

Cerberus PRO – system overview

Planning Tools

Cerberus PRO Planning Tool – control panels and network

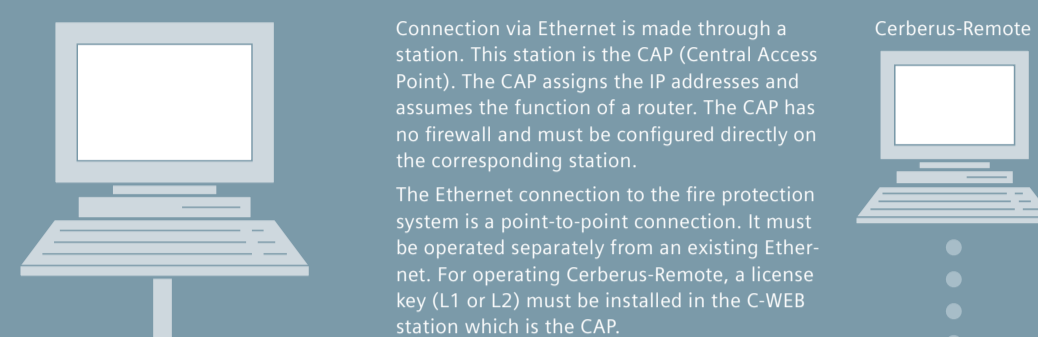
Answers for infrastructure.



Danger Management System

MM8000, the Danger Management Station from Siemens is connected via BACnet. BACnet is a standardized communications protocol used in building automation. MM8000 is connected to the Ethernet interface of a defined master station (CAP).

Each station that is to be addressed by the Danger Management System via BACnet must be released by means of the license key (L2).



Connection via Ethernet is made through a station. This station is the CAP (Central Access Point). The CAP assigns the IP addresses and assumes the function of a router. The CAP has no firewall and must be configured directly on the corresponding station.

The Ethernet connection to the fire protection system is a point-to-point connection. It must be operated separately from an existing Ethernet. For operating Cerberus-Remote, a license key (L1 or L2) must be installed in the C-WEB station which is the CAP.

Remote access

Remote access provides the option of accessing the system with the remote operation tool Cerberus-Remote (access via Ethernet).

C-WEB/Ethernet BACnet/IP

C-WEB/Ethernet

Four stations can be networked simply via Ethernet – a station can also be part of the C-WEB/SAFEDLINK. Connection is via a standard commercial Fast-Ethernet cable.

- Key figures**
- Max. number of networkable stations: 4
 - Type of cable: Fast-Ethernet Cat. 5
 - Data rate via Ethernet: 100/10 mbps
 - Max. Ethernet connection points on the C-WEB: 1
- Restriction on the Ethernet**
- Not EN 54-compliant
 - Redundant networking not possible
 - 4 stations can be networked via Ethernet (additional stations only networkable via C-WEB)

Fire control panel FC721 (1-loop)

Description

The FC721 is a compact fire control panel. It has the following features:

- 1 C-NET loop
- Integrated inputs/outputs for peripherals
- Integrated control unit
- Integrated power supply
- Automatic configuration

Technical data

- C-NET detector lines
- Number of addresses: max. 126
- Number of integrated loops/stubs: 1/2

Inputs and outputs

- 1 relay output for RT alarm
- 1 relay output for RT fault
- 1 monitored alarm output
- 1 monitored fault output
- 1 monitored sounder output (1 A)
- 4 configurable inputs/outputs 24 VDC
- 1 Ethernet connection (RJ45)

Housing

- Eco: 398x430x80 mm (HxWxD)
- 70 W power supply
- Max. battery capacity: 2x7 Ah
- Art. no.: S54400-C32-A2

Fire control panel FC721-ZZ

Description

The FC721-ZZ is a compact fire control panel. It has the following features:

- 1 C-NET loop
- Integrated inputs/outputs for peripherals
- Integrated control unit
- Integrated power supply
- Automatic configuration

Technical data

- C-NET detector lines
- Number of addresses: max. 126
- Number of integrated loops/stubs: 1/2

Inputs and outputs

- 1 relay output for RT alarm
- 1 relay output for RT fault
- 1 monitored alarm output
- 1 monitored fault output
- 1 monitored sounder output (1 A)
- 4 configurable inputs/outputs 24 VDC
- 1 Ethernet connection (RJ45)

Housing

- Eco: 398x430x80 mm (HxWxD)
- 70 W power supply
- Max. battery capacity: 2x7 Ah
- Art. no.: S54400-C32-A3

Fire control panel FC722 (2-loop)

Description

The FC722 is a compact 2-loop fire control panel. It has the following features:

- 2 C-NET loops
- Integrated inputs/outputs for peripherals
- Integrated control unit
- Integrated power supply
- Automatic configuration
- Networkability via C-WEB/SAFEDLINK or Ethernet

Technical data

- C-NET detector lines
- Number of addresses: max. 252
- Number of loops/stubs: 2/4
- Optionally with loop extension: 4 loops/8 stubs

Inputs and outputs

- 1 relay output for RT alarm
- 1 relay output for RT fault
- 1 monitored alarm output
- 1 monitored fault output
- 1 monitored sounder output (1 A)
- 8 configurable inputs/outputs 24 VDC
- 1 Ethernet connection (RJ45)
- Optional: sounder module for splitting the sounder line output into 4 monitored outputs (2 A)

Housing

- Eco: 398x430x80 mm (HxWxD)
- 70 W power supply
- Max. battery capacity: 2x26 Ah
- Art. no.: S54400-C29-A2

Fire control panel FC722-ZZ

Description

The FC722-ZZ is a compact 2-loop fire control panel. It has the following features:

- 2 C-NET loops
- Integrated inputs/outputs for peripherals
- Integrated control unit
- Integrated power supply
- Automatic configuration
- Networkability via C-WEB/SAFEDLINK or Ethernet

Technical data

- C-NET detector lines
- Number of addresses: max. 252
- Number of loops/stubs: 2/4
- Optionally with loop extension: 4 loops/8 stubs

Inputs and outputs

- 1 relay output for RT alarm
- 1 relay output for RT fault
- 1 monitored alarm output
- 1 monitored fault output
- 1 monitored sounder output (1 A)
- 8 configurable inputs/outputs 24 VDC
- 1 Ethernet connection (RJ45)
- Optional: sounder module for splitting the sounder line output into 4 monitored outputs (2 A)

Housing

- Eco: 398x430x80 mm (HxWxD)
- 70 W power supply
- Max. battery capacity: 2x26 Ah
- Art. no.: S54400-C29-A1

Fire control panel FC724 (4-loop)

Description

The FC724 is a compact 4-loop fire control panel. It has the following features:

- 4 C-NET loops
- Integrated inputs/outputs for peripherals
- Integrated control unit
- Integrated power supply
- Automatic configuration
- Networkability via C-WEB/SAFEDLINK or Ethernet

Technical data

- C-NET detector lines
- Number of addresses: max. 504
- Number of loops/stubs: 4/8
- Optionally with loop extension: 8 loops/16 stubs

Inputs and outputs

- 1 relay output for RT alarm
- 1 relay output for RT fault
- 1 monitored alarm output
- 1 monitored fault output
- 2 monitored sounder outputs (1 A each)
- 12 configurable inputs/outputs 24 VDC
- 1 Ethernet connection (RJ45)
- Optional: sounder module for splitting the sounder line output into 4 monitored outputs (2 A)

Housing

- Eco: 398x430x80 mm (HxWxD)
- 150 W power supply
- Max. battery capacity: 2x26 Ah
- Art. no.: S54400-C30-A2

Fire terminal FT724

Description

The FT724 has the following features:

- Integrated control unit
- Separate 24 VDC supply input possible
- Redundant 24 VDC supply input
- Networkability via C-WEB/SAFEDLINK or Ethernet

Technical data

- 24 VDC system power supply
- Alarm current: 130 mA

Housing

- Eco: 398x430x80 mm (HxWxD)
- 70 W power supply
- Max. battery capacity: 2x7 Ah
- Operating add-on (2xLED-ind.) FCM2-711-Y3
- Art. no.: S54400-C31-A2

C-WEB/SAFEDLINK

A maximum of 16 stations (fire control panels and operator terminals) can be networked together in any configuration via C-WEB/SAFEDLINK.

- Features of networking via the system bus**
- Cabling via 2-wire cable
 - Redundant transmission paths thanks to ring wiring
 - Increased security through degraded mode capability via second networking module
 - No additional degraded mode cabling required, even with more than 512 fire detectors in the system
 - Configurable view of the individual stations

Characteristic data

Max. number of networkable stations:	16
Max. distance between the stations (copper) with repeater:	2,000 m
Max. distance between stations (fiber-optic: multi mode/single mode):	2,500 m/15,000 m
Max. "standard" data rate:	312 kbps
Max. "low" data rate:	96 kbps
Max. number of network elements:	8,064
Max. control panels with system-wide view:	5

- The following guidelines must be observed:**
- Fire control panels with more than 512 fire detectors must be equipped with 2 network modules (SAFEDLINK) (EN 54).
 - In a system with a total of more than 512 fire detectors, fire control panels must be equipped with connected remote transmission devices with 2 network modules (SAFEDLINK) (EN 54).
 - Networking via Ethernet does not conform to EN 54.
 - Cables for the network and the DC power supply must be routed separately.

Legend for the designation of fire detectors:

C-NET	Network for linking Cerberus® PRO devices
C-WEB/SAFEDLINK	Network for linking the stations
C-WEB/Ethernet	Networking of 4 stations (not EN 54-compliant)
BACnet/IP	Connection to management systems/building control systems
Serial interfaces	An optional RS232 and/or an RS485 interface (also freely combinable) per control panel or operator terminal

Expansion and networking options

Loop extension (C-NET) FC2003-A1

The loop extension makes it possible to double the number of loops (e.g. from 2 loops to 4 loops or from 4 loops to 8 loops) while retaining a constant total number of addresses on the C-NET line card (e.g. 2 loops with 126 addresses each or 4 loops with 63 addresses each).

Art. no.: ASQ00010136

Network module (SAFEDLINK) FN2001-A1

With this module the station can be networked via the C-WEB. For this purpose it is necessary to install a network module. In case of additional requirements in terms of the degraded mode function 2 network modules can be installed.

Art. no.: ASQ00012851

RS232 module (isolated) FCA2001-A1

This module is needed, for example, for operating an event printer. It is plugged into the PMI mainboard. The RS232 module is not contained in the set for the event printer.

Art. no.: ASQ00003327

RS485 module (isolated) FCA2002-A1

This is needed, for example, for operating the following modules:

- Fire department display panel with integrated fire department operating panel (FAT and FBF) [DE & CZ]
- EVAC module [NL]

The RS485 module (isolated) is plugged into the PMI mainboard.

Art. no.: ASQ00009923

Sounder module FCA2005-A1

The sounder module has connections for 4 conventional sounder lines (primary lines: 4x up to 1 A, max. 2 A total). The sounder module is screwed to the assembly plate FKA2007-A1.

Art. no.: ASQ00014866

License key L1 FCA2012-A1

Activates the Cerberus-Remote function. For operating Cerberus-Remote, only the station which is to act as the CAP needs to have an L1 installed.

Art. no.: ASQ00018856

License key L2 FCA2013-A1

Activates the Cerberus-Remote and BACnet function. Every station that needs to be accessed by a management system must have L2 installed.

Art. no.: ASQ00018857

Power supply kit (70 W) FP2003-A1

Power supply for installation in empty housings. Optional: power supply kit with FP2003-A1 is possible.

Art. no.: ASQ00020825

Power supply kit (150 W) FP2004-A1

Power supply kit can be connected in the housing directly after FP2004-A1.

Art. no.: ASQ00018779

Housings

Housing (Eco) FH7201-Z3

- Max. battery capacity: 2x7 Ah
- 398x430x80 mm (HxWxD)
- Optional:
- Power supply kit (70 W) FP2003-A1
- Event printer FTO2001-A1
- Operating add-on (2xLED-ind.) FCM7211-Y3
- Art. no.: S54400-872-A1

Housing (Standard) FH7202-Z3

- Max. battery capacity: 2x26 Ah
- 398x430x160 mm (HxWxD)
- Optional:
- Power supply kit (70 W) FP2003-A1
- Power supply kit (150 W) FP2004-A1
- Power supply kit (150 W) FP2005-A1
- Event printer FTO2001-A1
- Operating add-on (2xLED-ind.) FCM7211-Y3
- Art. no.: S54400-870-A1

Housing (Comfort) FH7203-Z3

- Max. battery capacity: 2x26 Ah
- 796x430x160 mm (HxWxD)
- Optional:
- Power supply kit (70 W) FP2003-A1
- Power supply kit (150 W) FP2004-A1
- Power supply kit (150 W) FP2005-A1
- Event printer FTO2001-A1
- Operating add-on (2xLED-ind.) FCM7211-Y3
- Art. no.: S54400-871-A1

19" mounting kit FKA2016-A1

Enables all fire control panels and fire terminals to be mounted in a 19" frame; 100x430x324 mm (HxWxD)

Art. no.: S54400-875-A1

Operating add-ons

Operating add-on (2xLED-ind.) FCM7211-Y3

This contains 48 display groups each with one red and one yellow LED. Any events can be allocated to the LEDs; 200x42x25 (HxWxD)

Optional: event printer FTO2001-A1

Art. no.: S54400-875-A1

Key switch Kaba FTO2005-C1

Kaba lock cylinder with installation accessories and keys (Kaba 8 #100). Usable optionally for enabling operation.

Art. no.: ASQ00010113

Event printer FTO2001-A1

The event printer FTO2001-A1 is installed directly in the control panel or in the terminal. It is a thermal printer which logs all events. An RS232 module (isolated) FCA2001-A1 is required for operating the event printer. This is not contained in the printer set and must be ordered separately.

Art. no.: ASQ00010126

Event printer DL3750+

Monitored external event printer for serial connection or via Ethernet. Optional: RS232 module (isolated) FCA2001-A1

Art. no.: ASQ00023962

Power supply

Power supply kit (70 W) FP2003-A1

Power supply for installation in empty housings. Optional: power supply kit with FP2003-A1 is possible.

Art. no.: ASQ00020825

Power supply kit (150 W) FP2004-A1

Power supply kit can be connected in the housing directly after FP2004-A1.

Art. no.: ASQ00018779

Answers for infrastructure.



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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.

Siemens Switzerland Ltd
Industry Sector
Building Technologies Division
International Headquarters
Chäliweg 22
6301 Düb
Switzerland
Tel: +41 41 724 24 24

Answers for infrastructure.

- Increase productivity and efficiency through complete building life cycle management
- The megatrends – demographic change and globalization – are shaping the world today. These have an unprecedented impact on our lives and on vital sectors of our public infrastructure. Over the entire life cycle, our comprehensive and environmentally conscious portfolio of products, systems and services in the fields of electrical installation, engineering and research building and medical and residential buildings, construction and electronic security, ensures the optimum comfort and highest energy efficiency in buildings for people, processes and assets.
- Increases business productivity, processes and assets.

Megatrends driving the future

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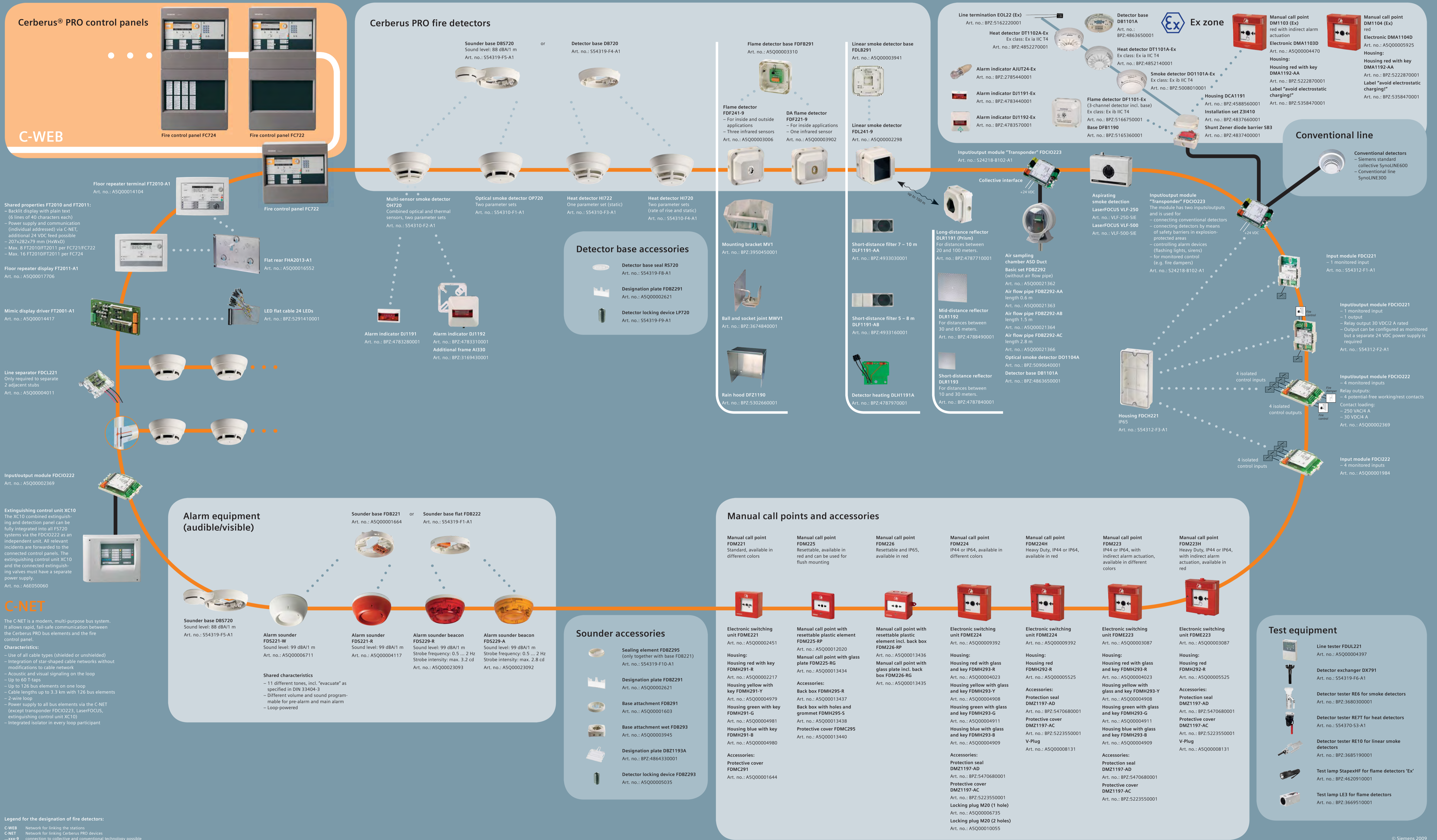
The associated toughest questions to answer

Siemens has continuously provided its customers with innovations in the areas of heating, energy, industry and infrastructure – globally and locally.

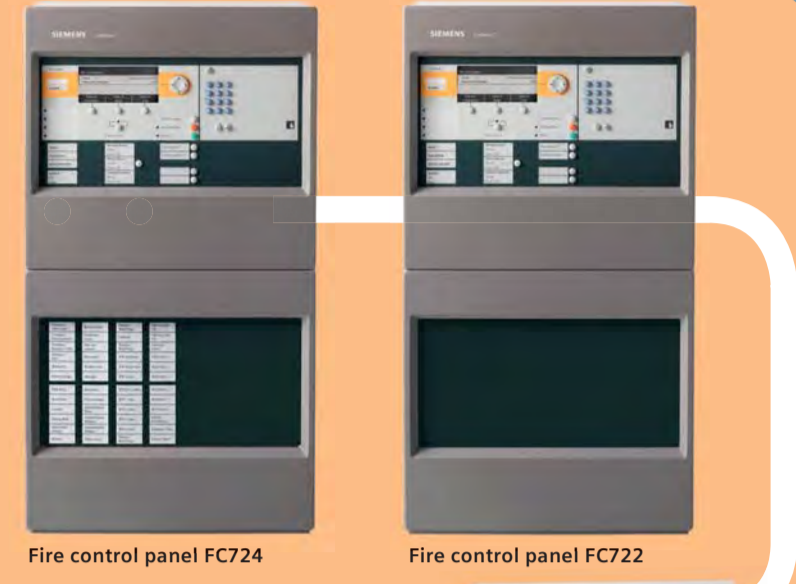
Cerberus PRO Planning Tool – C-NET devices

Answers for infrastructure.

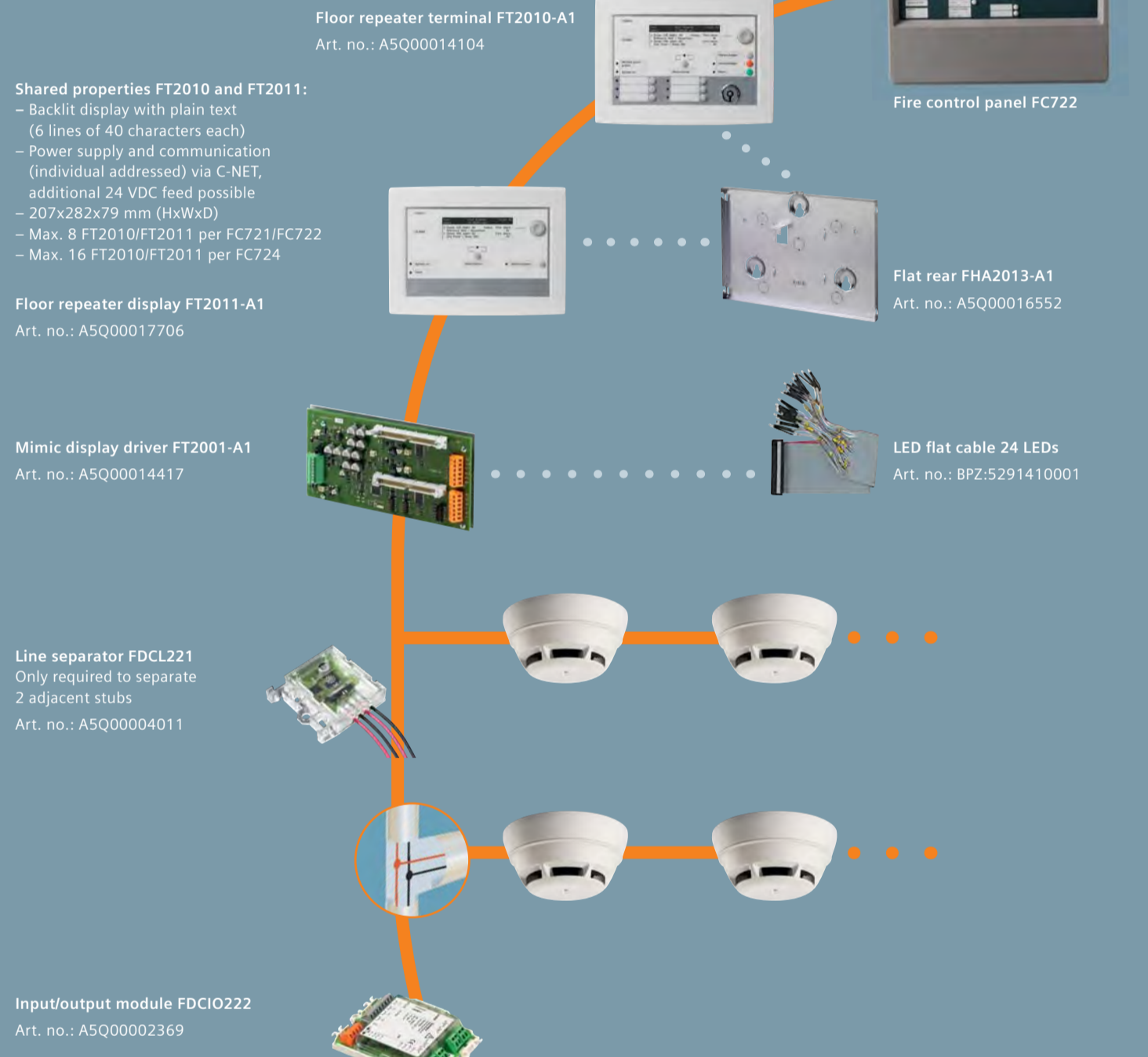
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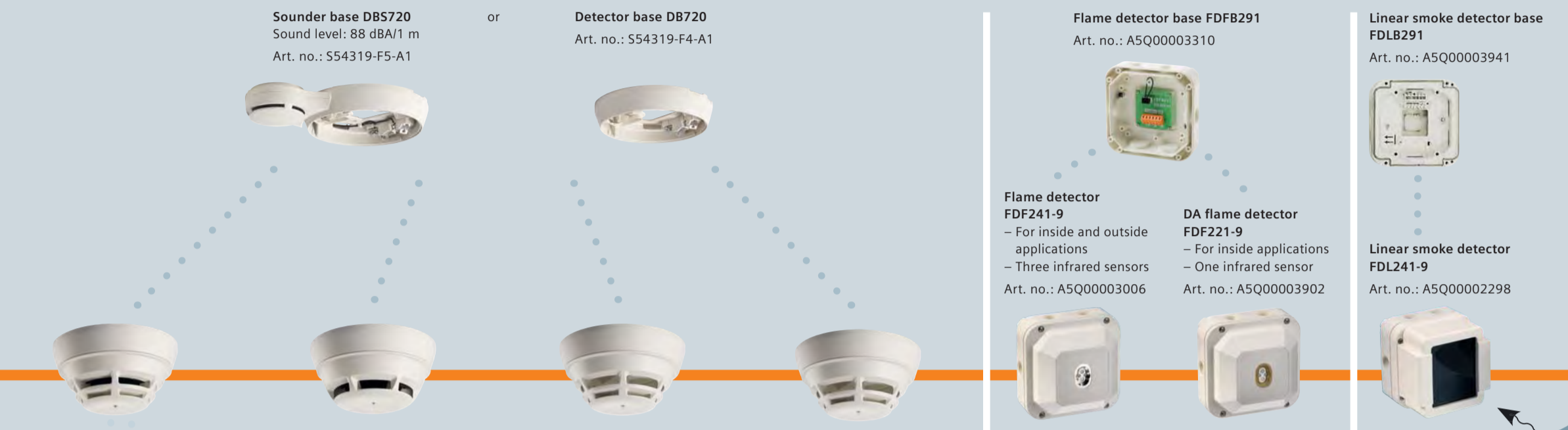
Cerberus PRO control panels



C-WEB



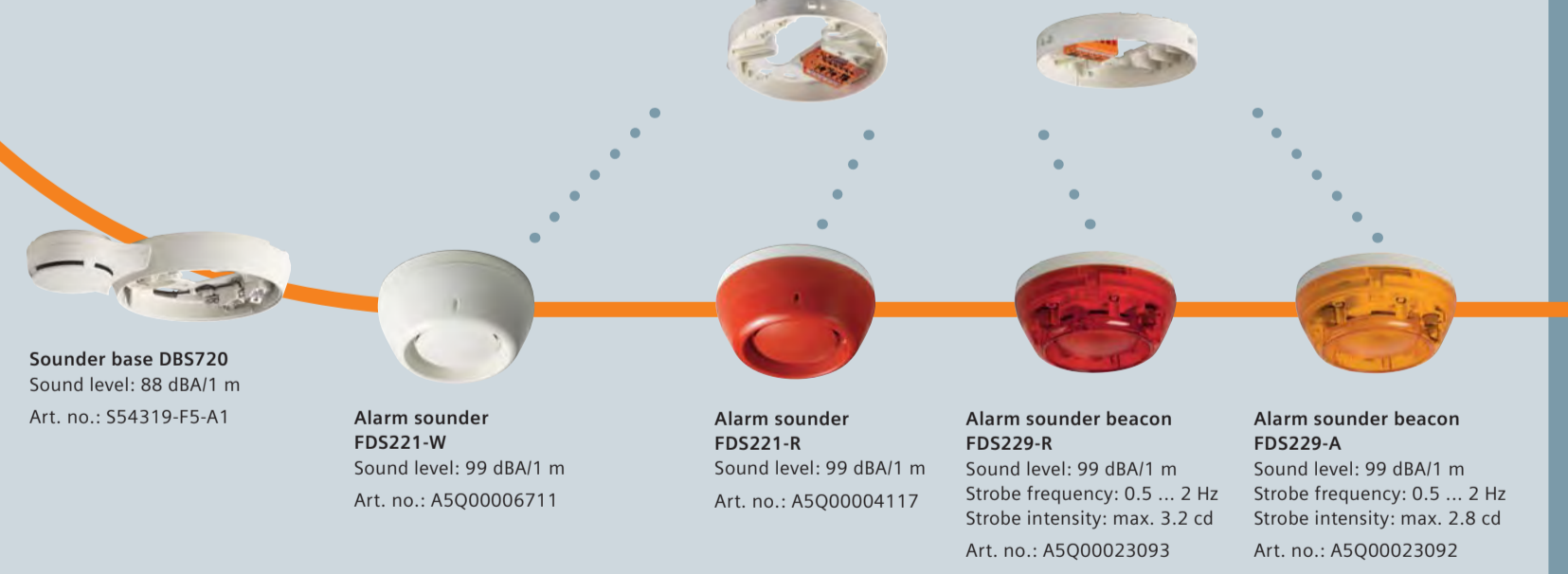
Cerberus PRO fire detectors



Detector base accessories

- Detector base seal RS720 Art. no.: S54319-F8-A1
- Designation plate FDBZ291 Art. no.: ASQ0002621
- Detector locking device LP720 Art. no.: S54319-F9-A1
- Mounting bracket MV1 Art. no.: BPZ:3950450001
- Ball and socket joint MWV1 Art. no.: BPZ:3674840001
- Rain hood DFZ1190 Art. no.: BPZ:5302660001

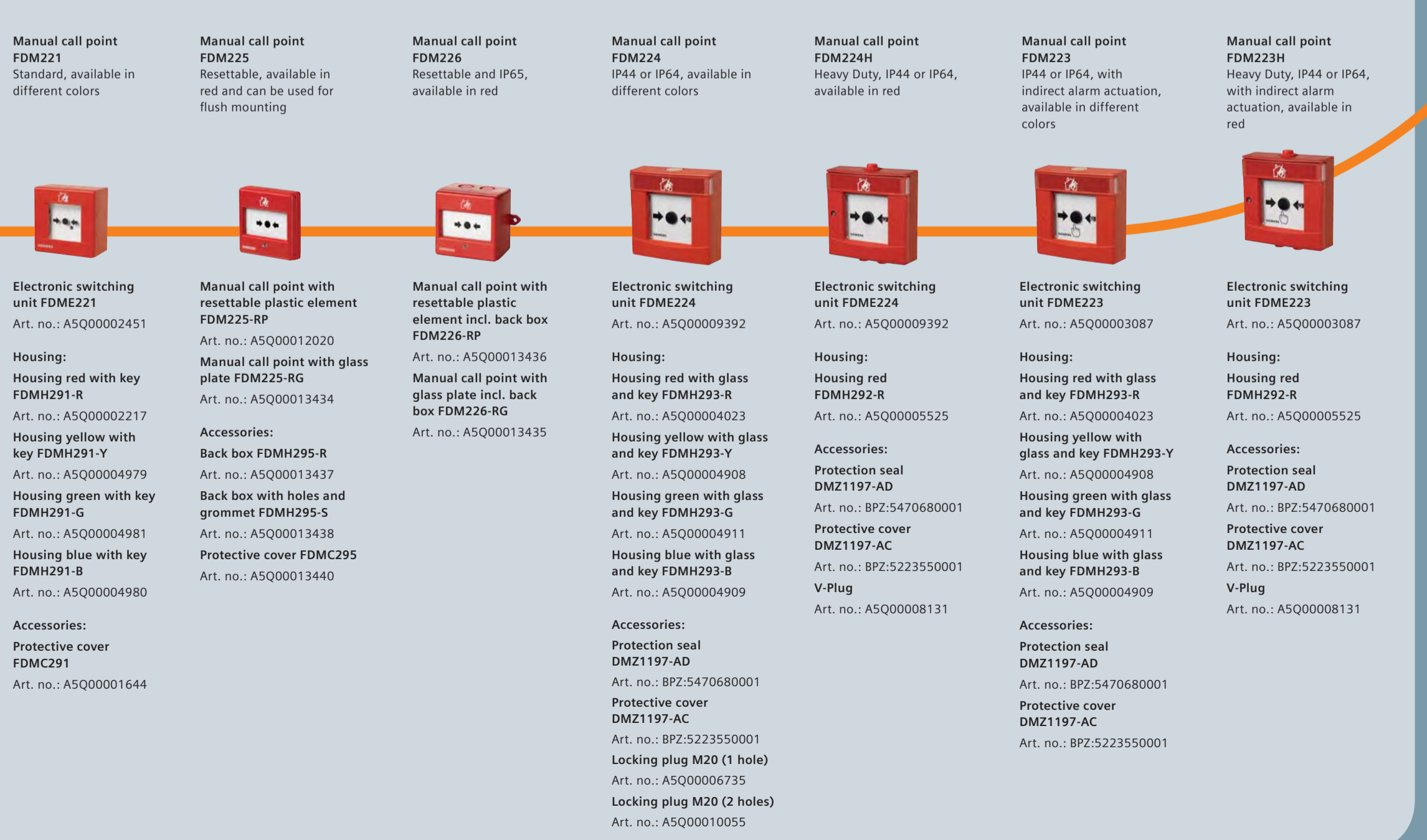
Alarm equipment (audible/visible)



Sounder accessories

- Sealing element FDBZ295 (only together with base FDBZ21) Art. no.: S54319-F10-A1
- Designation plate FDBZ291 Art. no.: ASQ00001603
- Base attachment FDBZ291 Art. no.: ASQ00003945
- Designation plate DBZ1193A Art. no.: BPZ:4864330001
- Detector locking device FDBZ293 Art. no.: ASQ00005035

Manual call points and accessories



Test equipment

- Line tester FDUL21 Art. no.: ASQ0004397
- Detector exchanger DX791 Art. no.: S54319-F6-A1
- Detector tester RE6 for smoke detectors Art. no.: BPZ:368030001
- Detector tester RE7T for heat detectors Art. no.: S54319-F5-A1
- Detector tester RE10 for linear smoke detectors Art. no.: BPZ:3685190001
- Test lamp StapeXH1 for flame detectors 'Ex' Art. no.: BPZ:4620910001
- Test lamp LE3 for flame detectors Art. no.: BPZ:3669510001

Legend for the designation of fire detectors:
 C-WEB Network for linking the stations
 C-NET Network for linking Cerberus PRO devices
 ...xxx-9 connection to collective and conventional technology possible