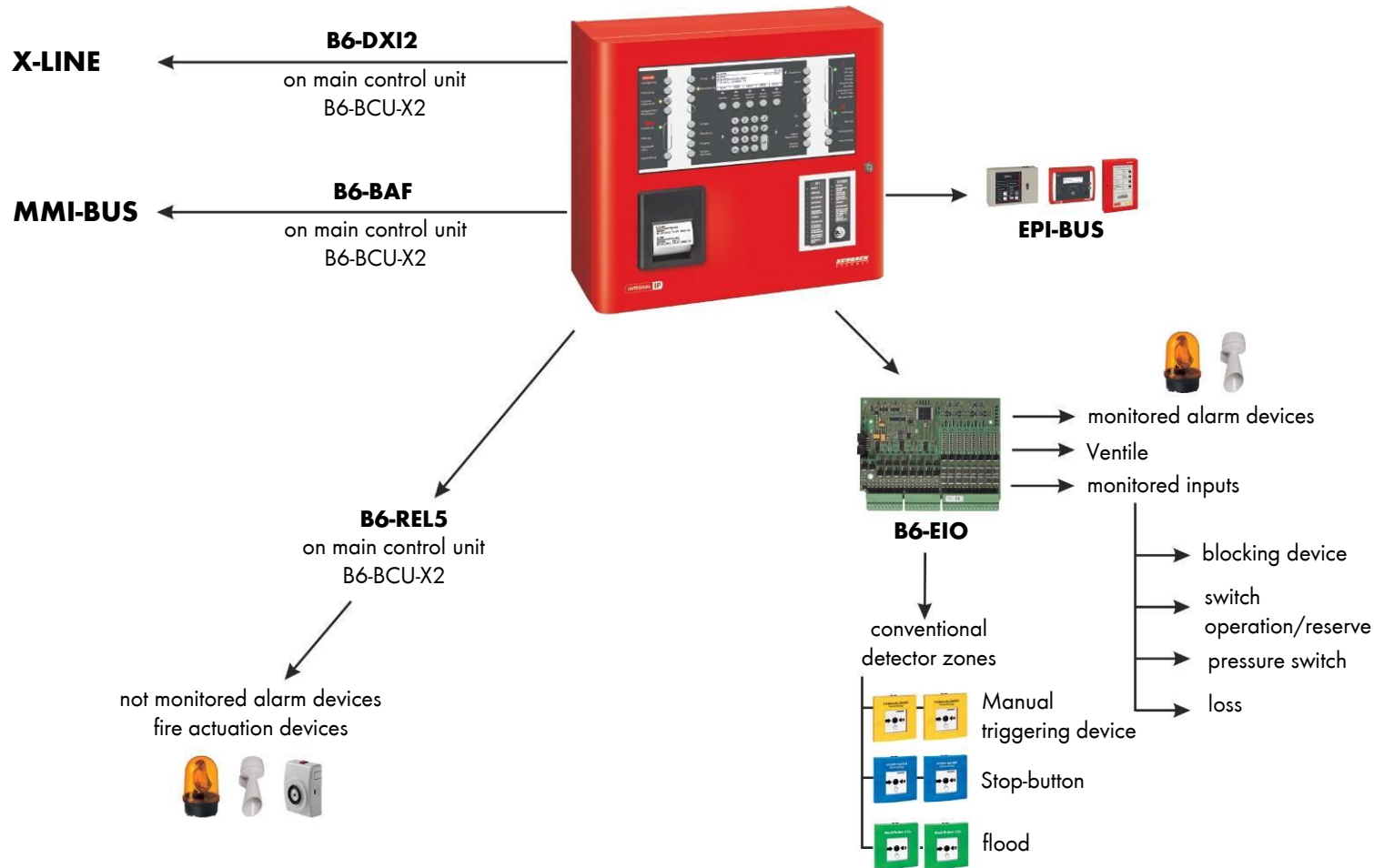




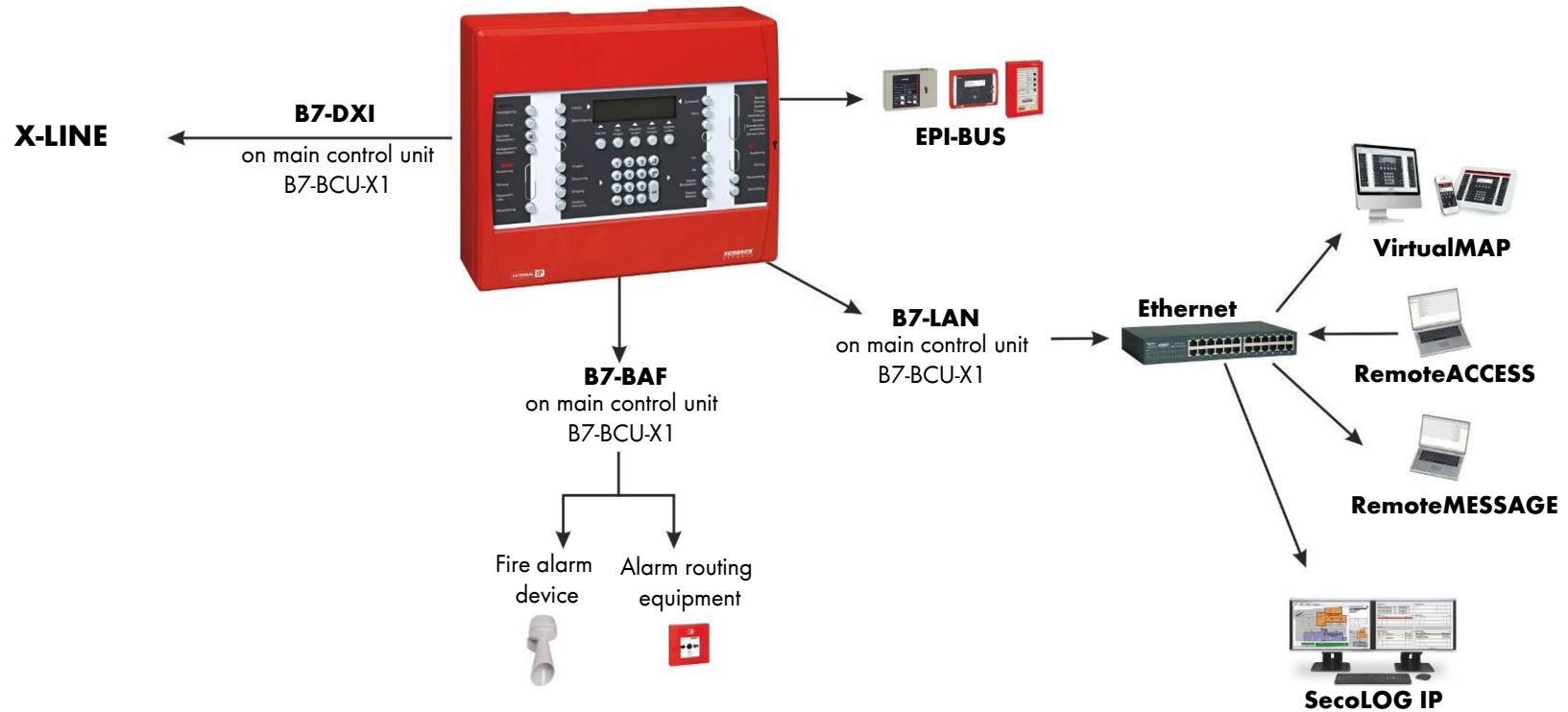
## Fire alarm control panel Integral IP CXF.



## Single-zone extinguishing panel Integral IP CXE.



## Integral IP BX.



## Integral Software.

- Supports all Integral IP system family control panels
- Suitable for configuring all sizes of systems as well as SecoNET networks
- Dongle-protected
- Compatible with all Windows operating systems from Windows 2000
- Graphically clear user interface, ergonomic and intuitive to learn



## Managementsystem SecoLOG IP Fire.

- Clear and user-friendly operation in message and command direction
- IP interface for networking using existing LAN networks
- Compatible with all Schrack fire alarm systems - can also be integrated subsequently
- Multi-user enabled and approved in accordance with ÖNORM F 3003



# IP Applications for Fire Alarm Systems.



## Integral IP Applications - Overview.



### Get informations

e.g. Analysis of the current status of a control panel before a service or maintenance takes place. Receipt of programmed messages (alarms, faults, etc.)

### Operating the system

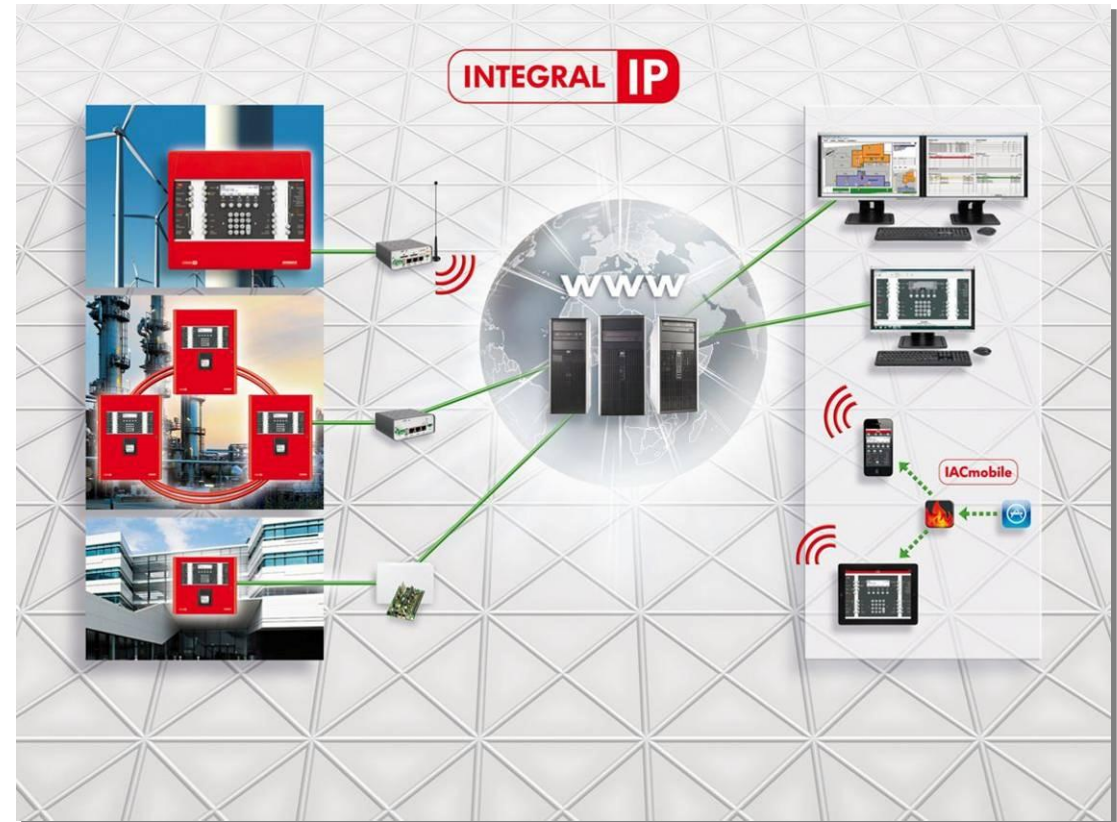
e.g. Remote operation of the control panel or remote help during operating the system

### Programming

Support during system start-up or assistance in troubleshooting or reprogramming

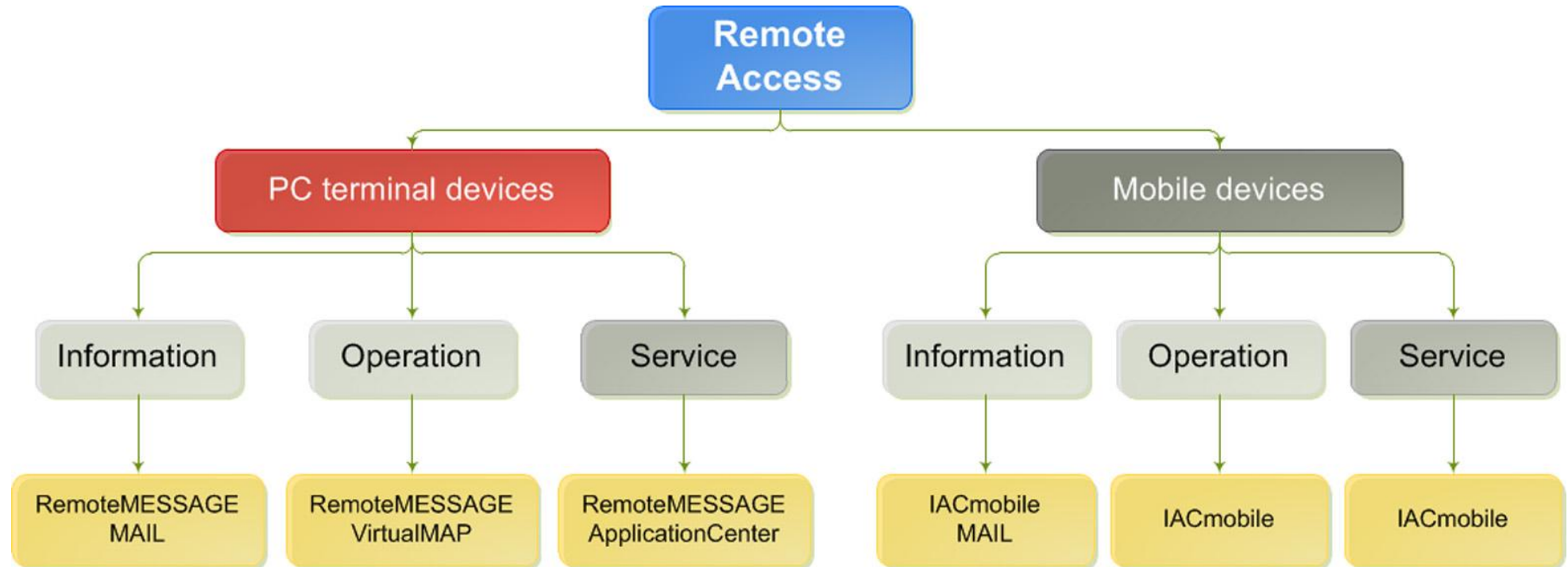
## Integral over IP – Applications & Benefits.

- Use of existing networks (Intranet, Internet)
- Standard interfaces (LAN, IP)
- Central Web-applications (Cloud Service)
- „Anywhere @ Anytime“ - independent of location & always available
- Messaging: Panels send information's automatically to responsible persons
- Immediate intervention of specialists possible from anywhere
- Central control and centralized support for any number of panels
- Any many more





## Integral IP Applications - Overview.



## Integral over IP – PC terminal devices.

- **RemoteMESSAGE**

Automatic messages from one or several control panels to a Server and visualisation on one or several PCs.

- **Integral MAIL**

Information: the control panels sends event-based emails to one or more recipients



## Integral over IP - PC terminal devices.

### ▪ **Integral VirtualMAP**

- Indicates information about the current state of the system, e.g. before a maintenance takes place, or is used for receiving messages (alarms, faults, etc.)
- Performing operation procedures, as they were possible only from stationary facilities up to now (control centre, doorman, etc.) or
- Online-Help when the supervising staff has difficulties during operation

### ▪ **IAC RemoteACCESS**

Support during start-up procedure, assistance in troubleshooting, remote reprogramming



## Integral over IP - Mobile devices.

- indication and operation of one or more fire alarm panels independent of location of the user
- Indicates information about the current state of the system, e.g. before a maintenance takes place, or is used for receiving messages (alarms, faults, etc.)
- Performing operation procedures, as they were possible only from stationary facilities up to now (control centre, concierge, etc.) or
- Remote help when the supervising staff has difficulties during operation
- Active information via Push-Notifications
- Geodata query

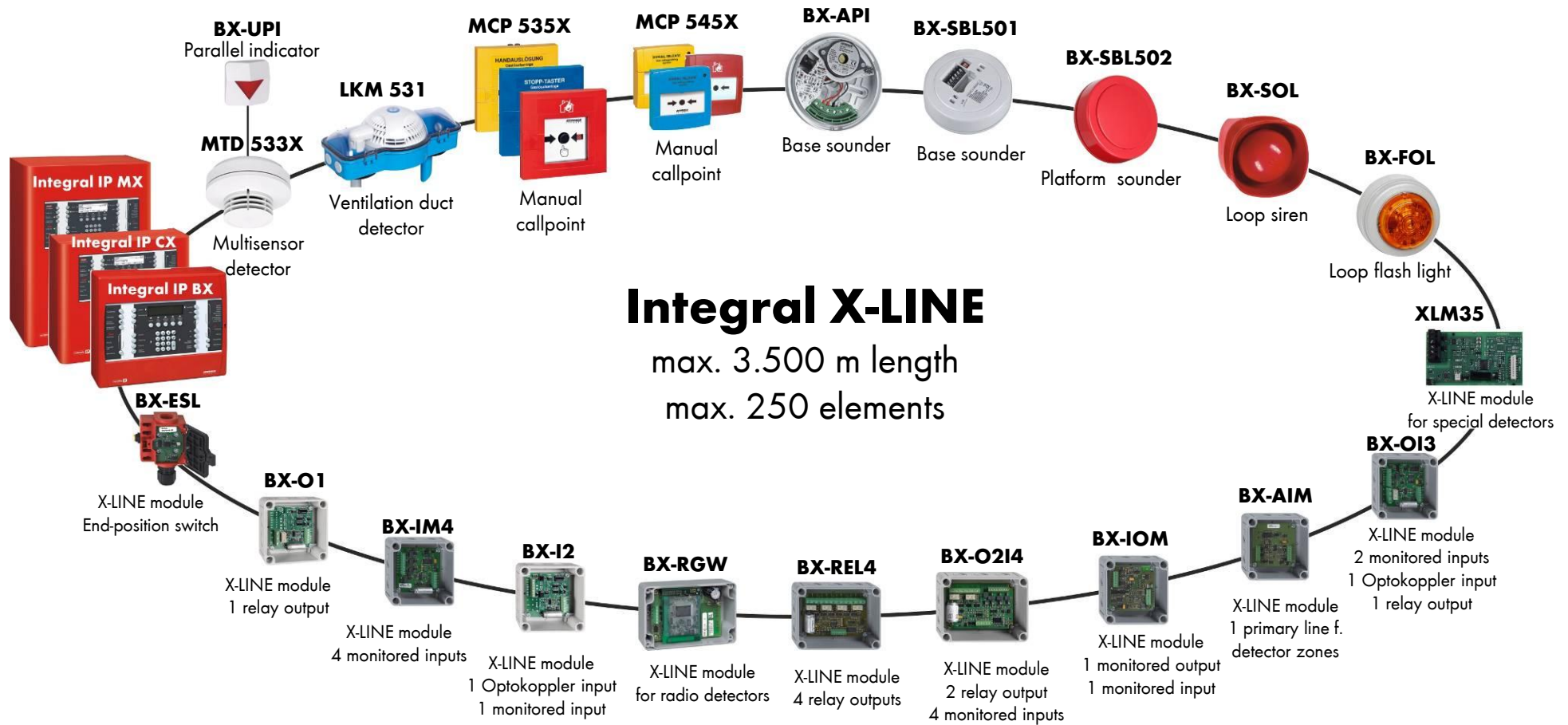


## Integral X-LINE.

- Digital, interactive loop communication and data backup
- Integrated short circuit isolator in each element
- Up to 250 elements per loop
- Up to 3.500 m loop length
- Start-up time <100s when fully equipped
- Monitoring of hazardous areas via loop-module and stub-line
- Intelligent integration of special detectors
  - universal or individual parameter sets programmable
  - Information from the connected special detector systems, incl. forwarding of the information to the management system
- Inputs and outputs are freely programmable or can be assigned by means of parameter sets
- Intelligent implementation of power supply devices
- High degree of backward compatibility



## Integral X-LINE.

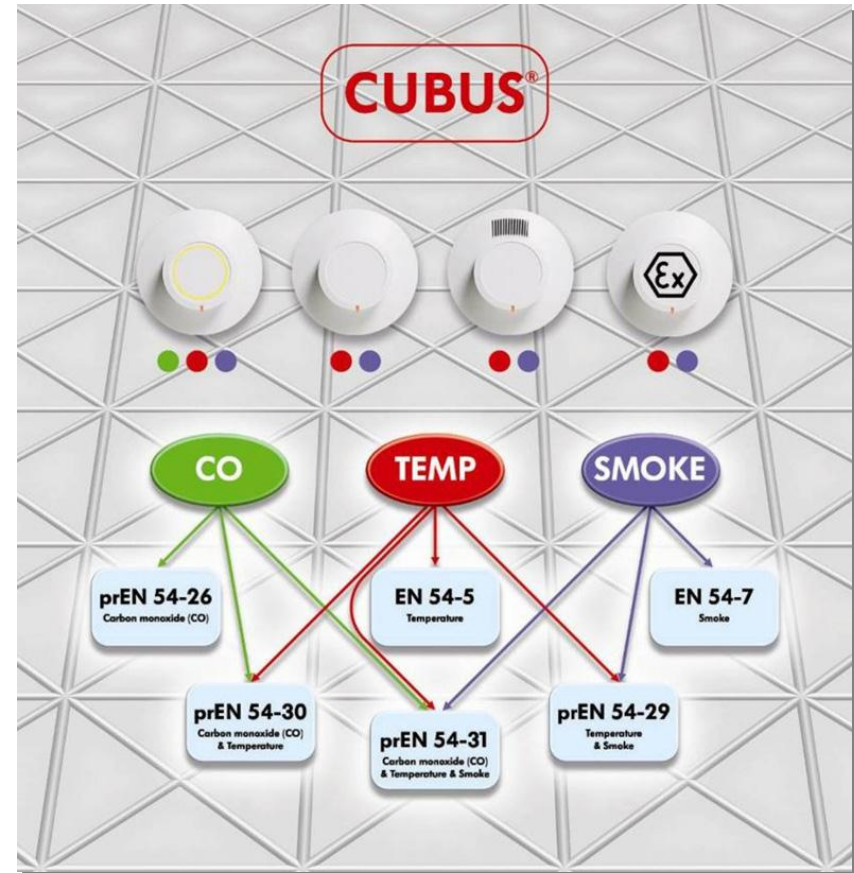


# CUBUS technology - New standards in detection.



## New standards in detection.

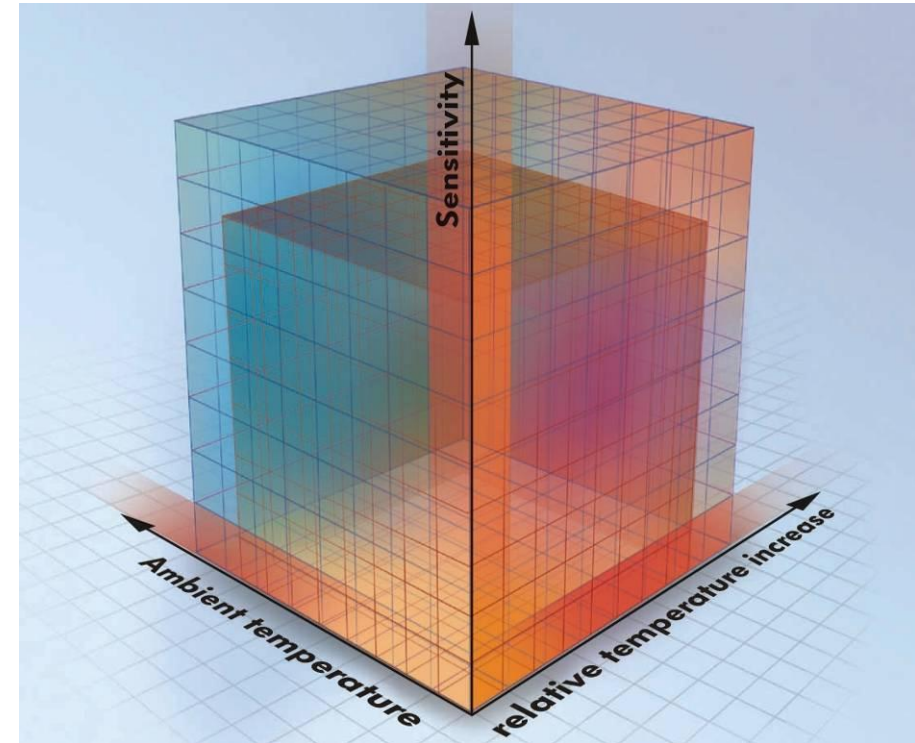
- **Multisensor detectors**  
for all applications
- **CUBUS technology**  
for intelligent detection
- **Compliant with all new EN standards**
  - prEN 54-26:2008  
Point fire detectors using carbon monoxide sensors
  - prEN 54-30:2009  
Point detectors using a combination of carbon monoxide and heat sensors
  - prEN 54-31:2012  
Point detectors using a combination of smoke, carbon monoxide and optionally heat sensors
  - prEN 54-29:2009  
Point detectors using a combination of smoke and heat sensors





## CUBUS Technology.

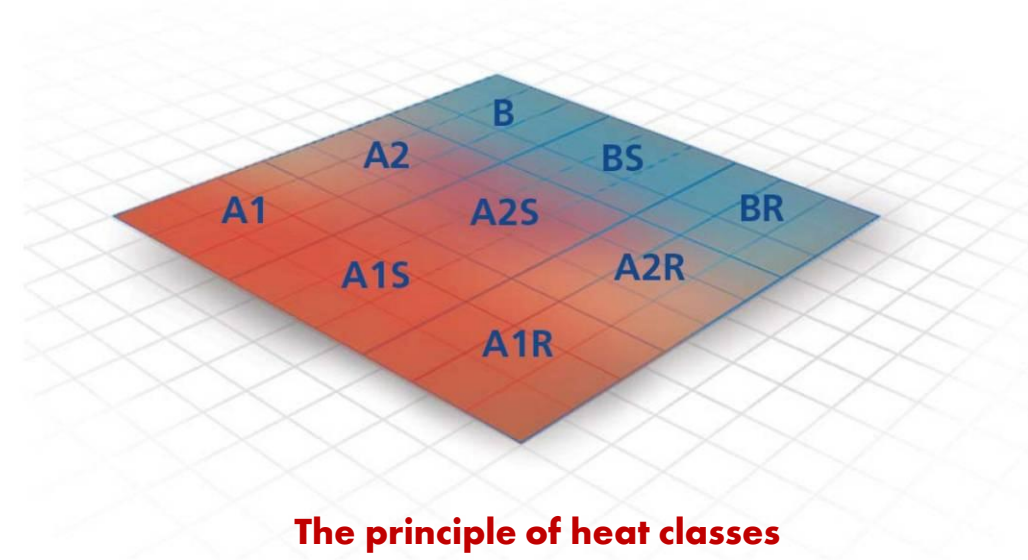
- The detector adjusts itself automatically according to its ambient conditions → other detectors have to be configured manually after installation
- The detector monitors the ambient temperature as well as the relative increase of temperature and automatically calculates the optimal smoke sensitivity for each location
- Thanks to CUBUS technology:
  - Costly deceptive alarms can be reduced
  - At the same time a fast and reliable detection is guaranteed



**Evtl. Link auf neuen CUBUS Film !!**

## Configurable Heat Classes.

- The heat sensor can be configured in to standard classes A1, A2 and B (for special areas of application also with the index R or S) in accordance with EN 54-5
- Class index „S“ is particularly well suited for use where deceptive values should be filtered out (e.g. in boiler houses or kitchens)
- Class index „R“ for areas with low ambient temperatures (e.g. unheated buildings)
- The three standard classes combined with the indexes R or S give a total of 9 variations in order to ensure optimal adaptation to surrounding conditions



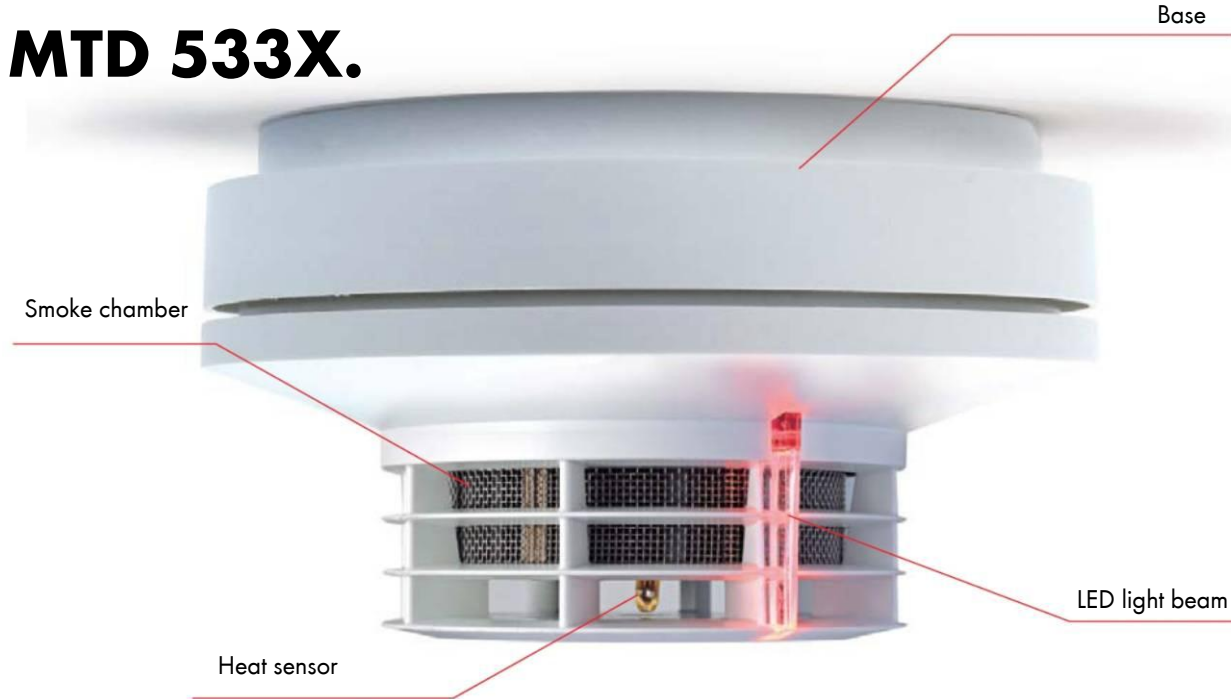
## Multiple sensor detector MTD 533X.

- Up to 250 pcs MTD 533X on one loop with up to 3.500 m length connectable
- Serial number for unique identification
- Fire zones can be defined as desired „Virtual Loop“
- Controlling of fire actuations also possible without forwarding an alarm and during the detector is switched off
- Intelligent test function for economical detector test
- Mechanically and electronically forwards and backwards compatible
- Automatic short circuit detection during startup



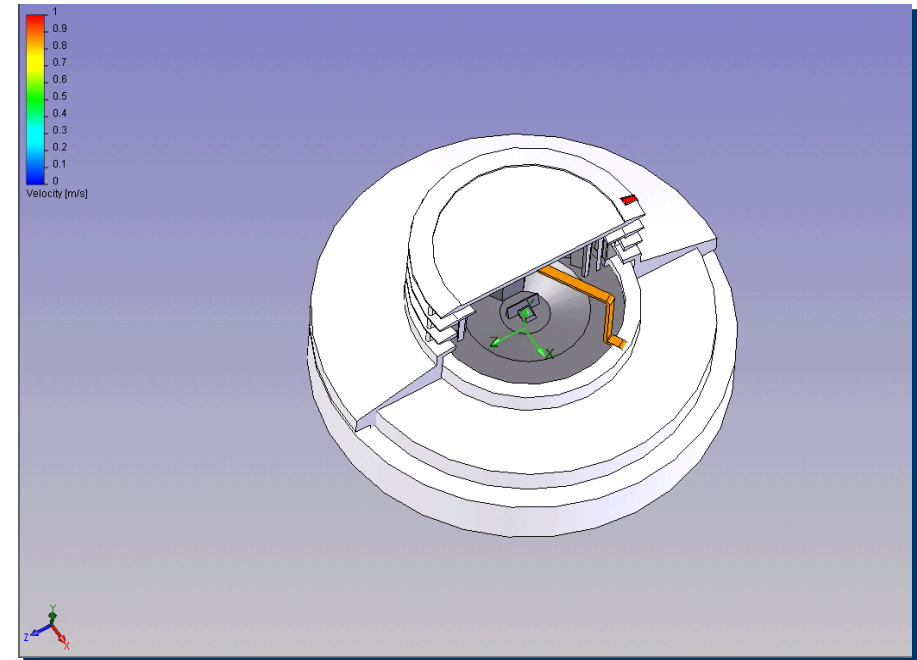
## Multiple sensor detector MTD 533X.

- Constant operational safety thanks to constant self tests
- Integrated short circuit isolator
- Parameterisable heat sensor
- Parameterisable alarm output
- Parallel indicator connectable
- Pre-alarm levels can be set at 30% or 75% a pre-alarm signal can be sent to the fire alarm control panel
- History memory for all detector data and events
- Monitoring of the contamination state
- Approved acc. to EN 54-5, EN 54-7, EN 54-17 and Construction Products Directive (CPD)



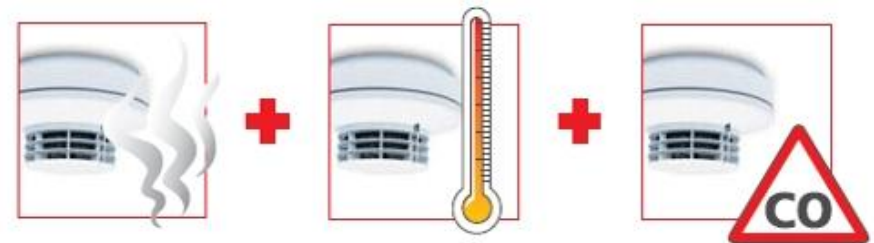
## Multiple sensor detector MTD 533X.

- The highest degree of safety for detection for all sizes of smoke particle thanks to an optimised inflow behaviour
- Smoke detection also always involves temperature evaluation
- In the event of a rapid increase in temperature fires are also detected without the formation of smoke
- Smoke and temperature sensors can be activated and disabled separately
- Automatic changeover possible based on time of day or clock time



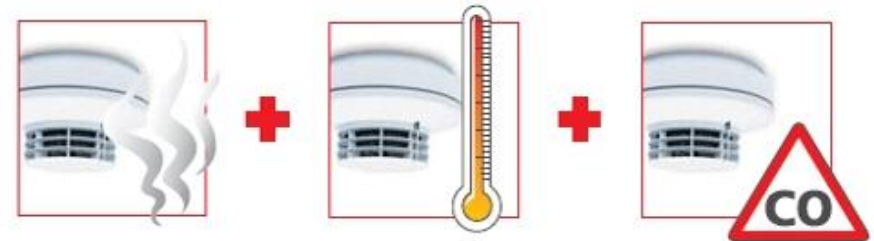
## Multiple sensor detector CMD 533X - Technology.

- Detects the fire characteristics smoke, heat and carbon monoxide (CO)  
acc. to EN54-5, EN54-7, EN54-26, EN54-29, EN54-30 & EN54-31
- CUBUS+ technology  
for automatic sensitivity adjustment  
(smoke detection supported by heat & CO)
- Adjustable technical CO alarm  
acc. to EN 50291-1 from 20 to 320 ppm
- Ambient CO-concentration can be read out
- Fire characteristics acc. EN54 and technical CO alarm  
can be activated individually
- Durable CO-cell: life-time up to 8 years
- Compensation of detector pollution



## Multiple sensor detector CMD 533X - Benefits.

- **One detector for all applications**
  - Detects smoke, heat and carbon monoxide (CO)
  - Ready for all future tenders – fulfils all EN 54-standards
  - Very flexible if the use of the room changes
- **Secure detection**
  - Prevents deceptive alarms caused by dust and steam
  - Wide range of fire detection (test fires acc. to EN 54)
- **Added value detection**
  - Early protection against suffocation
  - Ambient CO-concentration can be read out
  - Automatic triggering of controls at a configurable level of CO-concentration



## Multiple sensor detector CMD 533X - Applications.

- **For a rapid and secure detection of all types of fire in applications with a high risk of deceptive alarms:**
  - Kitchens, catering areas, washrooms
  - Bakeries, carpentry, mechanic workshops, discos, stables, swimming pools
  - Storage areas, cable trays, suspended ceilings, equipment rooms
- **Pre-alarm for harmful CO-concentrations dependent on the duration:**
  - Hotels, Hospitals, Residential and commercial buildings (rooms where people sleep)
  - Manufacturing plants, boiler rooms, closed garages





## Multiple sensor detector MTD 533X-S/SP - Technology.

- Detects the fire characteristics smoke and heat acc. to EN54-5, EN54-7 & EN54-29
- Integrated sound & voice acc. to EN54-3
- Four tones: DIN, Slow Whoop, Sweden and continuous tone selectable via the control panel
- Three volume levels: 92dB (high), 81dB (middle) and 69dB (low)
- Simultaneous sounder activation on one loop: approx. 20 (high), 32 (middle) and 60 (low)
- Voice output of 12 stored texts in different languages
- Synchronized audio and voice output
- Voice output of stored texts in different languages



## Multiple sensor detectors MTD 533X-S/SP - Benefits.

- One product for 2 functions
  - detects smoke and heat
  - integrated sound & voice
- Secure detection
- Clearly understandable alarm messages
- Reduced product costs
- Reduced installation costs
- Higher flexibility
- Uninterrupted alarm even in case of a failure



## Multiple sensor detectors MTD 533X-S/SP - Applications.

**For a rapid and secure detection in applications where acoustic alarm is required:**

- Hotels
- Schools
- Office buildings
- Public buildings
- Meeting places



## Green building door holding magnet BX-MDH.



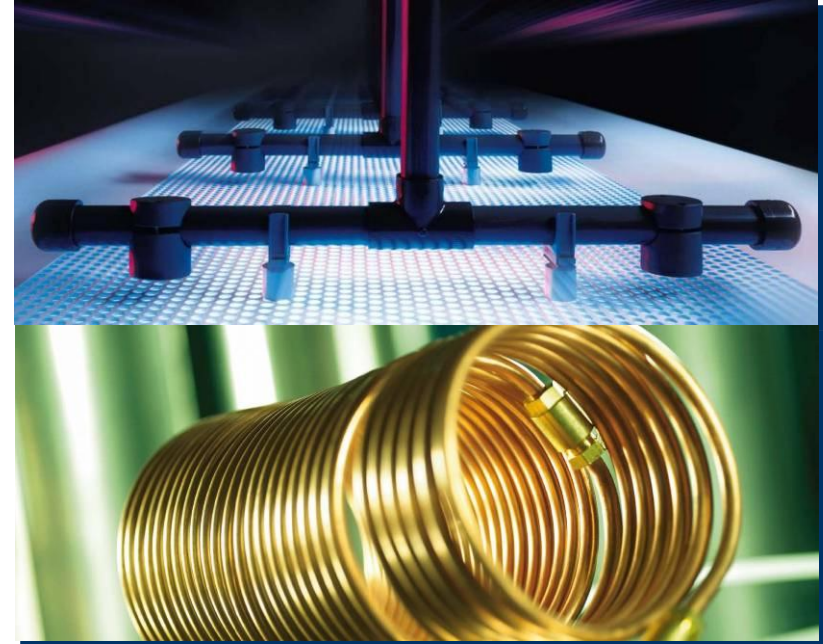
## Door holding magnet BX-MDH.

- Directly on the loop
- Saves energy costs in full, no continuous current required
- No power supply required (permanent magnet)
- Integrated monitoring of the door position
- High availability through loop technology
- Integrated short circuit isolator
- Selective activation (individual addressing)
- Easy to install – even afterwards

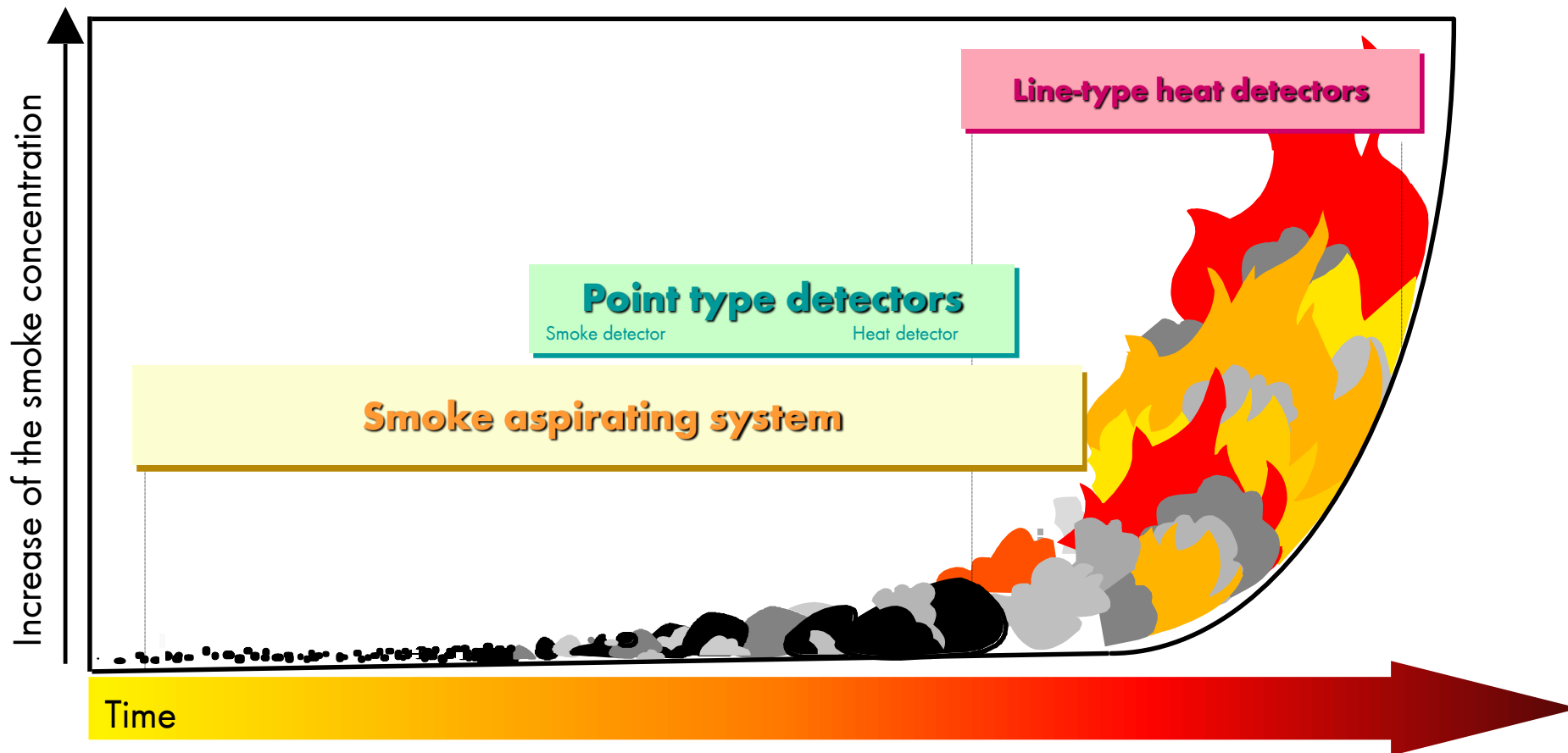


## Special detector systems.

- Aspirating smoke detectors
- Line type heat detectors
- Linear smoke detectors
- Flame detectors for hazardous areas



## Sensitivity survey of fire detectors.



## Aspirating smoke system AirSCREEN ASD 535.

- Monitoring of rooms

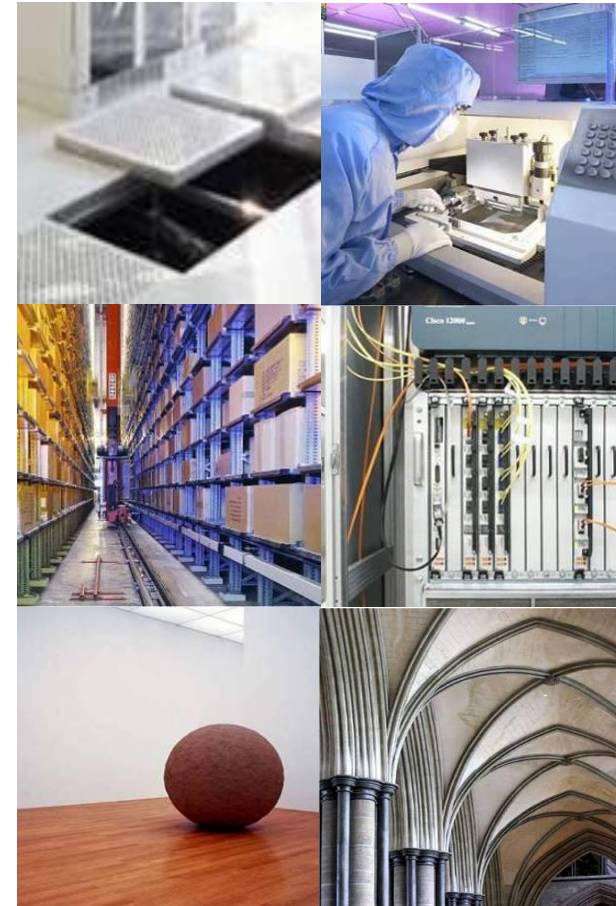
Warehouses and distribution centers, archives, false ceilings and raised floors, large halls, museums, galleries, theaters, cinemas, cultural heritage, monuments, airports, computer rooms, laboratories and research centers, transformer rooms, clean rooms, cold storage

- Monitoring of objects

Telecommunication facilities, high and low voltage distribution centers, computer equipment, CNC controls

- Invisible applications

Protection of cultural property, prison cells, etc.





## AirSCREEN ASD 535 - Features.

- Sensitivity adjustable from 0.002 to 10 %/m
- 1 or 2 sampling tubes with separate airflow sensor
- Asymmetrical aspirating lines possible with VdS approved calculation software PipeFlow
- Perfected smoke detection by means of High dynamic technology
- High suction capacity and low noise
- IP 54 without additional housing
- Optimized aerodynamics for reduced contamination
- also suitable for cold store areas
- Auto learning-function
- Comprehensive system integration
- VdS approval in accordance with EN 54-20 (classes A,B,C)



## Application fields for line type heat detectors.

- Aggressive environments (gases, off gases, salt mist dust, etc.)
- Moisture, incl. condensing moisture
- Extreme temperatures
- where conventional point detectors cannot be used
- Outdoor use
- Long lengths or large areas with many measuring points like tunnels or car parks
- Applications with difficult access after installation, e.g. hollow ceilings



## Examples for typical line type heat detector applications.

- Road tunnels, rail tunnels, metro tunnels
- Car parks, refrigerated storehouses
- Industrial object protection / refineries / gas lines and external heating lines
- Loading ramps
- Cable & energy tunnels
- Conveyor systems (e.g. coal coal loading stations, paint shops car industry, etc.)
- Disposal operations, recycling plants



## Line type heat sensor LWM1.

- works on the principle of line resistance
- 4-wire cable
- up to 300 m monitoring length
- Temperature range:  $-20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$   
(with special cable:  $-60^{\circ}\text{C}$  to  $175^{\circ}\text{C}$ )
- Detection via maximum temperature or rate-of-rise



## Areas of usage for linear smoke detectors.

Large industrial and public buildings, such as

- Airports
- shopping malls
- corporate buildings
- underground or railway stations
- trade fair halls and warehouses
- Garages and hangars
- Naves of churches

## Linear smoke detectors - Overview.



**SPC-E**

### **SPC-E**

sender/receiver  
5 to 100 m distance  
IP 42



**ECO**

### **ECO**

sender/reflector ES 50/25: 2 to 50 m distance  
sender/reflector ES 80: 10 to 80 m distance  
IP 44



**ILIA**

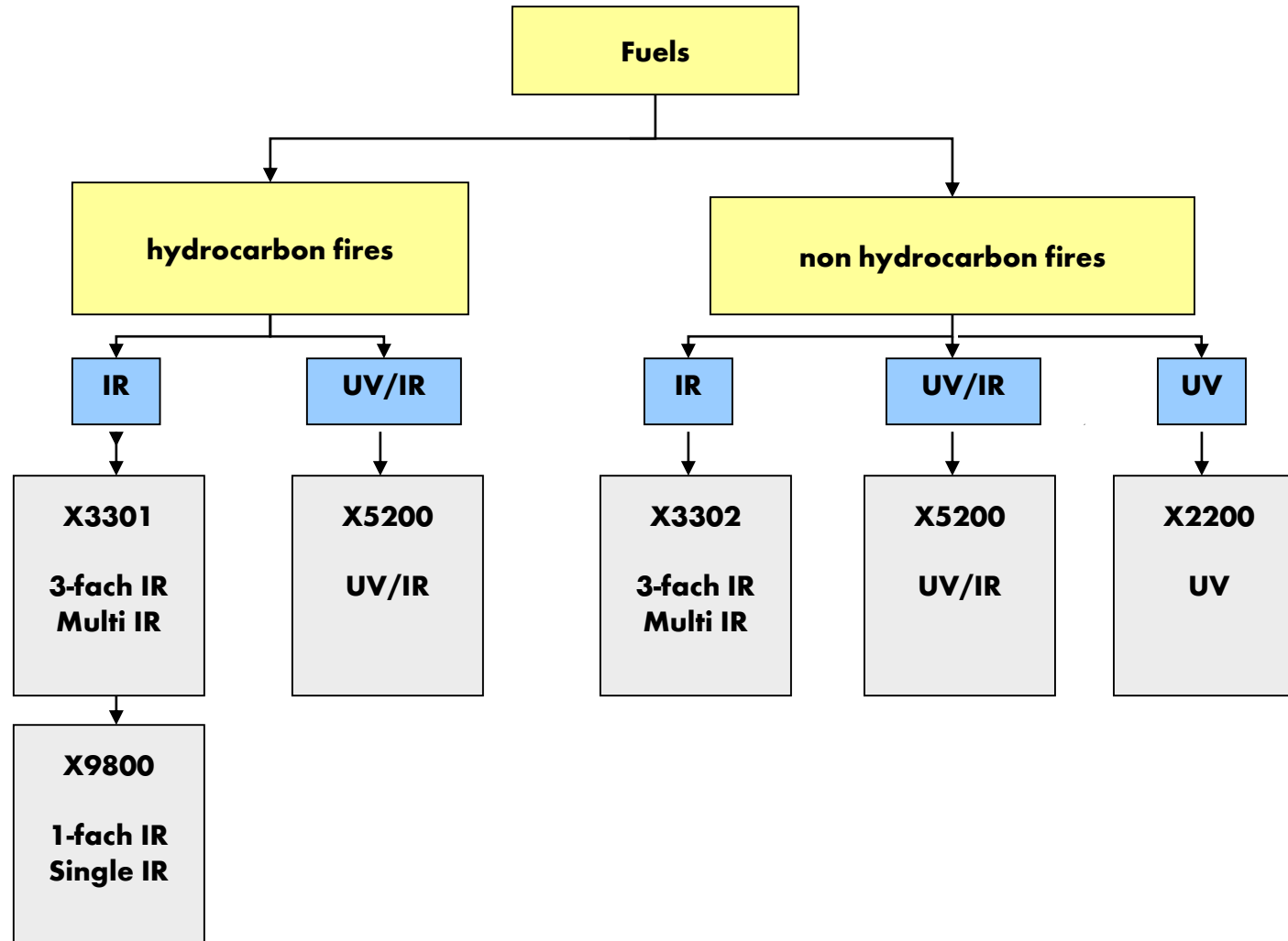
### **ILIA**

sender/reflector ILIA S/R: 10 to 150 m distance  
sender/receiver ILIA S/E: 10 to 200 m distance  
IP 65

## Areas of usage for flame detectors.

- Flame detectors release an alarm, when flames radiation and the typical flicker of flames and embers appear
- to avoid deceptive alarms, several sensors are often combined within one housing and are evaluated together
- Flame detectors operate in the invisible (ultraviolet or infrared) range and are preferably used in environments where smoke appears or if it is to be expected that a rapid development of open flames will appear in case of a fire.

## Flame detector Selection.





## Flame detectors - Overview.



Multi-IR Flame  
detector X3301

- detects 0,1 m<sup>2</sup> N-Heptan fire in a distance of 63m
- 3 different IR sensors
- $\mu$ P controlled heated optics
- SIL 2 Certification
- Applications: Wide areas, spray painting booths, gas turbines



IR Flame detector  
X9800

- detects 0,1 m<sup>2</sup> N-Heptan fire in a distance of 15m
- $\mu$ P controlled heated optics
- Applications: Hydrocarbon fires



UV Flame detector  
X2200

- detects 0,1 m<sup>2</sup> N-Heptan fire in a distance of 18 m
- Fast response
- Applications: Propellants, Munitions, Black powder, TNT, gun powder, sulphur



UV/IR Flame detector  
X5200

- detects 0,1 m<sup>2</sup> N-Heptan fire in a distance of 15m
- combines the technologies of X2200 and X9800
- Detection of both sensors generate an alarm signal simultaneously
- aux.-rel. programmable for UV and/or IR alarm signal
- $\mu$ P controlled heated optics
- Applications: Test engine cells, Exhaust test cells, hangars

## Audible alarm devices - Overview.



### **BX-SOL**

Addressable siren  
Loop connection  
Approval acc. to  
EN 54-3/-17



### **BX-SBL 501/502**

Addressable base siren  
Loop connection  
Approval acc. to EN  
54-3/-17



### **BX-API**

Addressable base siren  
Loop connection  
Approval acc. to EN  
54-3



### **CS 200 & YO4 & ACW**

conventional sirens  
not addressable  
additional cabling required  
connection via loop  
module BX-IOM possible  
Approval acc. to EN 54-3

## EN 54-23 Visual alarm devices.

- white or red flashlight
- flash rate between 0,5 Hz and 2 Hz
- min. illumination of 0.4 lm/ m<sup>2</sup> [unit = Lux] at each point in the room
- min. effective light intensity of 1 cd at max. 500 cd



## Visible alarm devices - Overview.



### **BX-FOL**

Addressable flashlight  
Loop connection  
Approval acc. to  
EN 54-17



### **V4**

conventional flashlight  
not addressable  
additional cabling  
required  
connection via loop  
module BX-IOM possible  
Approval acc. to EN 54-3



### **VTB**

conventional combined  
sounder / flashlight  
not addressable  
additional cabling  
required  
connection via loop  
module BX-IOM possible  
Approval acc. to EN 54-3