

Sinteso – panels, network and accessories

Planning Tool

Answers for infrastructure.

Topology 1

Ethernet

a danger management
system: up to 32 panels
can be networked in a

Characteristics of topology example

Data rate can be adapted to line quality

networked with a total length of up to 460 km

Easy networking of panels

32 panels can be networked.

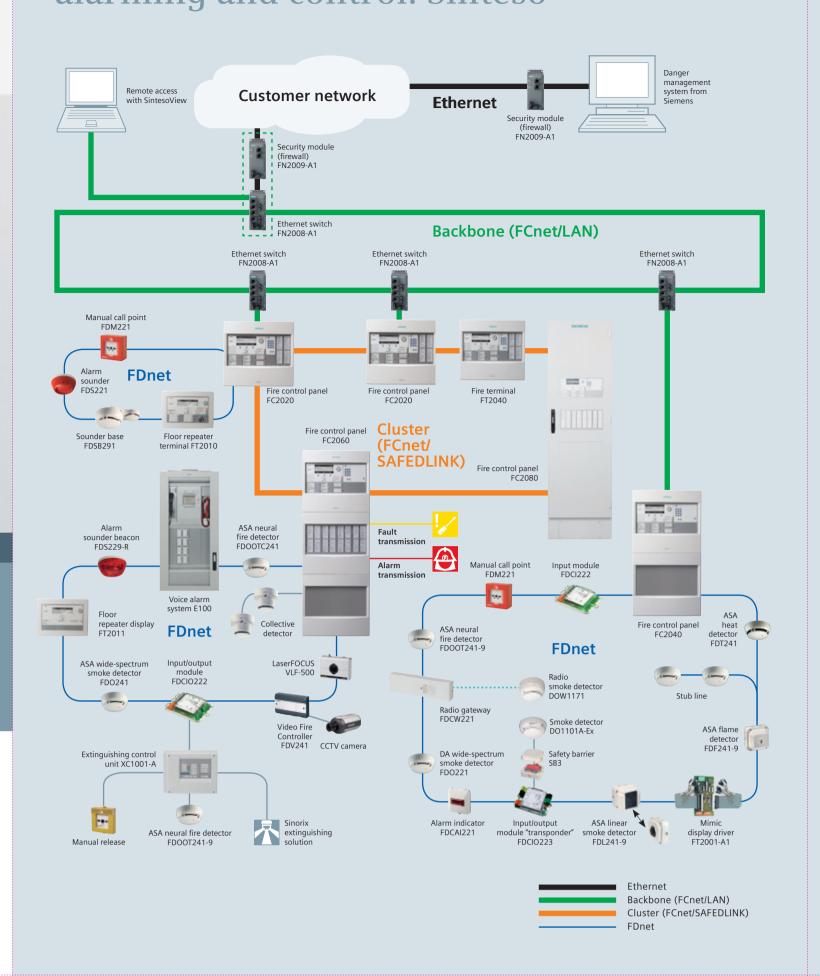
www.siemens.com/sinteso-move

of users. Also, our need for safety and security is constantly safe and secure buildings and infrastructure." In addition, we need to increase comfort for the well-being "We are the preferred partner for energy-efficient, has top priority – and not only where energy is concerned. warming and resource shortages. Maximum efficiency in new ways: demographic change, urbanization, global well they manage these challenges. Siemens has the Our world is undergoing changes that force us to think growing. For our customers, success is defined by how Answers for infrastructure.

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.

72 42 41 41 724 24 24 Switzerland guZ 1059 Gubelstrasse 22 International Headquarters Building Technologies Division Infrastructure & Cities Sector

Your system for fire detection, alarming and control: Sinteso



Up to 16 panels can be networked in a cluster (FCnet/SAFEDLINK) – if connected

to a danger management system. Without a danger management system, even up to

,-----,

3 3 2 3

2,000 m

4 km

40 km

Max. number of networkable panels:

connected to a danger management

Max. distance between panels with

Max. distance between panels with

Max. number of panels with

(FCnet/SAFEDLINK)

Key data

copper cable: • without repeater:

with repeater:

fiber-optic cable:

multi mode:

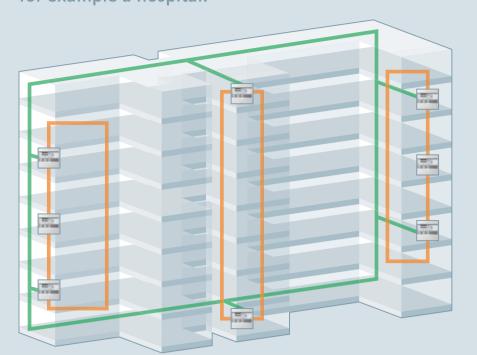
single mode:

system-wide view:

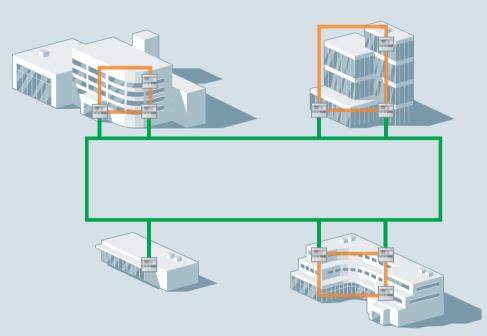
- Operation of panels as stand-alone solution or - Max. number of networkable panels if

Application: complex building and large campus

Network in a complex building, for example a hospital.



Extensive network spanning large distances, for example Description a production plant.



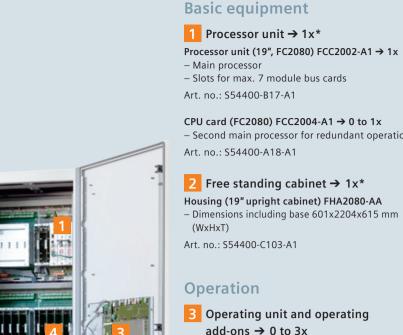
A campus comprises numerous, independent buildings. These have their own organization and structure that can be mapped ideally with a cluster of up to 16 panels. The backbone connects these clusters to an EN 54-compliant

Benefits Intelligently arranged network structure with clearly defined clusters Only one control panel necessary to access entire system with all subnetworks Backbone is EMC-protected and EN 54-compliant Simultaneous work at multiple stations allows for efficient commissioning - Can be connected to a pager system for the entire system, possible from a central point Distributed intelligence: complete control in the event of a fire is mapped in a cluster; this enables ideal adaptation to structural and process conditions Security personnel has entire campus in view – The right information at the right place: predefined views can be displayed according to customer requirements over the entire system; all controls can be configured to fulfill site-specific requirements

Description In complex buildings, the fire safety system can be adapted to local circumstances. The control panels as well as fire terminals are networked together via clusters (FCnet/SAFEDLINK). These clusters are interconnected via industrial LAN technology per backbone (FCnet/LAN) to create an EN 54-compliant overall system.

Benefits Only one remote transmission to fire brigade necessary for entire system – One interface to common pager system Overview of entire system from any configured – Fiber-optic backbone with high immunity to electromagnetic disturbance System-wide EN 54-compliant operation Timely hand-over thanks to parallel commissioning of individual panels or clusters Distributed intelligence: complete control in the event of a fire is mapped in a cluster; this enables ideal adaptation to structural as well

Sinteso control panel FC2080 uniquely safe and flexible



add-ons \rightarrow 0 to 3x Operating unit FCM2028-A2 → 0 to 1x Standard operating unit

Art. no.: \$54400-F83-A1 Operating add-on (2x LED indic.) FCM2006-A1

\rightarrow 0 to 2x – 48x LED groups Art. no.: A5Q00021771

Operating add-on (4x LED indic.) FCM2007-A1 → 0 to 2x – 96x LED groups

Art. no.: A5Q00021772

Extensions 4 Module bus cards → 0 to 37x

Line card (FDnet) FCL2001-A1 → 0 to 30x 4x FDnet lines and max. 252 addresses Art. no.: A5Q00009875 Line card (collective) FCL2002-A1 \rightarrow 0 to 30x 8x collective lines

Art. no.: A5000010502 Line card (MS9i) FCL2003-A1 → 0 to 30x - 2x MS9i lines and max. 100 addresses Art. no.: A5Q00010044

I/O card (FUE) FCI2007-A1 \rightarrow 0 to 7x - Transmission unit for alarms and faults – Max. 1x/card cage FCA2008-A1 Art. no.: \$54400-A20-A1

I/O card (programmable) FCI2008-A1 → 0 to 37x

 12x Open Collector inputs/outputs Art. no.: \$54400-A6-A1

> I/O card (sounder/monitored) FCI2009-A1 \rightarrow 0 to 7x 8x monitored outputs – Max. 1x/card cage FCA2008-A1

5 Card cage → 0 to 6x Card cage (5 slots) FCA2008-A1 - Slots for max. 5 module bus cards

Installation

Art. no.: S54400-B28-A1

Art. no.: \$54400-A21-A1

6 19" carriers → Depending on the number of card cages and other options

Carrier (19", card cage) FHA2023-A1 - For max. 2x card cages FCA2008-A1 (5 slots) Necessary height 358 mm Art. no.: S54400-B25-A1

Carrier (19", option) FHA2024-A1 - For options, max. height 135 mm on two-level hat rail, length 430 mm; max. 1x key safe

adapter SDA 300 (IFAM co.) Necessary height 182 mm Art. no.: \$54400-B26-A1

For 19" carriers, the available height between

the FCC2002-A1 processor unit and FHA 2021-A1 battery trav - With 1x battery tray FHA2021-A1: 1202 mm – With 2x battery trays FHA2021-A1: 935 mm

Power supply

7 Power supply → 1 to 4x** Carrier (19", power supply) FHA2022-A1

- 19" slot including 300 W power supply Art. no.: S54400-B24-A1 Power supply kit (150 W, B) FP2005-A1 → 0 to 1x/FHA2022-A1

– For extending the FHA2022-A1 by 150 W Art. no.: A5Q00018779 Battery tray (19") FHA2021-A11

→ 1x/FHA2022-A1 – For max. 2x 110 Ah Art. no.: S54400-B23-A1

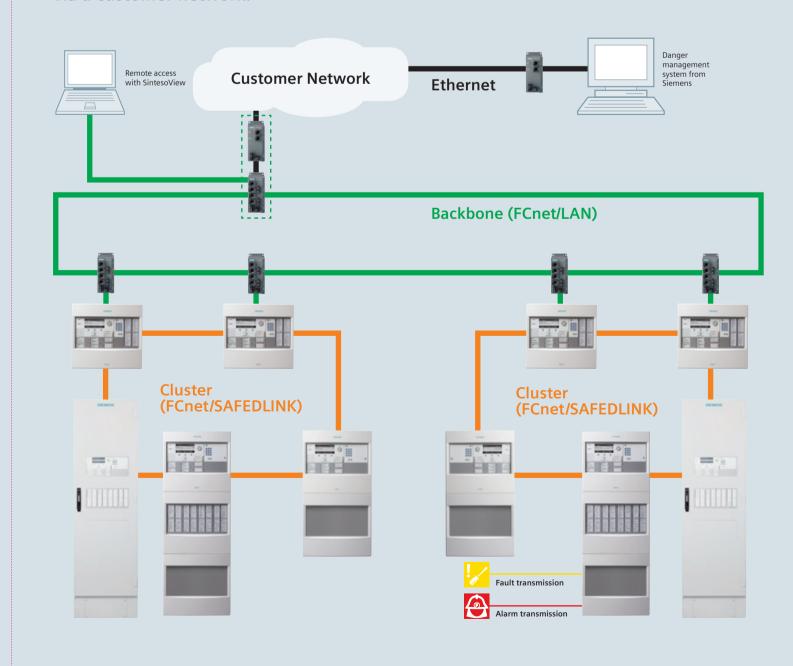
* Number of units to be installed ** if 3 or 4: split into two housings

Topology 2

Backbone (FCnet/LAN)

Cluster (FCnet/SAFEDLINK)

Up to 64 panels in one EN 54-compliant system with widely varying combinations of clusters and backbone – and with connection to a danger management system via a customer network.



Characteristics of topology example via backbone Extensive networks spanning long distances - Highest system availability thanks to systemwide redundancy – Panels in different clusters can communicate with each other - Even with these network structures, a system-wide transmission system including firefighting periphery can be implemented at a central contact point Distributed building complexes can be

- Backbone realized with fiber-optic cable

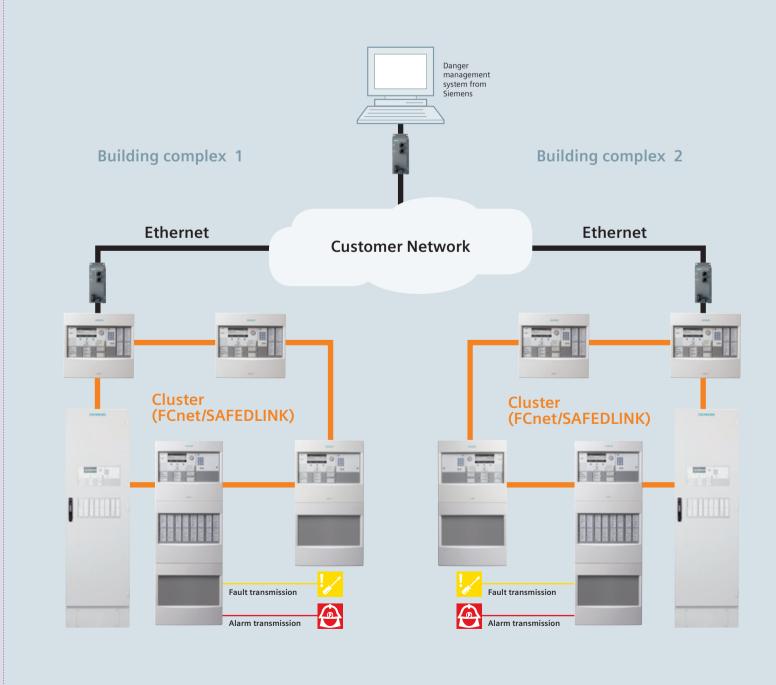
ideally protected

Key data – EN 54-compliant networking of up to 64 panels – Max. number of networkable panels incl. clusters (EN 54-compliant): - Max. number of clusters: – Max. number of networkable panels

Number of panels with system-wide view:

Topology 3

Use of a customer network to transmit relevant information from several locations to a central danger management station.



Characteristics of topology example Key data - Connection of independent building complexes - Max. number of networkable panels with a danger management station via IT per cluster: network provided by the customer Reduced installation or maintenance costs The maximum number of clusters, panels or data thanks to usage of customer networks points is dependent on the management station. – Autonomous clusters with their own

communication system to fire brigade

(to fulfill EN 54 regulations)

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License key L1 FCA2012-A1

installed in only one station.

License key L2 FCA2013-A1

Art. no.: A5Q00018856

must have L2 installed.

Art. no.: A5Q00018857

Activates the SintesoView function. For

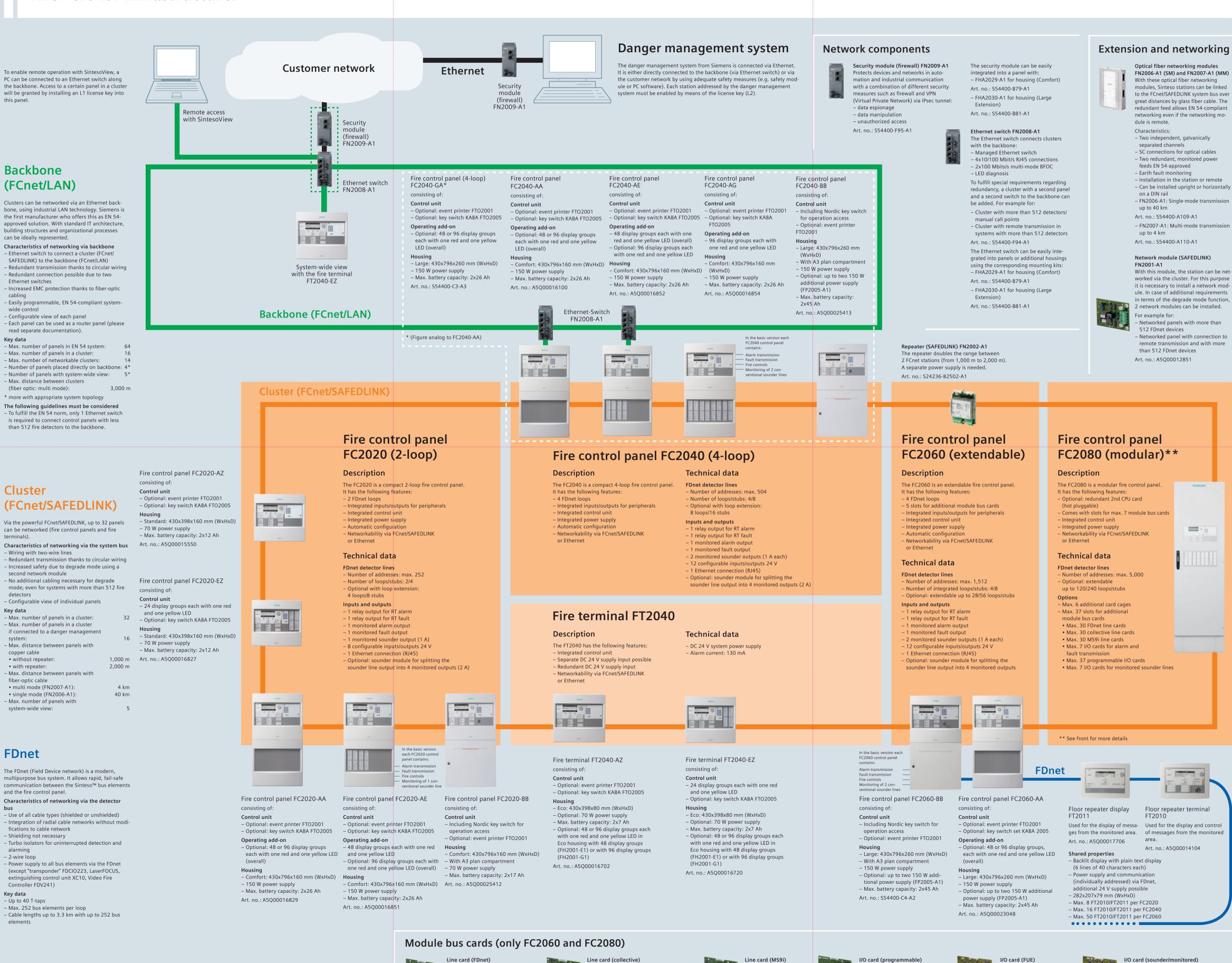
operating SintesoView, an L1 has to be

Activates the SintesoView function and

the connection to the danger manage-

ment system. Every station that needs

to be accessed by a management system



Extension and networking options

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 Art. no.: A5Q00005327

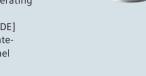
This is needed, for example, for operating the following modules: - Fire brigade display panel (FAT) [DE] - Fire brigade display panel with integrated fire brigade operating panel (FAT and FBF) [DE & CZ] – EVAC module [NL] - UGA 20 [FR]

RS485 module (isolated) FCA2002-A1

The RS485 module (isolated) is plugged into the PMI mainboard. Art. no.: A5Q00009923

Loop extension (FDnet) FCI2003-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 FDnet line card (e.g. 2 loops with 126 addresses each or 4 loops with 63 addresses each). Art. no.: A5Q00010136

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 FHA2007-A1. Art. no.: A5000014866



Power supply



Power supply kit (70 W) FP2003-A1 For the independent power supply of fire terminals such as FT724-ZZ. Art. no.: A5Q00016005

Power supply kit (150 W) FP2004-A1 Power supply for installation in empty housings. Optional: Additional powe supply with FP2005-A1 is possible. Art. no.: A5Q00020825

Additional power supply (150 W) Additional power supply can be connected in the housing directly

Housing (Large) FH2005-A1

Housing for larger batteries

- 430x796x260 mm (WxHxD)

supply (150 W) FP2005-A1

Flush mounting bezel one HU

Optional bezel for flush mounting

and FT20 operator terminals;

Flush mounting bezel two HU

Optional bezel for flush mounting

and FT20 operator terminals;

530x886 mm (WxH)

Art. no.: A5Q00024621

installation for all fire control panels

Housing (Eco + plan compartment)

Eco housing with A4 plan compartment;

530x500 mm (WxH)

Art. no.: A5Q00024719

installation for all fire control panels

- Optional: 48 or 96 die

Art. no.: A5Q00019543

FP2003-A1 or

(overall)

FHA2017-A1

FHA2015-A1

FH2006-A1

- Max. battery capacity: 2x65 Ah

Optional: power supply kit (70 W)

- Optional: power supply kit (150 W) FP2004-A1 and additional power

- Optional: event printer FTO2001-A1

each with one red and one yellow LED

after FP2004-A1. Art. no.: A5Q00018779

Housings

Housing (Eco) FH2001-A1

– Max. battery capacity: 2x7 Ah 430x398x80 mm (WxHxD) Optional: power supply kit (70 W) FP2003-A1 Optional: event printer FTO2001-A1 - Optional: 48 or 96 display groups each with one red and one yellow LED

Art. no.: A5000016865

Housing (Standard) FH2002-A1 - Max. battery capacity: 2x12 Ah - 430x398x160 mm (WxHxD) Optional: power supply kit (70 W) FP2003-A1 or

 Optional: power supply kit (150 W) FP2004-A1 and additional power supply (150 W) FP2005-A1 - Optional: event printer FTO2001-A1 - Optional: 48 or 96 display groups each with one red and one yellow LED (overall)

Art. no.: A5Q00018931



Art. no.: A5Q00009906

Housing (Large extension) FH2004-A1 Housing for larger batteries - Max. battery capacity: 2x65 Ah - 430x398x260 mm (WxHxD) Optional: power supply kit (70 W) FP2003-A1 or

each with one red and one yellow LED

 Optional: power supply kit (150 W) FP2004-A1 and additional power supply (150 W) FP2005-A1 - Optional: event printer FTO2001-A1 - Optional: 48 or 96 display groups

Art. no.: A5Q00018778

(overall)



Art. no.: A5Q00022369 19" mounting kit FHA2016-A1 Enables all fire control panels and

Key switch Nordic FTO2006-B1

Art. no.: A5Q00010129

Event printer FTO2001-A1

Key set with mounting accessories. Option-

ally applicable for operation clearance.

The event printer FTO2001-A1 is installed

directly in the control panel or in the ter

minal. It is a thermal printer which logs

all events. An RS232 module (isolated)

operator terminals to be mounted in a 19" frame; 430x100x324 mm (WxHxD) Art. no.: A5Q00020179

Operating add-ons



Operating add-on (2xLED incl.) FCM2006-A1 This contains 48 display groups each with one red and one vellow LED. Any events can be allocated to the LEDs: 427x200x25 mm (WxHxD) Optional: Event printer FTO2001-A1 Art. no.: A5Q00021771



Operating add-on (4xLED incl.) FCM2007-A1 This contains 96 display groups each with one red and one vellow LED. Any events can be allocated to the LEDs; 427x200x25 mm Art. no.: A5000021772



FCA2001-A1 is required for operating the event printer. This is not contained in the printer set and must be ordered Art. no.: A5Q00010126

Event printer DL3750+



Key switch Kaba FTO2005-C1 Kaha lock cylinder with installation accessories and kevs Kaba 8 #100. Usable optionally for enabling operation. Art. no.: A5Q00010113

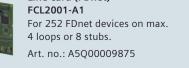


Monitored external event printer for serial connection or via Ethernet. Optional: RS232 module (isolated) FCA2001-A1 Art. no.: A5Q00023962

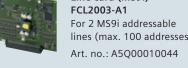
Legend for the interfaces:

One each optional RS232 and/or RS485 interface (can also be freely combined) per control panel or terminal Backbone (FCnet/LAN) Cluster (FCnet/SAFEDLINK) Network to connect panels FDnet Network to connect Sinteso devices

Line card (FDnet)



FCL2002-A1 To connect collective Siemens standard letectors on 8 stubs (MS7/9, MS24, DS11/ Sigmacon/SymoLINE600, FDOOT241-9 and FDOOT241-A9). Art. no.: A5Q00010502



FCI2008-A1 12 programmable inputs/ utputs with selectable behavior in degrade mode Art. no.: S54400-A6-A1



FCI2007-A1 For alarm and fault Art. no.: \$54400-A20-A1



FCI2009-A1 8 monitored sounder lines or onitored outputs. Art. no.: S54400-A21-A1

I/O card (sounder/monitored)