

Your overview to our high-performance fire portfolio

Quick Selection Guide

AVENAR panel 8000 and AVENAR panel 2000

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AVENAR panel 8000 and AVENAR panel 2000

3

Wall and Frame Mount

Main Panel Controller



FPE-8000-SPC standard licence F.01U.327.090
FPE-8000-PPC premium licence F.01U.352.441

Remote Keypad



FPE-80000-FMR Remote Keypad F.01U.327.092

Panel kits – AVENAR panel 2000



FPA-2000-SFM standard licence frame-mount F.01U.383.887
FPA-2000-PFM premium licence frame-mount F.01U.383.893
FPA-2000-SWM standard licence wall-mount F.01U.383.886
FPA-2000-PWM premium licence wall-mount F.01U.383.888

Panel rails



PRS-0002-C
 Rail for 2 modules
 F.01U.284.903



PRD 0004 A
 Rail for 4 modules
 4.998.137.280

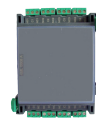
Modules



BCM 0000 B
 Battery Controller Module
 F.01U.081.384



ANI 0016 A
 Annunciator Module 16 Zones
 4.998.137.262



RML 0008 A
 Relay Module low voltage (8x)
 4.998.137.265



LSN 0300 A
 LSN improved Module 300 mA
 4.998.137.277



NZM 0002 A
 Notification Appl. Zone Module
 2 Zones
 4.998.137.275



CZM 0004 A
 4 Zone Conventional Module
 4.998.137.270



ENO 0000 B
 Fire Service Interface Module
 F.01U.063.204



RMH 0002 A
 Relay Module high voltage (2x)
 4.998.137.274



IOP 0008 A
 8 In-/8 Output Module
 4.998.137.269



IOS 0020 A
 20 mA Communication Module
 4.998.137.266



IOS 0232 A
 RS232 Communication Module
 4.998.137.267

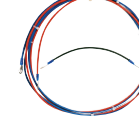


LSN 1500 A
 LSN improved Module 1500 mA
 4.998.137.278



FPE 5000 UGM
 Interface Module
 F.01U.028.289

Cables



CBB 0000 A
 Cable for BCM/Batt. 180 cm
 4.998.153.244



CPB 0000 A
 Cable for BCM/UPS 150 cm
 4.998.153.243
 For use of Power Supply Housing



FPE-8000-CRP
 Cable redundant controller
 F.01U.349.391



FPE-8000-CRK
 Cable redundant keypad
 F.01U.349.392



CPA 0000 A
 Cable set for MPC/AT2000
 4.998.153.247

External PS



Mounting frame medium

FPP 5000
 External Power Supply Unit Kit
 24 V/6 A, 38 Ah Batt.
 F.01U.511.307



Only for FPP 5000

FPP-5000-TI13
 LSN trouble interface
 To comply to EN54-13
 2 power fail inputs
 F.01U.161.679



FPP 3000

AVENAR panel 8000 and AVENAR panel 2000

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Wall and Frame Mount

Media Converter



EL1141-10B-BH
Ethernet Fibre Optics Media Converter Multi Mode
EL1141-80B-BH
Ethernet Fibre Optics Media Converter Single Mode

F.01U.265.641

F.01U.265.643

Remote Services



C1500
Secure Network Gateway
F.01U.309.110



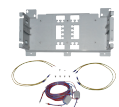
CBS-CNNCT-FIR
Fire Panel Remote Connectivity
F.01U.310.142

Power Supply



UPS 2416 A
Universal Power Supply 24V, 6A
F.01U.500.367

Mounting Kit



FPM-5000-KES
Mounting Kit for Ethernet Switch
F.01U.266.844

Wall Mount

Panel Housing



HCP 0006 A
for 6 modules, 1 Controller (MPC), 2 Batt. 12 V, 24 Ah
4.998.137.285



HBC 0010 A
for 10 modules 1 Controller (MPC), 2 Batt. 12 V, 24 Ah
4.998.137.286



HBE 0012 A
for 12 modules 2 Batt. 12 V, 24 Ah
4.998.137.287

Panel Housing



Mounting frame large
CPH 0006 A
for 6 modules, 1 Controller (MPC), 2 Batt. 12 V, 38 Ah
4.998.137.290



Mounting frame large
MPH 0010 A
for 10 modules 1 Controller (MPC)
4.998.137.291



Mounting frame large
EPH 0012 A
for 12 modules
4.998.137.292

Power Supply and Universal Housing



Mounting frame medium
PMF 0004 A
for 1-2 UPS 2416 A 2-4 Batt. 12 V, 38 Ah
4.998.137.294



Mounting frame small
PSF 0002 A
for 1 UPS 2416 A 2 Batt. 12 V, 38 Ah
4.998.137.293



Mounting frame small
USF 0000 A
Universal Housing incl. HMP 0003 A
4.998.147.119

Power Supply Housing

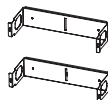


PSS 0002 A
for 1 UPS 2416 A 2 Batt. 12 V, 24 Ah
4.998.137.288



PSB 0004 A
for 1-2 UPS 2416 A 2-4 Batt. 12 V, 24 Ah
4.998.137.289

19" Rack



FRK 0019 A
19" Rack Installation Kit
F.01U.511.304

Mounting Frame



FHS 0000 A
Mounting Frame Large
4.998.137.296
4.998.139.490



FMH 0000 A
Mounting Frame Medium
4.998.137.297



FSH 0000 A
Mounting Frame Small
4.998.137.298

19" Installation Rack



FRB 0019 A
19" Rack Installation Kit, Large
4.998.139.498



FRM 0019 A
19" Rack Installation Kit, Medium
4.998.139.499



FRS 0019 A
19" Rack Installation Kit, Small
4.998.139.500

Power Supply Brackets



FPO-5000-PSB-CH
Power Supply Bracket
F.01U.078.860



FPO-5000-PSB1
Power Supply Bracket Single
F.01U.078.858

Mounting Plates



HMP 0003 A
Mounting Plate for Mounting Frame Large, FBH and FHS
F.01U.511.305

Mounting Kit



FPM-5000-KMC
Mounting Kit for Media Converter
F.01U.266.845

Replacement part



FPO-5000-EB
Earth bar
F.01U.513.251

LSNi Local SecurityNetwork

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Features

- Auto configuration capability (self-learning mode)
- Flexible network structure (loop, stub, T-tap and mixed structure)
- All cable types usable (shielded and unshielded cables)

- Up to 3000m line length
- Up to 1.5 A current per loop (LSN1500A)
- Up to 254 elements per loop/line
- Up to 127 elements per loop/line in LSN classic version

- Built-in diagnostics functions
- Remote support is possible

- Short circuit isolators in each device increase system integrity and cost savings

- Digital communication in every detector

- Addressable detectors
- Automatic or manual address setting possible

- One bus for intrusion and fire

- Remote programming and maintenance

Benefits

- Reduced programming and installation cost and time
- No special cable types needed, existing cables can be used

- Less installation time and cost through reduced number of loops
- Increased number of loop powered devices

- Easy and cost efficient maintenance and support

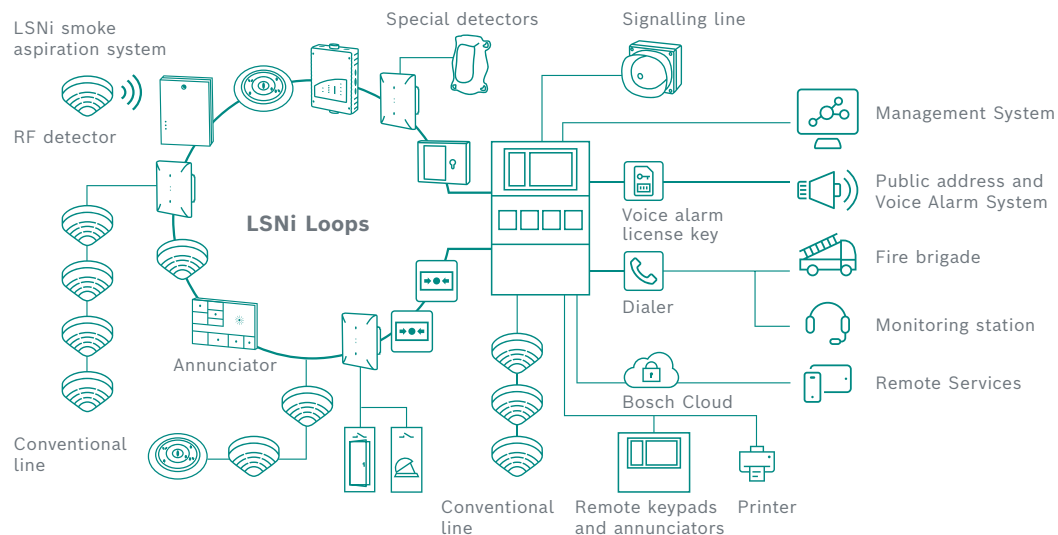
- One cable connects multiple areas
- Can withstand a short or open circuit at any point in the loop and all devices still function

- High security against tamper

- Easy operation
- Way of address setting can be chosen depending on the requirement on the site

- Cost efficient installation, additional security

- Cost efficient and time saving



LSNi Peripherals

Fire Detectors

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AVENAR
Heat Detector
FAH-425-T-R

Feature

- Combination of rate of rise and fixed temperature measurement
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- 2-wire device
- Rotary switches for automatic and manual addressing

Benefit

- EMC robustness against invisible disturbance values
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- 360° alarm LED: independent from direction of installation



AVENAR
Optical Smoke Detector
FAP-425-O

- Light scattering principle
- Automatic pollution detection
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- Drift compensation
- 2-wire device
- Automatic addressing

- Cost optimized alternative if no manual addressing is needed
- EMC robustness against invisible disturbance values
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- Automatic trouble notification in case of pollution
- 360° alarm LED: independent from direction of installation



AVENAR
Optical Smoke Detector
FAP-425-O-R

- Light scattering principle
- Automatic pollution detection
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- Drift compensation
- 2-wire device
- eSmog feature
- Rotary switches for automatic and manual addressing
- Integrated short-circuit isolaters (according EN54-17)

- EMC robustness against invisible disturbance values
- Long-term stability through drift compensation
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- Automatic trouble notification in case of pollution
- 360° alarm LED: independent from direction of installation
- External base for pre-installation; 100% compatible with the existing Bosch fire range
- Flexible in addressing (manually and automatically)

LSNi Peripherals

Fire Detectors



AVENAR Dual-Optical Smoke Detector **FAP-425-DO-R**

Feature

- High Performance Dual Ray Technology, Infrared and blue LED
- Automatic pollution detection
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- Drift compensation
- 2-wire device
- eSmog feature
- Rotary switches for automatic and manual addressing
- Integrated short-circuit isolaters (according EN54-17)

Benefit

- EMC robustness against invisible disturbance values
- Long-term stability through drift compensation
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- Automatic trouble notification in case of pollution
- 360° alarm LED: independent from direction of installation
- External base for pre-installation; 100% compatible with the existing Bosch fire range
- Flexible in addressing (manually and automatically)



AVENAR Multisensor Detector Optical, Thermal **FAP-425-OT**

- Combination of light scattering principle, rate of rise and fixed temperature measurement
- Automatic pollution detection
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- Drift compensation
- 2-wire device
- eSmog feature
- Automatic addressing
- Integrated short-circuit isolaters (according EN54-17)

- Cost optimized alternative if no manual addressing is needed
- Multi-criteria detector: Highest robustness against false alarms due to additional temperature sensor
- EMC robustness against invisible disturbance values
- Long-term stability through drift compensation
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- Automatic trouble notification in case of pollution
- 360° alarm LED: independent from direction of installation
- External base for pre-installation; 100% compatible with the existing Bosch fire range



AVENAR Multisensor Detector Optical, Thermal **FAP-425-OT-R**

- Combination of light scattering principle, rate of rise and fixed temperature measurement
- Automatic pollution detection
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- Drift compensation
- 2-wire device
- eSmog feature
- Rotary switches for automatic and manual addressing
- Integrated short-circuit isolaters (according EN54-17)

- Multi-criteria detector: Highest robustness against false alarms due to additional temperature sensor
- EMC robustness against invisible disturbance values
- Long-term stability through drift compensation
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- Automatic trouble notification in case of pollution
- 360° alarm LED: independent from direction of installation
- External base for pre-installation; 100% compatible with the existing Bosch fire range
- Flexible in addressing (manually and automatically)

LSNi Peripherals

Fire Detectors



AVENAR Multisensor Detector
Dual-Optical, Thermal
FAP-425-DOT-R

Feature

- High Performance Dual Ray Technology, Infrared and blue LED in combination with rate of rise and fixed temperature measurement
- Automatic pollution detection
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- Drift compensation
- 2-wire device
- eSmog feature
- Rotary switches for automatic and manual addressing
- Integrated short-circuit isolaters (according EN54-17)

Benefit

- Multi-criteria detector: Highest robustness against false alarms due to additional temperature sensor
- EMC robustness against invisible disturbance values
- Long-term stability through drift compensation
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- Automatic trouble notification in case of pollution
- 360° alarm LED: independent from direction of installation
- External base for pre-installation; 100% compatible with the existing Bosch fire range
- Flexible in addressing (manually and automatically)



AVENAR Multisensor Detector
Dual-Optical, Thermal, Chemical
FAP-425-DOTC-R

- High Performance Dual Ray Technology, Infrared and blue LED in combination with rate of rise and fixed temperature measurement as well as gas detection
- Automatic pollution detection
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- Drift compensation
- 2-wire device
- eSmog feature
- Rotary switches for automatic and manual addressing
- Integrated short-circuit isolaters (according EN54-17)

- Multi-criteria detector: Highest robustness against false alarms due to additional temperature sensor and CO sensor
- EMC robustness against invisible disturbance values
- Long-term stability through drift compensation
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- Automatic trouble notification in case of pollution
- 360° alarm LED: independent from direction of installation
- External base for pre-installation; 100% compatible with the existing Bosch fire range
- Flexible in addressing (manually and automatically)



AVENAR Multisensor Detector
Dual-Optical, Thermal, Chemical
FAP-425-DOTCO-R

- High Performance Dual Ray Technology, Infrared and blue LED in combination with rate of rise and fixed temperature measurement as well as gas detection and alarming
- Automatic pollution detection
- Self-monitoring sensor: Ready for self-supervision according to VdS 3860
- 360° alarm LED visible from any direction
- Drift compensation
- 2-wire device
- eSmog feature
- Rotary switches for automatic and manual addressing
- Integrated short-circuit isolaters (according EN54-17)

- Cost optimized through detector life-time extension
- Multi-criteria detector: Highest robustness against false alarms due to additional temperature sensor and CO sensor
- EMC robustness against invisible disturbance values
- CO sensors react promptly to smouldering and are more suitable for applications with dust, steam, cooking vapours
- Long-term stability through drift compensation
- Extended Remote Service and maintenance offering
- Increased safety by automatic self-supervision; less interruptions to maintenance operations
- Automatic trouble notification in case of pollution
- 360° alarm LED: independent from direction of installation
- External base for pre-installation; 100% compatible with the existing Bosch fire range
- Flexible in addressing (manually and automatically)

LSNi Peripherals

Fire Detectors



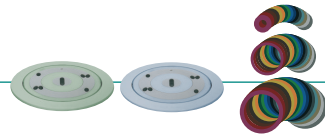
Smoke Detector FAP-OC 520

Feature

- Light scattering principle in a virtual chamber
- Multi-sensor detection in a combination of combustion gas and scattered-light sensor
- Central alarm LED visible from any direction
- 2-wire device
- Integrated short-circuit isolators

Benefit

- Almost invisible design
- Suitable solution for architectural challenging designs
- Cleaned in 5 seconds, daily cleaning possible
- No pollution risk, enhanced operational security
- Cost effective solution for expansion of existing installations
- High stability against disturbance values



Smoke Detector FAP-OC 520-P

- Light scattering principle in a virtual chamber
- Multi-sensor detection in a combination of combustion gas and scattered-light sensor
- Color rings can be fitted into the detector to adapt to the ceiling
- Central alarm LED visible from any direction
- 2-wire device
- Integrated short-circuit isolators

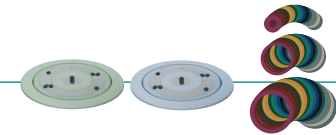
- Almost invisible design
- Suitable solution for architectural challenging designs
- Cleaned in 5 seconds, daily cleaning possible
- No pollution risk, enhanced operational security
- Cost effective solution for expansion of existing installations
- High stability against disturbance values



Smoke Detector FAP-O 520

- Light scattering principle in a virtual chamber
- Central alarm LED visible from any direction
- 2-wire device
- Integrated short-circuit isolators

- Almost invisible design
- Suitable solution for architectural challenging designs
- Cleaned in 5 seconds, daily cleaning possible
- No pollution risk, enhanced operational security
- Cost effective solution for expansion of existing installations



Smoke Detector FAP-O 520-P

- Light scattering principle in a virtual chamber
- Color rings can be fitted into the detector to adapt to the ceiling
- Central alarm LED visible from any direction
- 2-wire device
- Integrated short-circuit isolators

- Almost invisible design
- Suitable solution for architectural challenging designs
- Cleaned in 5 seconds, daily cleaning possible
- No pollution risk, enhanced operational security
- Cost effective solution for expansion of existing installations

LSNi Peripherals

Fire Detectors

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Duct Detector
FAD-425-O-R and FAD-HS 420 EN

Feature

- Use in ventilation systems with air velocities from 1m/s to 20m/s
- For the activation of fans, door controls or external display devices an optional relay board can be installed
- A clear section on the frosted cover allows to view alarm LED of integrated FAD-425-O-R detector
- Tamper control
- 2-wire device

Benefit

- Easy installation in air ducts
- Allows smoke detection in demanding environments



Aspirating Smoke Detector
FAS-420-TM

- Display sensitivity can be set to 0.05 %/m light oscuration
- RoomIdent – fire localization
- 10 level smoke density display
- Innovative air flow sensor technology
- High Power Light Source
- 4-wire device
- Max. 8 aspiration openings and 40 m or 2x25 m pipe length
- 3 versions available:
 - FAS-420-TM: Standard aspirating smoke detector
 - FAS-420-TM-R: with RoomIdent up to 5 rooms
 - FAS-420-TM-RVB: with RoomIdent and bar graph

- Very early smoke detection
- Minimalization of false alarms
- Easy maintenance and service
- Up to 5 rooms can be individually monitored



Aspirating Smoke Detector
FAS-420-TP

- Display sensitivity can be set to 0.015 %/m light oscuration
- 2 detector modules possible
- Innovative air flow sensor technology
- High Power Light Source
- 4-wire device
- Max. 32 aspiration openings per pipe system and
 - TP1: 300m;
 - TP2: 560m (2x280m) pipe length
- Also available as silent version

- Very early smoke detection
- Minimalization of false alarms
- Easy maintenance and service
- 2-detector-dependency possible



Aspirating Smoke Detector
FAS-420-TT

- Display sensitivity can be set to 0.0015 %/m light oscuration
- 2 detector modules possible
- Innovative air flow sensor technology
- High Power Light Source
- 4-wire device
- Max. 32 aspiration openings per pipe system and
 - TT1: 300m;
 - TT2: 560m (2x280m) pipe length
- Differentiated alarm indications

- Very early smoke detection
- Minimalization of false alarms
- Easy maintenance and service
- 2-detector-dependency possible

AVENAR All-in-One 4000

Optical and Acoustical Alarm Device



White housing, white flash
FNX-425U-WFWH



White housing, red flash
FNX-425U-RFWH



Red housing, white flash
FNX-425U-WFRD



Red housing, red flash
FNX-425U-RFRD



Battery Pack
FNX-425U-BAT



Cover red
FNX-425U-COVRD



Cover white
FNX-425U-COVWH

Benefit

- 1. Reduced cost by optimized installation + maintenance time**
 - Patent-registered power concept allows up to 125 products per loop
 - One combined device instead of three single ones optimizes installation time and saves space
 - Easy and cost-efficient installation + extension due to high UX focus
 - Decreased installation cost thanks to easy pre-mounting of the base (plug terminals, one-hand assembly, identification feature for screwing in)
- 2. Smart energy concept - 100% effective alarming in case of complete power cut (uninterruptible)**
 - Acoustical and optical warning also during complete power cut
 - Eliminates E-30 wiring requirement
 - Battery life-time up to 10 years
- 3. High degree of flexibility for different use cases**
 - Mountable on ceiling or wall
 - IP 41 class
 - Maximum flexibility for different application areas due to three intensity levels (certified according to EN54-3 and EN54-23)
 - Replacement of detector head alone is possible

Compatible with all fire detectors of the AVENAR 4000 series



LSNi Peripherals

Manual Call Points

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Manual Call Point
FMC-210 DM/SM

Feature

- Different colors available
- Single and double action
- Indoor and outdoor versions
- 2-wire device
- With glass pane
- Alarm LED visible from any direction
- Integrated short-circuit isolators
- Surface mounting possible

Benefit

- LED display for triggered alarm or inspection evaluation
- Can be used for fire & other types of manual alarms
- Individual call point identification
- Good reliability and flexible applications



Manual Call Point
FMC-420RW

- Different colors available
- Resettable or with glass pane
- Single-action call point
- Indoor version
- 2-wire device
- Alarm LED visible from any direction
- Integrated short-circuit isolators
- Surface mounting possible

- LED display for triggered alarm or inspection evaluation
- Can be used for fire & other types of manual alarms
- Individual call point identification
- Good reliability and flexible applications
- Resettable version: Easy reset via reset key
- Glass version: Protection against injury through foil-labeled glass pane



Manual Call Point Outdoor
FMC-420RW

- Red color
- Resettable or with glass pane
- Single-action call point
- Outdoor version
- 2-wire device
- Alarm LED visible from any direction
- Integrated short-circuit isolators
- Surface mounting possible

- LED display for triggered alarm or inspection evaluation
- Can be used for fire & other types of manual alarms
- Individual call point identification
- Good reliability and flexible applications
- Resettable version: Easy reset via reset key
- Glass version: Protection against injury through foil-labeled glass pane

LSNi Peripherals Signaling Devices



Base Sounder
FNM-420-A-BS-WH / FNM-420-A-BS-RD
FNM-420U-A-BSWH* / FNM-420U-A-BSRD*

Feature

- 2 types: red and white
- 90 dB with current < 5 mA
- Constant sound pressure level in case of voltage drop
- Immediate and instant synchronization
- 32 tones
- 5 sound pressure levels
- Combination with detector/Beacon
- Integrated short-circuit isolators

* Inbuilt high-output power sources

Benefit

- Simplified planning of fire alarm systems > 50 sounders per loop
- Constant sound pressure level ensures reliable notification
- European tones covered
- Easy fitting with pre-installed mounting plate, available also for surface mounted cabling
- Low current consumption for cost-effective solutions
- Reduced costs by mounting detector or beacon into base sounder
- Combination with detector saves extra cabling
- Immediate synchronization
- Functional even during power cuts
- Easy installation



Stand-alone Sounder Indoor
FNM-420-A-WH / FNM-420U-A-RD*
FNM-420U-A- WH* / FNM-420U-A-RD*

- 2 types: red and white
- 100 dB with current < 5 mA
- Constant sound pressure level in case of voltage drop
- Immediate and instant synchronization
- 32 tones
- 5 sound pressure levels
- Integrated short-circuit isolators

* Inbuilt high-output power sources

- Simplified planning of fire alarm systems > 50 sounders per loop
- Very high, consistent sound pressure level at low power
- Constant sound pressure level ensures reliable notification
- European tones covered
- Easy installation (comfortable back box with knock-outs and space for cabling)
- Functional even during power cuts
- Very robust design



Stand-alone Sounder Outdoor
FNM-420-B-RD
FNM-420U-B-RD*

- Red colour only
- Outdoor type with IP66
- 100 dB with current < 5mA
- Constant sound pressure level in case of voltage drop
- Immediate and instant synchronization
- 32 tones
- 5 sound pressure levels
- Integrated short-circuit isolators

* Inbuilt high-output power sources

- Simplified planning of fire alarm systems > 50 sounders per loop
- Very high, consistent sound pressure level at low power
- Constant sound pressure level ensures reliable notification
- European tones covered
- Easy installation (comfortable back box with knock-outs and space for cabling)
- Functional even during power cuts
- Very robust (weather-proof) design

LSNi Peripherals Signaling Devices



Stand-alone
Voice Sounder Indoor
FNM-420V-A-WH / FNM-420V-A-RD

Feature

- 2 types: red and white
- Constant sound pressure level in case of voltage drop
- Synchronization of sounders
- 32 tones, 7 languages
- 5 sound pressure levels
- Integrated short-circuit isolators
- Can be operated with an industrial, high performance power source
- Individually programmable with configuration software

Benefit

- Very high, consistent sound pressure level at low power
- Constant sound pressure level ensures reliable notification
- European tones covered
- Easy installation (comfortable back box with knock-outs and space for cabling)
- Very robust design
- Functional even during power cuts
- Individual or additional languages can be added



Strobe
FNS-420-R

- Addressable strobe
- Freely configurable
- Combination with detector base or with LSN base sounder
- Low current consumption of 6 mA
- Maximum light at 1 Hz frequency for high level of visibility
- 2-wire device
- Alarm LED visible from any direction
- Integrated short-circuit isolators

- Synchronized flash rate 1 Hz
- Low current consumption allows connection of a large number of peripheral elements
- Quick installation

LSNi Peripherals Interface Modules

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**Input Interface Module
FLM-420-I2**

Feature

- 2 monitored inputs
- Available as in-built, wall-mount and DIN-rail version
- Contact or voltage monitoring
- Line monitoring with use of EOL resistor
- 2-wire device

Benefit

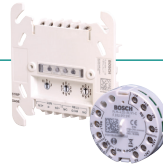
- Allows integration with technical alarms (e.g. freezer, air condition)
- The various monitoring types ensure customized applications



**Conventional Interface
Module
FLM-420/4-CON**

- 2 fire zones class B or 1 fire zone class A
- Available as wall-mount and DIN-rail version
- 200mA max. supply current per Aux-output
- switchable Aux for resetting 4-wire detectors
- 4-wire device

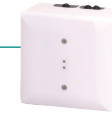
- One class A or two class B zone
- Provides integration of conventional fire alarm periphery into LSN systems
- Compatible with 2- and 4-wire detectors
- Can be used with a wide range of conventional detectors



**Relay Interface Module
Low Voltage
FLM-420-RLV1**

- 1 low voltage relay 30V/1A
- LSN improved version
- Available as in-built, wall-mount and DIN-rail version
- 2-wire device

- Control of external applications



**Relay Interface Module
High Voltage
FLM-420-RHV**

- 2 high voltage relays (240V/10A)
- 2 supervised feedback lines
- Available as surface mount and DIN-rail version
- 2-wire device

- Supervision and control of external applications e.g. extinguishing systems



**Signalling Device Interface
Module
FLM-420-NAC**

- 1 supervised output line reversed polarity with up to 3A
- Available as surface mount and DIN-rail version
- 4-wire device

- Supervised control of signalling devices
- Easy monitoring and activating of signalling devices

LSNi Peripherals Interface Modules



**Short Circuit Isolator
FLM-I 420**

Feature

- Isolation of short circuits on LSN-Line
- 2-wire device

Benefit

- Isolator for T-tap-systems
- Functionality of the remaining network is preserved



**Octo-relay Interface
Module Low Voltage
FLM-420-RLV8-S**

- Eight change-over contact relays provide potential-free contact outputs
- Maximum switching capacity of the relays 2A / 30VDC
- 2-wire device

- Easy wiring by pluggable terminal block
- Control of technical LED-tableaus



**Octo-Output Interface
Module with 2 Inputs
FLM-420-O8I2-S**

- Eight individually switchable open collector outputs
- Max. switchable current per output 700mA
- Outputs electrically isolated from LSN loop and short circuit proof
- Individually selectable monitoring functions (EOL or contact) for the two inputs each
- 2-wire device

- Easy wiring by pluggable terminal block
- Control of technical LED-tableaus



**Octo-Input Interface
Module with Relay
FLM-420-I8R1-S**

- Individually selectable monitoring functions (EOL or contact) for each of the 8 inputs
- Maximum switching capacity 2A/30VDC
- 2-wire device

- Easy wiring by pluggable terminal blocks
- Integration of technical alarms



**Interface Module
FLM-420-RLE-S**

- 1 low voltage relay (30 V, 1 A)
- 2 supervised input lines
- 1 input line programmable as relay feedback
- Conformity to VdS 2496: 2005

- Supervision and control of external applications, e.g. extinguishing systems
- Delivered with housing for surface mounting
- DIN-rail mountable



**Output-Input
Interface Modules
FLM-420-O1I1**

- Max. switchable current per output 700 mA
- Individually selectable input monitoring functions (EOL, contact or voltage)
- 2-wire device

- Available as in-built and DIN-rail version
- Control of external devices

LSNi Peripherals

Radio Detectors and Remote Indicators

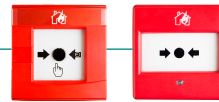
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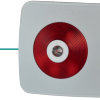
**Radio Gateway
FWI-270**



**Radio fire detector
FDOOT271-O**



**Radio Manual Call Point
FDM275-O, FDM273-O**



**Remote Indicator
FAA-420-RI-DIN**



**Remote Indicator
FAA-420-RI-ROW**

Feature

- Multihop mesh technology
- High transmission reliability thanks to the use of independent communication paths - transmission takes place via at least two communication paths
- Long range thanks to radio transmission via up to two intermediate stations
- Low power consumption

- Battery-powered radio fire detector
- Sophisticated opto-electronic measuring chamber with two optical transmitters, an optical receiver and two thermal sensors
- Use purely as optical smoke detector or purely as a heat detector
- Combination of optical and thermal sensor signals
- Optimizes detection reliability

- Switching unit includes radio electronics and dual-band antenna
- FDM275-O
 - Direct alarm activation by pressing plastic insert
- FDM273-O
 - Indirect alarm activation by smashing glass insert and pressing alarm button

- 60° view, for both wall mount and ceiling mount
- Easy plug in installation
- Easy cabling thanks to cable ties bracket and all direction knock-out holes
- Long life and robust construction housing
- Efficient LED
- VdS approved

- 360° view, for both wall mount and ceiling mount
- Easy cabling thanks to cable ties bracket and all direction knock-out holes
- Long life and robust construction housing
- Efficient LED
- Available for addressable and conventional application

Benefit

- Easy expansion of existing fire alarm systems
- High transmission and functional security
- Outstanding interference immunity
- High communication reliability due to redundant transmission paths and to a dual band (433MHz,868MHz)

- Easy extension of existing fire alarm systems without additional wiring

- Easy extension of existing fire alarm systems without additional wiring

- Parallel indication for detectors in false ceilings
- Mounting in corridors or access pathways

- Parallel indication for detectors in false ceilings
- Mounting in corridors or access pathways
- Cost-efficient solution

Conventional Peripherals

Fire Detectors



Optical Smoke Detector
FCP-O320



Multisensor Detector
FCP-OT320



Thermal Detector
FCH-T320



Multisensor Detector
FCP-OC320

Feature

- Light scattering principle
- Drift compensation
- Automatic pollution detection
- System-independent device (8.5V - 30V DC)
- 2-wire device
- Self-monitoring sensor

- Combination of light scattering principle, rate of rise and fixed temperature measurement
- Drift compensation
- Automatic pollution detection
- System-independent device (8.5V - 30V DC)
- 2-wire device
- Self-monitoring sensor

- Combination of rate of rise and fixed temperature measurement
- System-independent device (8.5V - 30V DC)
- 2-wire device
- Self-monitoring sensor

- Combination of light scattering principle as well as combustion gas detection
- Drift compensation
- Automatic pollution detection
- System-independent device (8.5V - 30V DC)
- 2-wire device
- Self-monitoring sensor

Benefit

- Cost optimized
- Low false alarm rate
- Drift compensation for long term stability
- Cost effective solution for expansion of existing installations

- Cost optimized
- Additional robustness against false alarm due to additional temperature sensor
- Drift compensation for long term stability
- Cost effective solution for expansion of existing installations
- Covers many detection applications

- Cost optimized
- Suitable for smoking lounges and very dusty areas
- Combination of fixed temperature and rate-of-rise algorithm for low false alarm rates
- Cost effective solution for expansion of existing installations

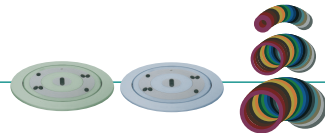
- Cost optimized
- Additional robustness against false alarm due to additional carbon monoxide sensor
- Drift compensation for long term stability
- Cost effective solution for expansion of existing installations

Conventional Peripherals

Fire Detectors



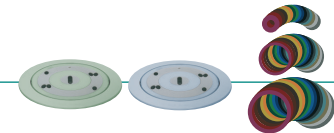
**Multisensor Detector
FCP-OC500**



**Multisensor Detector
FCP-OC500-P**



**Optical Smoke Detector
FCP-O500**



**Optical Smoke Detector
FCP-O500-P**

Feature

- Multi-sensor detection in a combination of combustion gas and scattered light sensor
- Available in white
- Voltage range 8.5-33 V DC
- 4-wire device
- Self-monitoring sensor

- Light scattering principle in a virtual chamber in combination with combustion gas detection
- Color rings can be fitted into the detector to match the ceiling
- Voltage range 8.5-33 V DC
- 4-wire device
- Self-monitoring sensor

- Light scattering principle in a virtual chamber
- Available in white
- Voltage range 8.5-33 V DC
- 4-wire device
- Self-monitoring sensor

- Scattered-light measurement in a virtual chamber
- Color rings can be fitted into the detector to match the ceiling
- Voltage range 8.5-33 V DC
- 4-wire device
- Self-monitoring sensor

Benefit

- Almost invisible design
- Suitable solution for architectural challenging designs
- Cleaned in 5 seconds, daily cleaning possible
- No pollution risk, enhanced operational security
- Cost effective solution for expansion of existing installations

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Conventional Peripherals

Manual Call Points



Manual Call Point
FMC-300RW

Feature

- Different colors available
- Resettable or with glass pane
- Single-action call point
- Indoor version
- 2-wire device
- Alarm LED visible from any direction
- Surface mounting possible

Benefit

- LED display for triggered alarm or inspection evaluation
- Can be used for fire & other types of manual alarms
- Good reliability and flexible applications
- Resettable version: Easy reset via reset key
- Glas version: Protection against injury through foil-labeled glass pane



Manual Call Point
FMC-120-DKM

- Different colors available
- Double action
- Indoor and outdoor versions
- 2-wire device
- With glass pane
- Alarm LED visible from any direction
- Integrated short-circuit isolators
- Surface mounting possible

- LED display for triggered alarm or inspection evaluation
- Can be used for fire & other types of manual alarms
- Good reliability and flexible applications

Conventional Peripherals Signaling Devices



Beacons Conventional
SOL-LX-C /SOL-LX-W

Feature

- Available in red and white
- Available with red and white flash colors
- For wall or ceiling applications
- Up to 7.5 m coverage
- Flash rate switch: 0,5 Hz or 1 Hz
- Low current consumption
- LED technology
- Indoor and Outdoor
- EN54 approved

Benefit

- Good reliability and long service life
- Flexibility in system design
- Reduced power consumption by up to 50% because of coverage and flash rate switch
- Unique lens design for optimal light dispersal, minimizing power wastage
- Can be used in adverse environmental conditions



Sounder Beacons Conventional
ROLP-W-LX

- Available in red and white
- Available with red and white flash colors
- For wall applications
- Up to 7.5 m coverage
- Flash rate switch: 0,5 Hz or 1 Hz
- 32 tone variants via DIP-switch
- Low current consumption
- EN54 and EN54-3 approved

- Good reliability and long service life
- Flexibility in system design
- Reduced power consumption by up to 50% because of coverage and flash rate switch
- Unique lens design for optimal light dispersal, minimizing power wastage
- Can be used in adverse environmental conditions



Strobe
FNS-320

- Different colors available
- Flash rate of once per second with a frequency of 1 Hz
- Xenon bulb
- For operating voltage 9 V DC to 30V DC
- Suitable for indoor and outdoor use (-20°C to +70°C)

- Good reliability and long service life
- High flash performance through the use of xenon flash tubes
- Can be used in adverse environmental conditions

Conventional Peripherals Signaling Devices



Sounder with LED
FNM-320-LEDSRD



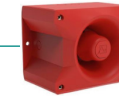
Strobe red/white flash
PYX-M10-SSM



Sounder
FNM-320



Base Sounder **MSS 300**
Base Sounder Stand
Alone **MSS 300-SA**



Sounder
PA 5 - 107 dB (A)



Sounder
**PA10 SSM -
117 dB (A)e**

Feature

- Sounder Red with LED
- Light output > 0.5 cd
- Flash rate 1 Hz
- With sound transducer and integrated LED
- Surface mounting possible

- Industrial signaling devices for indoor and outdoor usage (IP66) and up to -40°C
- Devices fulfilling EN54-23 standards with light intensity up to 149cd

- Volume up to 112 dB(A)
- For 12 V DC and 24 V DC
- 32 tone variants via DIP-switch
- Simple mounting via bayonet lock
- Surface mounting and flush mounting possible

- 11 different tones
- Volume control via DIP-switch and potentiometre up to 100 dB
- Max. current consumption 20 mA

- Industrial signaling devices for indoor and outdoor usage (IP66) and up to -40°C
- Devices fulfilling EN54-3 standards with high sound-pressure level up to 107dB(A), 80 tones, inrush current reduction with SSM

- Industrial signaling devices for indoor and outdoor usage (IP66) and up to -40°C
- Devices fulfilling EN54-3 standards with high sound-pressure level up to 117dB(A), 80 tones, inrush current reduction with SSM

Benefit

- Compact, robust and maintenance-free
- Good reliability and long service life
- Can be used in adverse environmental conditions
- Combined optical and acoustical signalling device

- Light intensity up to 149cd (USP), light scope up to 22.5m, mounting height up to 10m
- High IK rating of 08, vandalism safe, -40C temp the devices can be perfectly mounted in frost rooms, IP 66 rating for indoor and outdoor, REVIT files available for BIM ; listed in Europe at automotive industry therefore easy sales entry

- One class A or two class B zone
- Provides integration of conventional fire alarm periphery into LSN systems
- Compatible with 2- and 4-wire detectors
- Can be used with a wide range of conventional detectors

- Combination with detector saves extra cabling
- Independent signalling combined with high reliability and long durability

- High IK rating of 08, vandalism safe, -40C temp the devices can be perfectly mounted in frost rooms, high IP rating of 66 makes it possible to use it indoor and outdoor, REVIT files available for BIM ; listed in Europe at automotive industry therefore easy sales entry
- Power consumption: 38 mA (@ 24 V / DIN-Tone)

- High IK rating of 08, vandalism safe, -40C temp the devices can be perfectly mounted in frost rooms, high IP rating of 66 makes it possible to use it indoor and outdoor, REVIT files available for BIM ; listed in Europe at automotive industry therefore easy sales entry
- Power consumption: 282 mA (@ 24 V / DIN-Tone)

Conventional Peripherals

Special Detectors



Flame Detector IR3

Feature

- Class 1 sensitivity according to EN 54-10 detects 0.1m² flames at 25m
- Low risk of false alarms due to different IR wavelengths and a combination of filters and signal processing techniques
- Reliable operation, even if the lens is contaminated by a layer of oil, dust, water-vapour, or ice
- Selectable response time
- 2-wire or 4-wire configuration via DIP switch settings
- CDP 016589 and VdS G 212189 approved and certified

Benefit

- The response to 0.75 to 2.7 µm light emissions from fires allows the detection of almost all flickering flames
- False alarms due to factors such as flickering sunlight are avoided by a combination of filters and signal processing techniques
- Low-frequency detection enables the sensor to operate through a layer of oil, dust, water-vapour, or ice



IR3 Flame Detector Flameproof Exd

- Suitable for explosive areas of the zones 1, 21, 2 and 22 (ATEX and IECEx certified)
- Class 1 sensitivity acc. to EN 54-10 detects 0.1m² flames at 25m
- Low risk of false alarms due to different IR wavelengths and a combination of filters and signal processing techniques
- Reliable operation, even if the lens is contaminated by a layer of oil, dust, water-vapour, or ice
- Selectable response time
- CPD 016519 and VdS G 212189 approved and certified

- The response to 0.75 to 2.7 µm light emissions from fires allows the detection of almost all flickering flames
- False alarms due to factors such as flickering sunlight are avoided by a combination of filters and signal processing techniques
- Low-frequency detection enables the sensor to operate through a layer of oil, dust, water-vapour, or ice

Conventional Peripherals

Special Detectors



**Linear Smoke Detector with self-alignment
Fireray 5000-EN**



**Linear beam, standalone reflective
FRAY-ONE-EN**



**Linear Smoke Detector
Fireray 3000**



**Linear Heat Detector VdS
FCS-LHD-2EN**

Feature

- Integral LASER alignment aid
- Automatic contamination compensation
- AutoOptimize beam alignment
- Building shift compensation
- Adjustable alarm threshold
- Minimum distance 5m, maximum distance 100m
- EN 54-12 approved
- UL approved
- Second beam path possible

- Standalone product with integrated control unit
- Auto-Alignment with motorized detector head
- Light Cancellation Technology
- Building Movement Tracking
- Detection range up to 120m

- Extended monitoring area
- Separate transmitter and receiver
- Evaluation unit integrated into a compact housing
- Integral LASER alignment aid
- 2nd beam path possible
- Adjustable alarm thresholds
- Minimum distance 2m
- Maximum distance 120m

- VdS certified Linear Heat system covering distances up to 500 meter
- Price competitive solution for small to medium applications like car-parks
- Built-in LCD display for easy installation and commissioning without additional toolset

Benefit

- Cost effective
- Ground level system controller on eye level provides cost-savings through easy installation and maintenance
- Up to 2 detector heads connectable
- Drift compensation
- AutoOptimize beam alignment

- Easy to mount and cost-effective
- Suitable for use in areas where point-type detectors are not effective

- Good applicability for any kind of ceilings
- Accommodates high installation heights
- Can be used in applications with reflections (e.g. glass ceilings, pool areas)

- Applicable in constricted spaces and different types of sensor cables allow to install in extreme environmental conditions
- VdS approved based on EN54-22 for class settings A1I, A2I and BI
- Alarm detection with rate-of-rise detection and fixed heat alarm
- IP65 protected linear heat detector unit

Conventional Peripherals

Special Detectors



Conventional Aspirating
Smoke Detectors
FCS-320-TP Series

Feature

- Connectable to conventional fire panels
- 4-wire conventional device
- High power light source
- Max. 8 aspiration openings and 40m or 2x25m pipe length

Benefit

- Very early smoke detection
- Minimization of false alarms
- Easy maintenance and service
- Up to 5 rooms can be individually monitored



Conventional Aspirating
Smoke Detectors
FCS-320-TM Series

- Connectable to conventional fire panels
- 4-wire conventional device
- Innovative air flow
- High power light source
- Max. 32 aspiration openings per pipe system and TP1: 300m; TP2: 560m (2x280m) pipe length

- Very early smoke detection
- Minimization of false alarms
- Easy maintenance and service
- 2-detector-dependency possible



AVIOTEC 8000i IR
FCS-8000-VFD-I

- Video based flame and smoke detection
- Detection range: up to 300m (dependent on used lens)
- Video surveillance and fire detection combined in one single product
- One product solution: no accessories needed, camera, lens, IR illumination and IP67 protection all included

- Very fast flame and smoke detection regardless of installation height
- Video fire detection works in changing weather and light conditions (indoor and outdoor)
- Outdoor fire detection close to buildings where practically no other detection technology is available
- Artificial intelligence-based algorithm reduces unwanted alarms
- 4+ Megapixel picture resolution for improved picture quality on market level