

# Sinteso – FDnet devices

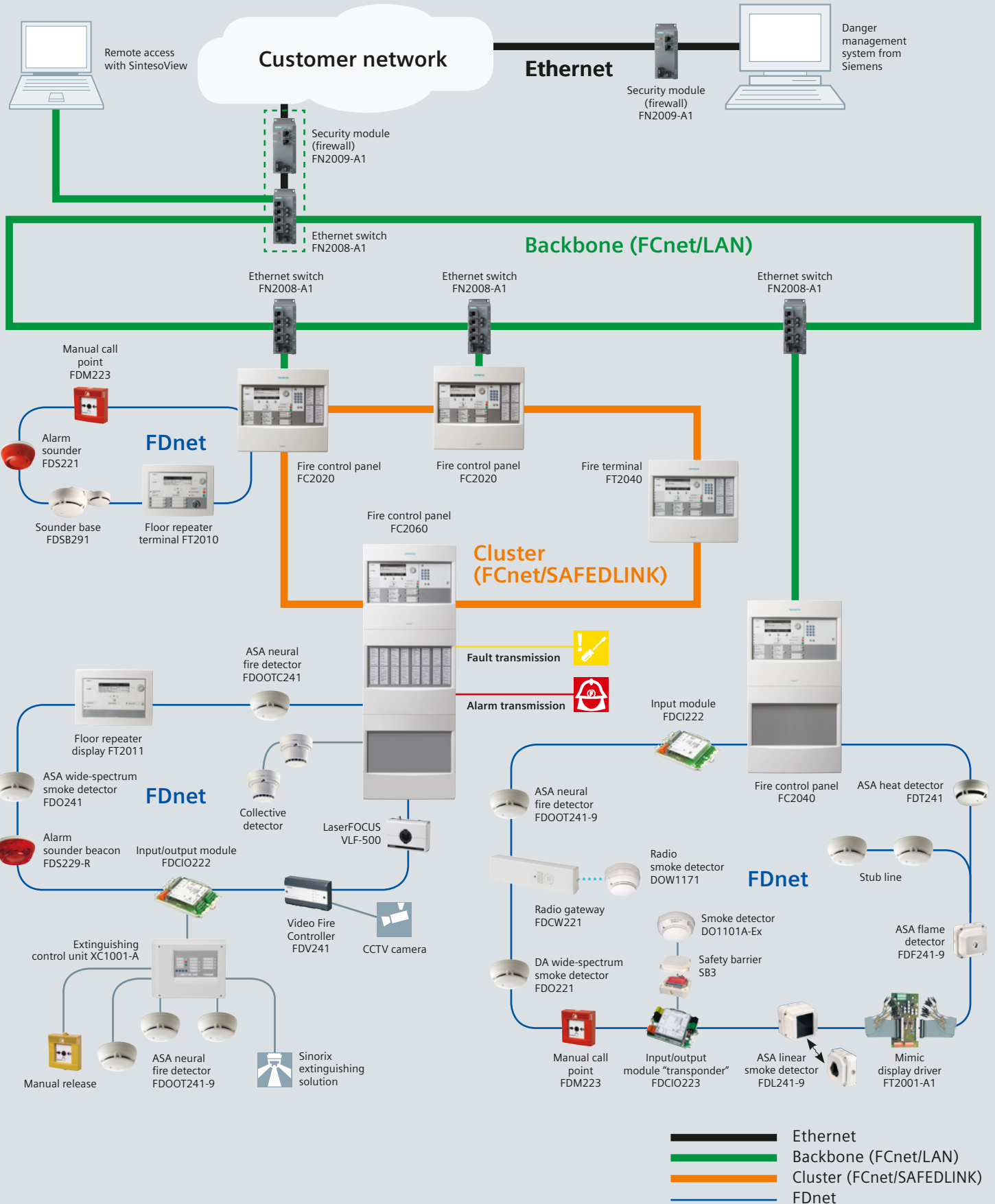
Planning Tool



Answers for infrastructure.

**SIEMENS**

# Your system for fire detection, alarming, and control: Sinteso



## Compatibility overview: detector mechanics

Detectors, alarm sounders, accessories		Housings and mounting feet		
		FDB221	FDB222	FDB221-AA
		Detector base with stand-offs	Detector base flat	Detector base with stand-offs and micro terminal
<b>Detectors<sup>1)</sup></b>				
FDT221/241	DA heat detector ASA heat detector	✓	✓	✓
FDO221/241	DA wide-spectrum smoke detector ASA wide-spectrum smoke detector	✓	✓	✓
FDOOT221	DA neural fire detector	✓	✓	✓
FDOOT241-9	ASA neural fire detector, used as collective detector or as Sinteso detector on the FDnet	✓	✓	✓
FDOOT241-8	ASA neural fire detector, used in the MS8 detector system or as Sinteso detector on the FDnet	✓	✓	✓
FDOOTC241	ASA neural fire detector with CO sensor	✓	✓	✓
<b>Alarm sounders</b>				
FDS221-X	Alarm sounder, red or white	✓	✓	✓
FDS229-X	Alarm sounder beacon, red or orange	✓	✓	✓
<b>Accessories</b>				
FDBZ293	Detector locking device against theft	✓	✓	✓
DBZ1190-AA	Micro terminals, for wire strengths of 0.28 mm <sup>2</sup> to 0.5 mm <sup>2</sup>	✓	✓	✓
DBZ1190-AB	Connection terminals, for wire strengths of 1.0 mm <sup>2</sup> to 2.5 mm <sup>2</sup>	✓	✓	✓
FDBZ291 <sup>2)</sup>	Designation plate	✓	✓	✓
FDBZ295 <sup>2)</sup>	Sealing element	✓	–	✓
FDB293 <sup>3)</sup>	Base attachment wet	✓	✓	✓
FDB291 <sup>4)</sup>	Base attachment for the supply of surface-mounted cables	✓	✓	✓

<sup>1)</sup> Optional: Detector dust cap FDZ291 for protection during construction work, <sup>2)</sup> Designation plate FDBZ291 and sealing element FDBZ295 cannot be used together, <sup>3)</sup> Optional: Protective cage DBZ1194 to protect the detector from damage; EMC protective cage FDBZ294; detector heating FDBH291; designation plate DBZ1193A, <sup>4)</sup> Op

## Compatibility overview: input and input/output module mechanics

Input and input/output modules		Housings and mounting feet		
		FDCH291	FDCH292	FDCH221
		Housing	Housing IP65	Housing IP65
FDCI222	Input module, 4 monitored contact inputs	✓	✓	✓
FDCIO222	Input/output module, 4 monitored contact inputs and 4 control outputs	✓	✓	✓
FDCIO223	Input/output module "transponder", 2 monitored inputs/ outputs that can be either used as detector line, as contact input, control output or as control output with confirmation	✓	✓	✓
FDCIO224	Input/output module, like FDCIO222, but for VdS interface to control an extinguishing system release unit	✓	✓	✓
FDCI221	Input module, 1 monitored contact input	–	–	✓
FDCIO221	Input/output module, 1 monitored contact input, 1 control output	–	–	✓



# Sinteso special detectors

Sinteso™ offers a wide spectrum of detectors for special requirements, such as flame detectors that can distinguish an open fire from artificial light or sunlight; or wireless radio fire detectors that are ideal for historical buildings and museums.

## ASA infrared flame detector FDF241-9, DA infrared flame detector FDF221-9



### Applications

- Power plants
- Hangars
- Warehouses
- Outdoor applications
- Haulage ramps
- Production plants

### Technical details

- Addressable or collective, **ASAtechnology™**
- DA FDF221-9 flame detector for simple inside applications, detection with one infrared sensor and detection algorithms
- ASA FDF241-9 flame detector for most demanding applications (inside and outside), detection with 3 infrared sensors and **ASAtechnology**
- Excellent immunity to false alarms thanks to fuzzy logic and wavelet analysis
- Event-controlled detection behavior
- Microprocessor-controlled signal evaluation
- Two-wire installation for all cable types
- Communication via FDnet (individual addressing) or collective signal processing

## ASA linear smoke detector FDL241-9



### Applications

- Shopping malls
- Halls
- Historical buildings
- Atriums
- Industry
- Churches, theaters

### Technical details

- Addressable or collective, **ASAtechnology**
- Reliable smoke detection in large-volume rooms (inside application)
- Detection distance from 5 – 100 m
- Signal processing with **ASAtechnology**
- Works according to the principle of light attenuation by smoke
- Selectable response behavior, up to 3 sensitivity levels can be selected
- Event-controlled detection behavior
- Transmission of 4 different danger levels to control unit
- Microprocessor-controlled signal evaluation
- Automatic self-test
- Automatic compensation for soiling
- High immunity against extraneous light and electromagnetic influences
- Transmitter and receiver in one housing
- Distance measuring between transmitter and receiver
- Communication via FDnet (individual addressing) or collective signal evaluation

## LaserFOCUS VLF-250, VLF-500



### Applications

- Clean rooms
- Subway stations
- High, open rooms
- Cold storage
- IT and communication systems
- Culturally significant buildings
- Data centers
- Archives

### Technical details

- Addressable (FDnet)
- Out-of-the-box installation and commissioning
- Ultrasonic airflow sensing
- Laser-based, absolute smoke detection
- Special software (ASPIRE 2) supports pipe network designs
- Programmable alarm thresholds
- Two-stage air filtration
- Instant recognition display
- Instant Fault Finder™
- AutoLearn™ Smoke
- AutoLearn™ Flow
- Field service access door
- Multiple event logging in separate logs
- Event log for up to 18 000 events
- Offline/online configuration capability
- Up to 250 m² (2500 sq. ft.) coverage
- Up to 500 m² (5000 sq. ft.) coverage

Ex-hazard applications: automatic fire detectors DT1101A-Ex, DT1102A-Ex, DO1101A-Ex



**Applications**

- Pharmaceutical and chemical industry
- Production plants
- Petrol depots
- Oil refineries
- Oil platforms
- Battery rooms

**Technical details**

- For explosion-hazard area of zones 1 and 2
- High degree of reliability and stability
- High resistance to electromagnetic interference, humidity, and corrosion
- Connection to FDnet via FDCIO223 transponder and safety barrier SB3
- Comprehensive final examination and quality control
- Environmentally safe material: halogen-free plastic material identifiable through embossed code, easy to uninstall and disassemble

Radio fire detection system FDCW221, DOW1171, SMF6120, SMF121



**Applications**

- Historical buildings
- Museums
- Churches
- Libraries
- Industrial rooms with changed usage
- Office rooms with changed floor plan

**Technical details**

- Addressable (FDnet)
- Complete integration in Sinteso fire detection system
- Simultaneous operation of wired and wireless fire detectors
- High transmission reliability ( e.g. automatic definition of optimum basic and backup radio channels), automatic change of channel (up to 4 alternative channels) in the event of radio interference, bi-directional data traffic in SRD band, 2 integrated antennae (antenna diversity), communication failures are recognized in max. 100 s, alarms and radio interruptions will immediately be transmitted
- Individual detector addressing for easy identification of location
- Up to 16 radio gateways with crossover of radio cells
- Up to 30 radio detectors (smoke detectors and manual call points) can be connected to each radio gateway
- 2 external alarm indicators can be connected to each radio gateway
- Long battery service life > 5 years

# Highlights for alarming

More safety and security thanks to intelligent FDnet devices: with the floor repeater terminal, floor repeater display, and the video fire controller, Sinteso supports reliable alarming as well as alarm and event verification on site.

## Floor repeater terminal FT2010, floor repeater display FT2011



### Applications

- Single wards in a hospital
- Hotel floors
- Shopping malls
- Nursing homes

### Technical details

- Floor repeater display and operating units for the addressable Sinteso fire detection system
- Quick overview on floor level, can display messages from entire system
- Communication via FDnet (individual addressing); safeguarded through integrated turbo isolators as well as loop installation in case of a short circuit or line interruption
- Power supply via FDnet (less cabling), additional 24 V power supply possible
- Flexible usage of floor repeater terminals on entire FDnet, installation at a later point in time possible
- Two-wire installation for all types of cable
- Large backlit display with configurable plain text readout (6 lines of 40 characters each)
- Customer-specific text display possible
- Same message layout as with the fire control panel
- 6 freely configurable function keys
- Sabotage security through key
- Up to 8 floor repeater terminals and floor repeater displays can be connected to FC2020
- Up to 16 floor repeater terminals and floor repeater displays can be connected to FC2040
- Up to 50 floor repeater terminals and floor repeater displays can be connected to FC2060
- Design matches all FC20xx fire control panels and FT2040 fire terminals
- Flat, elegant housing

## Video fire controller FDV241



### Applications

- For alarm analysis, live event verification, and situation evaluation using live images, e.g. in inaccessible areas (security laboratories, underground plants etc.), shopping malls, airports, nursing homes, schools, prisons, youth hostels etc.
- For later analysis of alarms and events such as arson, sabotage, vandalism on the basis of recorded film footage

### Technical details

- Addressable (FDnet)
- Video fire controller for the addressable Sinteso fire detection system for monitoring and recording of alarms and events
- Configuration of video fire controller to control the detectors at the control panel
- Status indication via LEDs
- Two-wire installation for all types of cable
- Integrated line isolator
- External 24 V power supply required
- Mounting in intermediate distribution frame or in a third-party housing adaptable to U-rail
- Local storage on compact flash card with pre- and post-alarm recording
- Can be connected with CCTV via coaxial cable or Ethernet for live picture transmission and live event evaluation
- Faults at video fire controller or connected camera transmitted to control panel
- VdS approved

# Sinteso Planning Tool – FDnet devices

Answers for infrastructure.



### Sinteso™ control panels

Sinteso fire control panels (FC200; FC204; FC206) (for further details see also the Sinteso Planning Tool – control panels, network, and accessories)

**FCnet**

### Sinteso S-LINE fire detectors

With its combination of innovative sensor technology and unique ASA technology, the Sinteso S-LINE for sophisticated applications provides unsurpassed detection security and equal sensitivity to all types of fire, while simultaneously ignoring deceptive phenomena. The significant innovation of the Sinteso S-LINE is the fact that the detectors interpret situations in real time and automatically switch the area of application of the selected ASA parameters. The detectors respond more sensitively to fire and are more resistant to deceptive phenomena.

**Detector base FDB221**  
Art. no.: ASQ00001664

**Detector base flat FDB222**  
Art. no.: S54319-F1-A1

**ASA flame detector FDF241-9**  
The flame detectors are suitable for the detection of smokeless liquid and gas fires and of smoke forming open fires arising from the burning of materials containing carbon. The FDF241-9 is a 3-channel infrared flame detector for highest application requirements (indoor and outdoor). The three sensors measure in different, specific infrared wavelengths to be able to distinguish open fires from artificial light or sunlight.  
Art. no.: ASQ00003006

**ASA linear smoke detector FDL241-9**  
Linear smoke detector for monitoring warehouse and factory halls or rooms with complex ceiling structures. Max. distance from detector to reflector: 100 meters.  
Art. no.: ASQ00002298

**Flame detector base FDF291**  
Art. no.: ASQ00003310

**Linear smoke detector base FDL291**  
Art. no.: ASQ00003941

### Ex zone

**Line termination EOL22 (Ex)**  
Art. no.: BPZ-516222001

**Heat detector DT1102A-Ex**  
Ex class: Ex ia IIC T4  
Art. no.: BPZ-485270001

**Heat detector DT1101A-Ex**  
Ex class: Ex ia IIC T4  
Art. no.: BPZ-4852140001

**Smoke detector DO1101A-Ex**  
Ex class: Ex ia IIC T4  
Art. no.: BPZ-5008010001

**Flame detector DF1101-Ex**  
(3-channel detector incl. base)  
Ex class: Ex ia IIC T4  
Art. no.: BPZ-5166750001

**Base FDF1190**  
Art. no.: BPZ-5166360001

**Alarm indicator FDAI93-Ex**  
Art. no.: S54370-F6-A1

**Alarm indicator FDAI92-Ex**  
Art. no.: S54370-F4-A1

**Detector base DB1101A**  
Art. no.: BPZ-4863650001

**Manual call point DM1103 (Ex)**  
red with indirect alarm actuation  
Electronic DMA1103D  
Art. no.: ASQ00004470

**Housing:**  
Housing red with key DMA1192-AA  
Art. no.: BPZ-5222870001  
Label "avoid electrostatic charging!"  
Art. no.: BPZ-5358470001

**Manual call point DM1104 (Ex)**  
red  
Electronic DMA1104D  
Art. no.: ASQ00005925

**Housing:**  
Housing red with key DMA1192-AA  
Art. no.: BPZ-5222870001  
Label "avoid electrostatic charging!"  
Art. no.: BPZ-5358470001

**Housing DCA1191**  
Art. no.: BPZ-4588560001  
- Installation set Z31410  
Art. no.: BPZ-4837660001  
Shunt Zener diode barrier SB3  
Art. no.: BPZ-4837400001

**Floor repeater terminal FT2010-A1**  
Used for display and operation of alarms from the area monitored.  
Art. no.: ASQ00014104

**Shared properties FT2010 and FT2011:**  
- Backlit display with plain text display (6 lines of 40 characters each)  
- Power supply and communication (individually addressed) via FDnet, additional 24 V feed possible  
- 282x207x79 mm (WxDxH)  
- Max. 8 FT2010/FT2011 per FC200  
- Max. 16 FT2010/FT2011 per FC204  
- Max. 50 FT2010/FT2011 per FC206

**Floor repeater display FT2011-A1**  
Used for display of alarms from the area monitored.  
Art. no.: ASQ00017706

**Mimic display driver FT2001-A1**  
The mimic display driver controls 48 LEDs, with which events throughout the system can be displayed. The LEDs can be positioned, for example, on a site plan control panel.  
Art. no.: ASQ00014417

**Input/output module FDCIO222**

**Extinguishing control unit XC10**  
The XC10 single-area extinguishing control unit can be fully integrated into all FC20 panels via the FDCIO222 as an independent unit. All relevant incidents are forwarded to the connected control panels. The extinguishing control unit XC10 and the connected extinguishing valves must have a separate power supply.  
Art. no.: A6E050060

**Flat rear FHA2013-A1**  
Reduction of housing depth to 46 mm with FT2010/2011, when a flat installation is required with flush-mounted cabling.  
Art. no.: ASQ00016552

**LED flat cable 24 LEDs**  
Art. no.: S291410001

**ASA neural fire detector FDOOT241-9**  
For early warning in the event of flame combustion of solid and liquid materials and smoldering fires, suitable for use in the FDnet and in limit value technology (see "Modernization" box).  
Art. no.: ASQ00004813

**ASA wide-spectrum smoke detector FDT241**  
Optical smoke detector for early warning of smoking flame and smoldering fires.  
Art. no.: ASQ00004811

**ASA neural fire detector FDOOT241**  
Detection properties same as ASA neural fire detector FDOOT241-9, plus detection of carbon monoxide (CO) as well as fire-independent CO concentrations, e.g. according to Life Safety norms.  
Art. no.: S54319-F1-A1

**ASA heat detector FDT241**  
Freely programmable thermo-differential or maximum heat detector for the detection of open fires with rapid rise in temperature.  
Art. no.: ASQ00004812

**Mounting bracket MWV1**  
Art. no.: BPZ-3950450001

**Ball and socket joint MWV1**  
Art. no.: BPZ-3674840001

**Rain hood DF21190**  
Art. no.: BPZ-5302660001

**Short-distance filter 7 – 10 m DLF1191-AA**  
This short-distance filter is required additionally for short distances between 7 and 10 meters.  
Art. no.: BPZ-4933030001

**Reflector for long distance DLR1191 (Prism)**  
For distances between 20 and 100 meters.  
Art. no.: BPZ-4787710001

**Short-distance filter 5 – 8 m DLF1191-AB**  
This short-distance filter is required additionally for short distances between 5 and 8 meters.  
Art. no.: BPZ-4933160001

**Reflector for middle distance DLR1192**  
For distances between 30 and 65 meters.  
Art. no.: BPZ-4788490001

**External light filter DLF1191-AC**  
To prevent faults with high levels of external light.  
Art. no.: BPZ-5221480001

**Reflector for short distance DLR1193**  
For distances between 10 and 30 meters.  
Art. no.: BPZ-4787840001

**Detector heating DLH1191A**  
For use where there is a risk of condensation in detector FDL241-9 and/or in reflector DLR1191. Operating voltage: DC 20 ... 30 V. Operating current: 30 ... 50 mA.  
Art. no.: BPZ-4787970001

**Video fire controller FDV241**  
Video recording allows subsequent analysis of the cause of an incident. Live video transmission allows the situation to be assessed directly. The video fire controller and the connected video camera must have a separate power supply.  
Art. no.: S54335-F1-A1

**Air sampling smoke detection kit FDBZ292**  
The FDBZ292 aspirating smoke detector unit reliably monitors intake, outlet, and circulating air ducts in air-conditioning and ventilation systems for smoke at air speeds of 1 m/s to 20 m/s. The aspirating smoke detector unit is a passive monitoring system without its own fan. VDS-conform operation with the ASA neural fire detector FDOOT241-9.  
Art. no.: ASQ00021362

**Basic set FDBZ292**  
(without air flow tube)  
Art. no.: ASQ00021362

**Air flow tube FDBZ292-AA**  
length 0.6 m  
Art. no.: ASQ00021363

**Air flow tube FDBZ292-AB**  
length 1.5 m  
Art. no.: ASQ00021364

**Air flow tube FDBZ292-AC**  
length 2.8 m  
Art. no.: ASQ00021366

**LaserFOCUS**  
Highly sensitive smoke suction system for earliest possible fire detection (from 0.025 %/m) with 8 alarm thresholds (day/night), tube connection with air flow monitoring. The LaserFOCUS must be provided with a separate 24 V power supply.  
VLF-250  
Art. no.: VLF-250  
VLF-500  
Art. no.: VLF-500

**Input/output module "transponder" FDCIO223**  
The module has two inputs/outputs and is used for:  
- connecting conventional detectors (point detectors, special detectors)  
- connecting detectors by means of safety barriers in explosion-protected areas  
- controlling alarm devices (flashing lights, sirens)  
- for monitored control (e.g. fire dampers)  
Art. no.: S24218-B102-A1

### Modernization

**Conventional detector FDOOT241-9**  
- Siemens standard (DS115/Sigmacord/SynoLINE600; MS7; MS9; MS24)  
- Conventional line (SynoLINE300)

**ASA neural fire detector FDOOT241-9**  
- combination with other detectors on a conventional detector line possible.  
Art. no.: ASQ00004813

**Detector base FDB201 (collective)**  
Art. no.: ASQ00003814

**Detector base flat FDB202 (collective)**  
Art. no.: S54319-F3-A1

**ASA neural fire detector FDOOT241-9**  
Art. no.: ASQ00004813

**Input/output module FDCIO222**  
- 4 monitored inputs  
Relay outputs:  
- 4 potential-free working/stop contacts  
Contact loading:  
- AC 250 V/4 A  
- DC 30 V/4 A  
Art. no.: ASQ00002369

**Input module FDCI222**  
- 4 monitored inputs  
Art. no.: ASQ00001984

**Input module FDCI221**  
- 1 monitored input  
Art. no.: S54312-F1-A1

**Input/output module FDCIO221**  
- 1 monitored input  
- 1 output  
- Relay output DC 30 V/2 A rated  
- Output can be configured as monitored, but a separate DC 24 V power supply is required  
Art. no.: S54312-F2-A1

**Line separator FDCL221**  
The line separator (an electronic switch) is used where several stubs branch off in parallel from the FDnet. This prevents several stub lines falling in the event of a short circuit. The reuse of installed cables is a typical application field.  
Art. no.: ASQ00004011

**Multi line separator module FDCL221-M**  
The multi line separator has altogether nine integrated line separators with one individual addressing each and one LED indicator per separator. It can be connected to two separate FDnet loops and has:  
- connections for detector lines  
- connections for stub lines – jumpers to program the operating mode  
- yellow LEDs for status indication  
Art. no.: S54312-F6-A1

### Detector base accessories

**Base attachment humid FDB293**  
Art. no.: ASQ00003945

**Detector heating FDBH291**  
Art. no.: ASQ00004439

**Protective cage DB21194**  
Art. no.: BPZ-4677110001

**Detector designation plate DBZ1193A**  
Art. no.: BPZ-4864330001

**Dummy detector FDX291**  
Art. no.: ASQ00005035

**Designation plate FDBZ291**  
Art. no.: ASQ00002621

**Base attachment FDB291**  
Art. no.: ASQ00001603

**Detector locking device FDBZ293**  
Art. no.: ASQ00005035

**Detector dust cap FDD291**  
Art. no.: ASQ00004814

### Manual call points and accessories

**Manual call point FDM221**  
Standard, available in different colors.  
Art. no.: ASQ00002451

**Manual call point FDM225**  
Resettable, available in red, and can be used for flush mounting.  
Art. no.: ASQ00012020

**Manual call point FDM226**  
Resettable and IP66, available in red.  
Art. no.: ASQ00013436

**Manual call point FDM224**  
IP44 or IP64, available in different colors.  
Art. no.: ASQ00009392

**Manual call point FDM224H**  
Heavy duty, IP44 or IP64, available in red.  
Art. no.: ASQ00009392

**Manual call point FDM223**  
IP44 or IP64, with indirect alarm actuation, available in different colors.  
Art. no.: ASQ00003087

**Manual call point FDM223H**  
Heavy duty, IP44 or IP64, with indirect alarm actuation, available in red.  
Art. no.: ASQ00003087

**Electronic switching unit FDM225-RP**  
Art. no.: ASQ00013436

**Manual call point with resettable plastic element incl. back box FDM225-RP**  
Art. no.: ASQ00012020

**Manual call point with glass plate FDM225-RG**  
Art. no.: ASQ00013434

**Manual call point with resettable plastic element incl. back box FDM226-RP**  
Art. no.: ASQ00013436

**Manual call point with glass plate incl. back box FDM226-RG**  
Art. no.: ASQ00013435

**Electronic switching unit FDM224**  
Art. no.: ASQ00009392

**Electronic switching unit FDM224**  
Art. no.: ASQ00009392

**Electronic switching unit FDM223**  
Art. no.: ASQ00003087

**Electronic switching unit FDM223**  
Art. no.: ASQ00003087

**Housing FDCH291**  
To mount FDCI222, FDCIO222, FDCIO223, FDCIO224.  
- Protection category IP54 for dry areas  
Art. no.: ASQ00002395

**Housing IP FDCH292**  
To mount FDCI222, FDCIO222, FDCIO223, FDCIO224.  
- Protection category IP65 for wet areas  
Art. no.: ASQ00003942

**Housing FDCH21**  
IP65  
Art. no.: S54312-F3-A1

**4 isolated control inputs**

**4 isolated control outputs**

**4 isolated control inputs**

**4 isolated control inputs**

### Alarm equipment for audible and visible alarming

**Sounder base FDSB291**  
The sounder base is used for additional alarming, e.g. in hotel rooms, as "amplification" of the alarm sounder FDS221 that is installed in the hallway. The sounder base can only be used together with an automatic C-LINE or S-LINE FDOOT, FDT or FDO detector.  
Sound level: 88 dBA/1 m  
Art. no.: ASQ00001647

**Alarm sounder FDS221-W**  
Sound level: 99 dBA/1 m  
Art. no.: ASQ00006711

**Alarm sounder FDS221-R**  
Sound level: 99 dBA/1 m  
Art. no.: ASQ00004117

**Alarm sounder beacon FDS229**  
Sound level: 99 dBA/1 m  
Strobe frequency: 0.5 ... 2 Hz  
Strobe intensity: 1.1 ... 3.2 cd  
Art. no.: ASQ00023093 (red, FDS229-R)  
Art. no.: ASQ00023092 (yellow, FDS229-A)

**Alarm indicator (addressable) FDCAI221**  
Art. no.: S54370-F10-A1

**Shared characteristics:**  
- 11 different tones, incl. "evacuate" as specified in DIN 23404-3  
- Different volume and sound for pre-alarm and main alarm  
- Without additional power supply  
- Integrated separator switch

### Sinteso C-LINE detectors

Sinteso C-LINE detectors are used in standard applications where the risk is average and the potential for deception is moderate. They guarantee optimal fire detection while preventing false alarms through the use of selectable parameter sets. In parameter sets, sensor signals such as amplitudes, gradients, and signal fluctuations are each analyzed on an application-specific basis by means of detection algorithms (DA).

**DA neural fire detector FDOOT221**  
Art. no.: ASQ00001566

**DA wide-spectrum smoke detector FDO221**  
Art. no.: ASQ00001565

**DA heat detector FDT221**  
Art. no.: ASQ00001567

**Flame detector base FDF291**  
Art. no.: ASQ00003310

**DA flame detector FDF221-9**  
The flame detectors are suitable for the detection of smokeless liquid and gas fires and smoking open fires occurring during the burning of materials containing carbon. The FDF221-9 is a single-channel infrared flame detector for simple indoor applications.  
Art. no.: ASQ00003902

**Detector base FDB221**  
Art. no.: ASQ00001664

**Detector base flat FDB222**  
Art. no.: S54319-F1-A1

**Housing with key: FMH291-R**  
Art. no.: ASQ00002217

**Housing yellow FMH291-Y**  
Art. no.: ASQ00004979

**Housing green FMH291-G**  
Art. no.: ASQ00004981

**Housing blue FMH291-B**  
Art. no.: ASQ00004980

**Accessories: Protective cover FDMC291**  
Art. no.: ASQ00001644

**Accessories: Back box FDMH295-R**  
Art. no.: ASQ00013437

**Back box with holes and grommet FDMH295-S**  
Art. no.: ASQ00013438

**Protective cover FDMC295**  
Art. no.: ASQ00013440

**Accessories: Protective cover FDMC295**  
Art. no.: ASQ00013440

**Housing with glass and key: FMH293-R**  
Art. no.: ASQ00004023

**Housing yellow FMH293-Y**  
Art. no.: ASQ00004908

**Housing green FMH293-G**  
Art. no.: ASQ00004911

**Housing blue FMH293-B**  
Art. no.: ASQ00004909

**Housing orange FMH293-O**  
Art. no.: S54311-F2-A1

**Accessories: Protective cover FDMC291**  
Art. no.: ASQ00001644

**Accessories: Protection seal DMZ1197-AD**  
Art. no.: BPZ-5470680001

**Protection seal DMZ1197-AC**  
Art. no.: BPZ-5470680001

**Locking plug M20 (1 hole)**  
Art. no.: ASQ00006735

**Locking plug M20 (2 hole)**  
Art. no.: ASQ00010055

**Housing with glass and key: FMH293-R**  
Art. no.: ASQ00005525

**Accessories: Protection seal DMZ1197-AD**  
Art. no.: BPZ-5470680001

**Protection seal DMZ1197-AC**  
Art. no.: BPZ-5470680001

**V-Plug**  
Art. no.: ASQ00008131

**Housing green FMH293-G**  
Art. no.: ASQ00004911

**Housing blue FMH293-B**  
Art. no.: ASQ00004909

**Housing orange FMH293-O**  
Art. no.: S54311-F2-A1

**Accessories: Protection seal DMZ1197-AD**  
Art. no.: BPZ-5470680001

**Protection seal DMZ1197-AC**  
Art. no.: BPZ-5223550001

**Protective cover DMZ1197-AC**  
Art. no.: BPZ-5223550001

### Radio fire detection

**Radio gateway FDCW221**  
The radio gateway FDCW221 enables bidirectionally connect up to 30 battery-powered radio fire detectors to the FDnet. An SSD band is used, a frequency range exclusively for the security technology (868 – 870 MHz).  
Art. no.: ASQ000020241

**Base and smoke detector DOW1171**  
Incl. 2 lithium batteries 9 V  
Art. no.: S24218-F62-A5

**Radio network in SSD band**

**MCP base SMF6120**  
Art. no.: S24218-F72-A1

**Lithium battery 3.6 V**  
Art. no.: V24069-Z12-A1

**Key**  
Art. no.: S24217-G34-A1

**Legend for the designation of fire detectors:**

FCnet	Fire Control network	FDT	Fire Detector "thermo" (heat differential alarm, can also be programmed as maximum heat detector)
FDnet	Field Device network	DAI	C-LINE
FDO	Fire Detector "optical" (optical forward dispersed light alarm)	DAI	C-LINE
FDOOT	Fire Detector "optical/thermal" (optical forward/backward dispersed light alarm incl. heat sensor)	DAI	C-LINE
FDOOT	Fire Detector "optical/thermal" (optical forward/backward dispersed light alarm incl. heat sensor)	DAI	C-LINE
FDOOT	Fire Detector "optical/thermal" (optical forward/backward dispersed light alarm incl. heat sensor and CO sensor)	DAI	C-LINE

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The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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