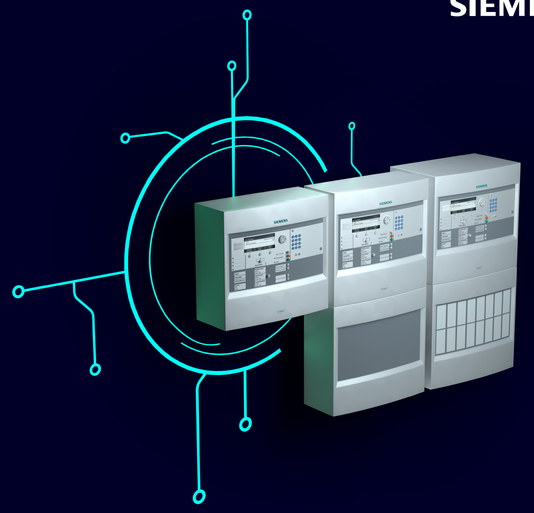
SIEMENS



Sinteso
panels, network and accessories

Planning Tool

Smart infrastructure intelligently connects energy systems, buildings and industries to adapt and evolve the way we live and work.

We work together with customers and partners to create an ecosystem that intuitively responds to the needs of people and helps customers to better use resources.

It helps our customers to thrive, communities to progress and supports sustainable development.

Creating environments that care.

siemens.com/smart-infrastructure

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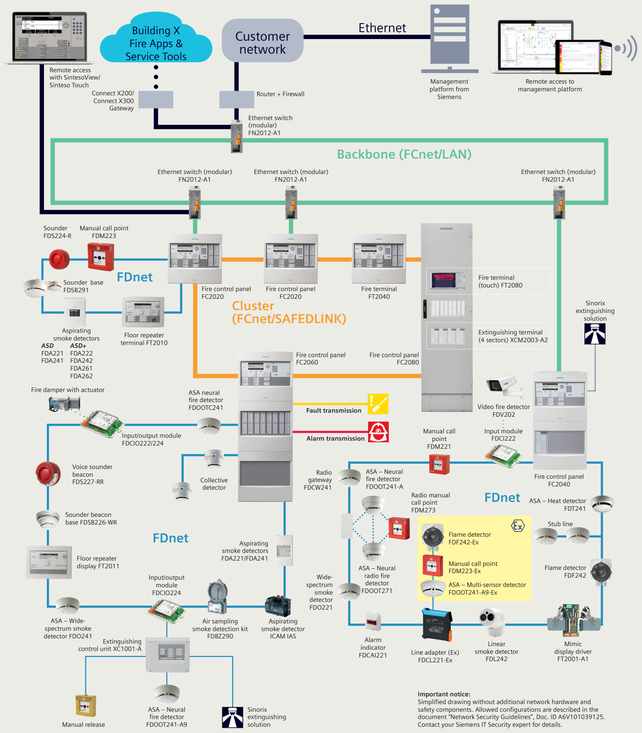
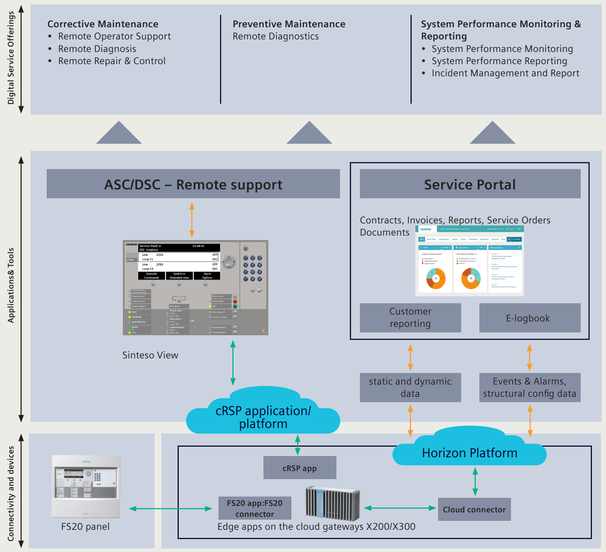
Sinteso – Because smarter protection matters



Important notice:
Simplified drawing without additional network hardware and safety components. Allowed configurations are described in the document "Network Security Guidelines", Doc. ID A6V10039125. Contact your Siemens IT Security expert for details.

Digital Service offerings with FS20 Sinteso system



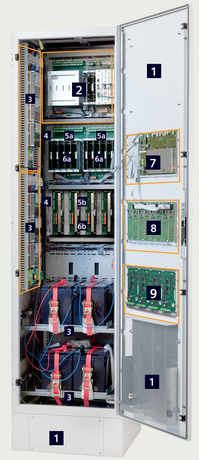
Siemens common Remote Service Platform (cRSP)

The cRSP is an Siemens-wide IT platform used to remotely access IP-based technical systems.
Security, fire safety and comfort systems can be connected to the cRSP.
Using cRSP, employees can view the customer systems for which they are authorized.
The platform meets very strict security standards. Siemens was one of the first organizations in the world to implement an internationally recognized information security management system (ISMS) for remote services in accordance with ISO/IEC 27001.

Service Portal Features

- View and manage contracts and invoices
- View installed systems and history
- Request support and open tickets
- Track service tickets
- Generate and view reports
- View latest system status with E-logbook

Sinteso control panel FC2080 – uniquely safe and flexible



Basic equipment

1 Pedestal cabinet 1x*
Housing (19" pedestal cabinet) FH2080-AA
– Housing incl. base, door and plan compartment A3
– Dimensions incl. base: 601x2204x615 mm (WxHxD)
Order no.: S54400-C103-A1

2 Processor unit 1x*
Processor unit (19", FC2080) FCC2002-A1 1x
– Card cage (CPU) with
• CPU card (FC2080) incl. network module (SAFEDLINK, CC) FN2010-A1
• Communication card (FC2080) incl. network module (SAFEDLINK, CC) FN2010-A1
• 1 free slot for an optional second CPU card (FC2080)
• 2 free slots for module bus cards
– Card cage (5 slots) with slots for max. 5 module bus cards
– Cable kit for connecting an optional operating unit
Order no.: S54400-B17-A1

CPU card (FC2080) FCC2004-A1 0 to 1x
– Second CPU card for redundant operation
Order no.: S54400-A18-A1

Power supply

3 Power supply 1 to 4x**
Carrier (19", power supply) FHA2022-A1 1 to 4x**
– 19" carrier incl. 2x power supply (150 W) cascaded
Order no.: S54400-B24-A1

Power supply kit (150 W, B) FP2005-A1 0 to 1x per each FHA2022-A1
– For extending the FHA2022-A1 by 150 W
Order no.: A5Q00018779

Battery pan (19") FHA2021-A11 1x per each FHA2022-A1
– Battery pan incl. 2x tension belts
– For max. 2x batteries 100 Ah (to be ordered separately)
Order no.: S54400-B23-A1

Mechanical installation

4 19" carriers
Carrier (19", card cage) FHA2023-A1 0 to 3x
– For max. 2x card cages (5 slots) FCA2008-A1
Order no.: S54400-B25-A1

Carrier (19", option) FHA2024-A1 0 to 8x
– For options, max. height 135 mm on two-level hat rail, length 430 mm; max. 1x key safe adapter SDA 300 (IFAM co.)
Order no.: S54400-B26-A1

Extinguishing carrier (19", card cage) FHA2058-A1 0 to 2x
– For max. 4x card cages FCA2046-A1
Order no.: S54392-B7-A1

Extensions fire

5a Card cage 0 to 6x
Card cage (5 slots) FCA2008-A1
– Slots for max. 5 module bus cards
Order no.: S54400-B28-A1

6a Module bus cards 0 to 37x
Line card (FDnet) FCL2001-A1 0 to 30x
– 4x FDnet lines and max. 252 addresses
Order no.: A5Q00009875

Line card (collective) FCL2002-A1 0 to 30x
– 8x collective lines
Order no.: A5Q00010502

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

Line card (AnalogPLUS) FCL2005-A1 0 to 30x
– 4x AnalogPLUS lines and max. 126 addresses per line
Order no.: S54400-A107-A1

Line card (interactive) FCL2006-A1 0 to 30x
– 1x interactive line and max. 126 addresses
Order no.: S54400-A108-A1

Line card (interactive Ex) FCL2007-A1 0 to 30x
– 1x interactive Ex line and max. 32 addresses
Order no.: S54400-A134-A1

I/O card (FUE) FCI2007-A1 0 to 7x
– Transmission unit for alarms and faults
– Max. 1x per card cage (5 slots) FCA2008-A1
Order no.: S54400-A20-A1

I/O card (programmable) FCI2008-A1 0 to 10x
– 12x open collector inputs/outputs
Order no.: S54400-A6-A1

I/O card (sounder/monitored) FCI2009-A1 0 to 7x
– 8x monitored outputs
– Max. 1x per card cage (5 slots) FCA2008-A1
Order no.: S54400-A21-A1

Extensions extinguishing

5b Card cage 0 to 8x
Card cage (1 sector) FCA2046-A1
Order no.: S54392-B8-A1

Multi-sector extinguishing
Cable kit (FCA2046-XCM2003) FCA2051-A1
– Connection to the extinguishing terminal XCM2003-A2
– 1x per extinguishing sector
Order no.: S54392-K13-A1

Cable kit (FCA2046-FCA2046) FCA2049-A1
– Connection to the next FCA2046 card cage
Order no.: S54392-K15-A1

Cable kit (FHA2053-FHA2053) FCA2048-A1
– Connection to the next FHA2053 carrier
Order no.: S54392-K16-A1

Cable kit (2nd 19", FCA2053) FCA2050-A1
– Connection to the second 19" housing
Order no.: S54392-K14-A1

6b Extinguishing cards 0 to 8x
Extinguishing card XCI2005-A1 0 to 8x
Order no.: S54392-A7-A1

Operation

7 Operating unit 0 to 1x
Operating unit FCM2028-A2 0 to 1x
– Standard operating unit
– Communication over FCnet
Order no.: S54400-F83-A1

8 Operating add-ons 0 to 2x***
Operating add-on (2xLED display) FCM2038-A2 0 to 2x per operating unit
– 48x LED groups
Order no.: S54400-B146-A1

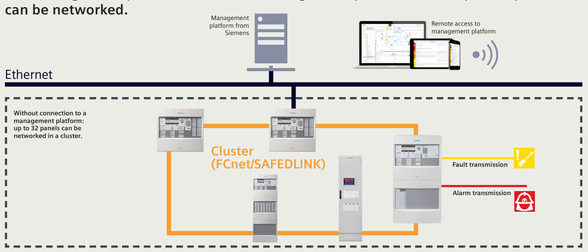
Operating add-on (4xLED display) FCM2036-A2 0 to 1x per operating unit
– 96x LED groups
Order no.: S54400-B147-A1

9 Extinguishing terminal 0 to 2x
Extinguishing terminal (4 sectors) XCM2003-A2 0 to 2x
Order no.: S54392-B4-A1
Extinguishing terminal (1 sector) XCM2002-A2 0 to 2x
Order no.: S54392-B3-A1

* Number of units to be installed
** if 3 or 4: split into two housings
*** max. 120 LED groups per operating unit

Topology 1

Up to 16 panels can be networked in a cluster (FCnet/SAFEDLINK) – if connected to a management platform. Without a management platform, even up to 32 panels can be networked.



Characteristics of topology example
– Easy networking of panels
– Operation of panels as standalone solution or networked with a total length of up to 1,280 km
– Existing cable infrastructure can be used

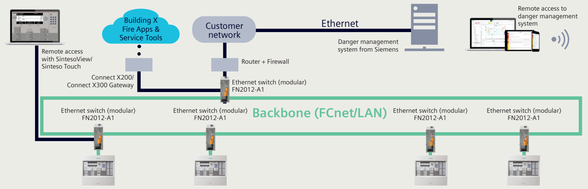
Key data

– Max. number of networkable panels:	32
– Max. number of networkable panels if connected to a danger management system:	16
– Max. distance between panels with copper cable:	
• without repeater:	1 km
• with repeater (FN2002-A1):	2 km
– Max. distance between panels with fiber-optic cable:	
• multi mode (FN2007-A1):	4 km
• single mode (FN2006-A1):	40 km
– Max. number of panels with system-wide view:	5

Important notice:
Simplified drawing without additional network hardware and safety components. Allowed configurations are described in the document "Network Security Guidelines", Doc. ID A6V10039125. Contact your Siemens IT Security expert for details.

Topology 2

Up to 64 panels in one EN 54-compliant system using a backbone (FCnet/LAN) without subnet, with connection to a management platform via a customer network.



Characteristics of topology example
– EN 54-compliant networking of up to 64 panels via backbone
– Redundant transmission thanks to circular wiring
– Forewarding of degrade alarm over the FCnet/LAN is with MoNet module implemented
– Increased EMC protection thanks to fiber-optic cabling
– Configurable view of each panel
– Common remote transmission to the fire brigade
– Optional danger management system
– Remote access with Building X Fire Apps
– Better performance on BACnet communication from stations to Management platform

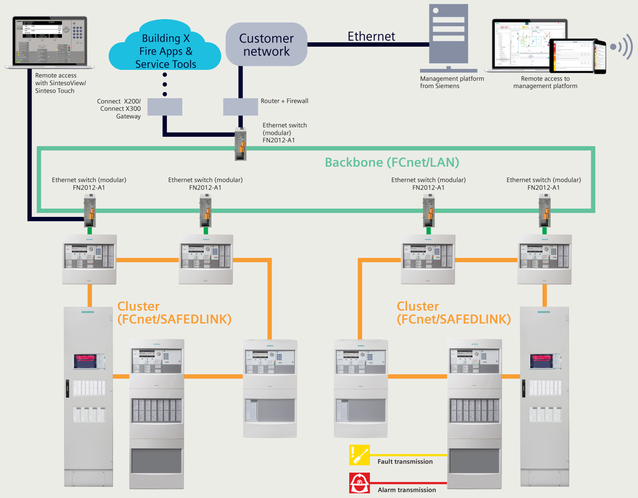
The FC2080 fire control panel and the FG2020 gateway can't be integrated into "FCnet/LAN without Subnetwork"

Key data

– Max. number of panels:	64
– Max. distance between panels:	
• multi-mode	4 km
• single mode	40 km

Topology 3

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



Important notice:
Simplified drawing without additional network hardware and safety components. Allowed configurations are described in the document "Network Security Guidelines", Doc. ID A6V10039125. Contact your Siemens IT Security expert for details.

Characteristics of topology example
– EN 54-compliant networking of up to 64 panels via backbone and cluster
– Extensive networks spanning long distances
– Highest system availability thanks to system-wide 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 ideally protected
– Backbone realized with fiber-optic cable

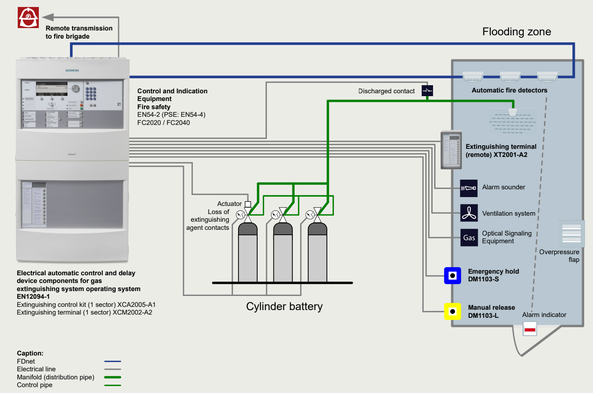
Key data

– Max. number of networkable panels incl. clusters (EN 54-compliant):	64
– Max. number of clusters:	14
– Max. number of networkable panels per cluster:	16
– Number of panels with system-wide view:	5

Integrated Extinguishing control planning

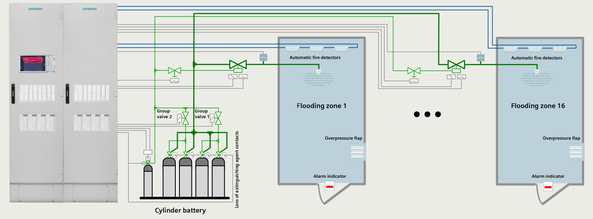
Single-sector extinguishing

Combined fire detection and extinguishing control panel FC20 operating as a single-sector extinguishing system. FC20 works with most types of extinguishing systems for room or object protection. A single-sector installation consists of a single flooding zone and cylinder bank. In case of a fire, the extinguishing agent flows through the manifolds to the flooding zone and is distributed there by the nozzles. The system can be optionally configured with a reserve cylinder battery.



Multi-sector extinguishing

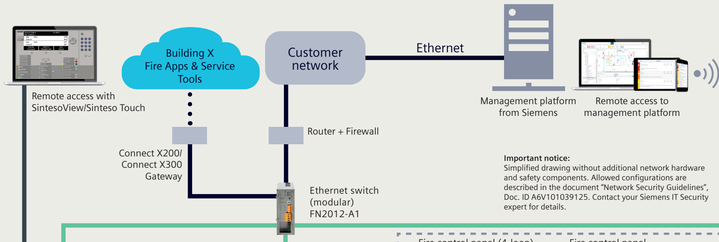
Combined fire detection and extinguishing control panel FC2080 operating as a multi-sector extinguishing system. A multi-sector installation consists of a single cylinder bank shared with multiple flooding zones, via selector valves. In case of a fire in one of the flooding zones, the corresponding selector valve is opened and the necessary groups of cylinders are released. The extinguishing agent flows through the manifolds to the flooding zone. The system can also be optionally configured with a reserve cylinder battery.



Sinteso Planning Tool Panels, network and accessories

SIEMENS

SintesoView/Sinteso Touch
For remote operation using SintesoView and Sinteso Touch, a Windows-enabled device is either connected to the Internet or customer network via LAN, WLAN, or mobile network operator. The signals are then transmitted to an Ethernet switch that connects to the backbone. This connection is protected against unauthorized access by a firewall. A license key provides access to the fire protection system. The device serves as a virtual terminal, offering the same user interface as the operating station or panel (FT2080, FT2040, FC20xx) in the fire detection network.



Backbone (FCnet/LAN)

Clusters can be networked via an Ethernet backbone, using industrial LAN technology. Siemens is the first manufacturer who offers this as an EN 54-approved solution. With standard IT architecture, building structures and organizational processes can be ideally represented.

Characteristics of networking via backbone
– Ethernet switch to connect a cluster (FCnet/SAFEDLINK) to the backbone (FCnet/LAN)
– Redundant transmission thanks to circular wiring
– Redundant connection possible due to two Ethernet switches
– Increased EMC protection thanks to fiber-optic cabling
– Easily programmable, EN 54-compliant system-wide control
– Configurable view of each panel
– Each panel can be used as a router panel (please read separate documentation).

Key data

– Max. number of panels in EN 54 system:	64
– Max. number of panels in a cluster:	16
– Max. number of networkable clusters:	14
– Number of panels placed directly on backbone:	4*
– Number of panels with system-wide view:	5*
– Max. distance between clusters	
Fiber optic multi mode (FN2012-A1 with Ethernet module (MM) VN2002-A1):	4,000 m
Fiber optic single mode (FN2012-A1 with Ethernet module (SM) VN2003-A1):	40,000 m

* more with appropriate system topology

The following guidelines must be considered
– To fulfill the EN 54 norm, only 1 Ethernet switch is required to connect control panels with less than 512 fire detectors to the backbone.

Cluster (FCnet/SAFEDLINK)

Via the powerful FCnet/SAFEDLINK, up to 32 panels can be networked (fire control panels and fire terminals).

Characteristics of networking via the system bus
– Wiring with two-wire lines
– Redundant transmission thanks to circular wiring
– Increased safety due to degrade mode using a second network module
– No additional cabling necessary for degrade mode; even for systems with more than 512 fire detectors
– Configurable view of individual panels

Key data

– Max. number of panels in a cluster:	32
– Max. number of panels in a cluster if connected to a management platform:	16
– Max. distance between panels with copper cable	
• Without repeater:	1 km
• With repeater:	2 km
– Max. distance between panels with fiber-optic cable	
• Multi mode (FN2007-A1):	4 km
• Single mode (FN2006-A1):	40 km
– Max. number of panels with system-wide view:	5

FDnet

The FDnet (Field Device network) is a modern, multipurpose bus system. It allows rapid, fail-safe communication between the Sinteso™ bus elements and the fire control panel.

Characteristics of networking via the detector bus
– Use of all cable types (with/without shielding)
– Integration of radial cable networks without modifications to cable network
– No shielding necessary
– Turbo isolators for uninterrupted detection and alarming
– 2-wire loop
– Power supply to all bus elements via the FDnet (except input/output module FDCIO221, zone module FDCI223, "transponder" FDCIO223, extinguishing control unit XC10, aspirating smoke detectors FDA221/FDA241)

Key data
– Up to 40 T-taps
– Max. 252 bus elements per loop
– Cable lengths up to 3.3 km with up to 252 bus elements

Detailed planning information

Detailed information for planning of the system are available in the planning document, Doc. ID 008843.

Legend for the interfaces:

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

Management platform

The building management platform Desigo CC™ is connected via Ethernet. It is either directly connected to the backbone (via Ethernet switch) or via the customer network. In each case the adequate safety measures (e.g. Firewall, etc) have to be used. Web clients and apps for smartphones and tablets provide remote access to the management platform.

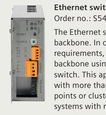
Important notice:
Simplified drawing without additional network hardware and safety components. Allowed configurations are described in the document "Network Security Guidelines", Doc. ID A6V101039125. Contact your Siemens IT Security expert for details.

Network components

Third-party interface

Modbus gateway NK8237.2
The NK8237 is used as a gateway between Sinteso and Modbus devices. It provides for bidirectional Modbus RTU and TCP connectivity to Sinteso fire protection systems. It has protection, routing and logging capabilities built in. The gateway does not replace the firewall which protects the Sinteso system against unauthorized access and cyber attacks.
Order no.: S54461-C7-A1

Backbone



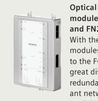
Ethernet switch (modular) FN2012-A1,
Order no.: S54400-B152-A1
The Ethernet switch connects clusters to the backbone. In case of increased redundancy requirements, a cluster can be linked to the backbone using a second panel and a second switch. This applies, for example, for clusters with more than 512 detectors/manual call points or clusters with remote transmission in systems with more than 512 detectors.
– 4 Ethernet interfaces
– 2 slots for optional Ethernet modules (ring). These must be ordered separately:
• VN2001 Ethernet module (copper/electric), max. 100 m
Order no.: S54400-A42-A1
• VN2002 Ethernet module (multi mode), optical Ethernet, max. 4 km
Order no.: S54400-A43-A1
• VN2003 Ethernet module (single mode), optical Ethernet, max. 40 km
Order no.: S54400-A44-A1
– Fault output: relay contact, floating

The FN2012-A1 additionally needs the connection module (MoNet) FCA2031-A1
Order no.: S54400-A153-A1

For installation in panels or additional housings, use the following installation kits:
– FHA2029-A1 for Eco, Standard, Comfort housings
Order no.: S54400-B79-A1
– FHA2030-A1 for Large, Large Extension housings
Order no.: S54400-B81-A1

Connect X300 Gateway CXG3.X300
Connect X300 gateway is connecting to a wide range of both Siemens and third-party building products.
Thanks to this gateway, the Fire Safety Systems can be connected to the cloud, and therefore be upgraded with various digital use-cases.
Order no.: S55842-Z121-A100

Fiber-optic converter



Optical fiber networking modules FN2006-A1 (SM) and FN2007-A1 (MM)
With these optical fiber networking modules, Sinteso stations can be linked to the FCnet/SAFEDLINK system bus over great distances by glass fiber cable. The redundant feed allows EN 54-compliant networking even if the networking module is remote.

Characteristics:
– Two independent, galvanically separated channels
– SC connections for optical cables
– Two redundant, monitored power feeds EN 54-approved
– Earth fault monitoring
– Installation in the station or remote
– Can be installed upright or horizontally on a DIN rail
– FN2006-A1: Single-mode transmission up to 40 km
Order no.: S54400-A109-A1
– FN2007-A1: Multi-mode transmission up to 4 km
Order no.: S54400-A110-A1

Connect X200 Gateway CXG3.X200
Connect X200 is a cost-effective gateway, connecting to a wide range of both Siemens and third-party building products. It has the possibility to be mounted inside the panel.
Thanks to this gateway, the Fire Safety Systems can be connected to the cloud, and therefore be upgraded with various digital use-cases.
Order no.: S55842-Z131-A100

Accessory kit + ACDC (X200) FCA2056-A1
Order no.: S54400-S115-A1

Mounting plate (X200) FHA2063-A1
Order no.: S54400-B116-A1

Extension and networking options

Panels	Slide-in/card options								
	Line card (FDnet, P) FCL2008-A1 For 252 FDnet devices on max. 4 loops or 8 stubs. Order no.: S4400-A182-A1	**Line card (collective) FCL2002-A1** To connect collective Siemens standard detectors on 8 stubs (MS7/9, MS24, DS11/Sigmacen/ SynoLINE600, FDOOT241-9 and FDOOT241-A9). Order no.: ASQ00010502	**Line card (MS9i) FCL2003-A1** For 2 MS9i addressable lines (max. 100 addresses). Order no.: ASQ00010044	**Line card (AnalogPLUS) FCL2005-A1** For 4 addressable AnalogPLUS lines (max. 126 addresses per line). Order no.: S54400-A107-A1	**Line card (interactive) FCL2006-A1** For 1 addressable interactive line (max. 126 addresses). Order no.: S54400-A108-A1	**Line card (interactive Ex) FCL2007-A1** For 1 addressable interactive Ex line (max. 32 addresses). Order no.: S54400-A134-A1	**I/O card (FUE) FCI2007-A1** For alarm and fault transmission. Order no.: S54400-A20-A1	**I/O card (programmable) FCI2008-A1** 12 programmable inputs/outputs with selectable behavior in degrade mode. Order no.: S54400-A6-A1	**I/O card (sounder/monitored) FCI2009-A1** 8 monitored sounder lines or monitored outputs. Order no.: S54400-A21-A1
FC2020	–	–	–	–	–	–	–	–	–
FC2030	✓	✓	✓	✓	✓	✓	✓	✓	✓
FC2040	–	–	–	–	–	–	–	–	–
FC2060	✓	✓	✓	✓	✓	✓	✓	✓	✓
FC2080	✓	✓	✓	✓	✓	✓	✓	✓	✓

Panels	Slide-in/card options							
	Network module (SAFEDLINK) FN2001-A1 With this module, the station can be networked via the cluster. For this purpose it is necessary to install a network module. In case of additional requirements in terms of the degrade mode function, 2 network modules can be installed. For example for: – Networked panels with more than 512 FDnet devices – Networked panel with connection to remote transmission and with more than 512 Fdnet devices Order no.: A5Q00012851	**CPU card FCC2004-A1** For redundant CPU operation. Order no.: S54400-A18-A1	**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. Order no.: A5Q00005327	**RS485 module (isolated) FCA2002-A1** 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] The RS485 module (isolated) is plugged into the PMI mainboard. Order no.: A5Q00009923	**Loop extension (FDnet, P) FCI2025-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 periphery board (e.g. 2 loops with 126 addresses each or 4 loops with 63 addresses each). Order no.: S54400-A185-A1	**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. Order no.: S54400-A1866	**Extinguishing card XCI2005-A1** Consisting of: – Module for one extinguishing sector – 10 configurable monitored outputs (actuators, alarm and peripheral devices) – 10 configurable monitored inputs (monitoring of extinguishing devices) – 6 driver outputs – Connection for remote terminal Order no.: S54392-A7-A1 **Card cage (1 sector exting.) FCA2046-A1** Consisting of: – Card holder for one extinguishing card Order no.: S54392-B8-A1
FC2020	✓	–	✓	✓	✓	✓		✓
FC2030	✓	–	✓	✓	✓[1]	✓	–	–
FC2040	✓	–	✓	✓	✓	✓		✓
FC2060	✓	–	✓	✓	✓[1]	✓	–	–
FC2080	–	✓	–	–	–	✓		✓

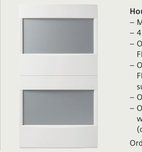
[1] Only usable on periphery board

License key	Without license key	S1 (FCA2033-A1)	S2 (FCA2034-A1)	S3 (FCA2035-A1)	S4 (FCA2036-A1)
		Order no.: S54400-P154-A1	Order no.: S54400-P155-A1	Order no.: S54400-P156-A1	Order no.: S54400-P157-A1
Management platform from Siemens	✓	✓	✓	✓	✓
SintesoView, Sinteso Touch and BACnet 3rd-party provider (supervision)	–	✓	✓	✓	✓
BACnet 3rd-party provider (supervision and basic commands)	–	–	✓	✓	✓
BACnet 3rd-party provider (supervision and extended commands)	–	–	–	✓	✓
BACnet 3rd-party provider (activation and deactivation commands)	–	–	–	–	✓

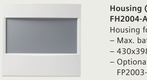
Housings

Housing (Eco) FH2001-A1
– Max. battery capacity: 2x7 Ah
– 430x398x260 mm (WxHxD)
– Optional: power supply kit (70 W) FP2003-A1
– Optional: event printer FTO2001-A1
– Optional: 48 or 96 display groups each with one green/red and one yellow LED (overall)
Order no.: A5Q00016865

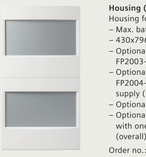
Housing (Standard) FH2002-A1
– Max. battery capacity: 2x12 Ah
– 430x398x160 mm (WxHxD)
– Optional: power supply kit (70 W) FP2003-A1 or
– Optional: power supply kit (150 W) FP2004-A1 and additional power supply (150 W) FP2005-A1
– Optional: event printer FTO2001-A1
– Optional: 48 or 96 display groups each with one green/red and one yellow LED (overall)
Order no.: A5Q00018931



Housing (Comfort) FH2003-A1
– Max. battery capacity: 2x26 Ah
– 430x796x160 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 green/red and one yellow LED (overall)
Order 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
– 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 green/red and one yellow LED (overall)
Order no.: A5Q00018778



Housing (Large) FH2005-A1
Housing for larger batteries
– Max. battery capacity: 2x65 Ah
– 430x796x260 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 green/red and one yellow LED (overall)
Order no.: A5Q00019543

19" mounting kit FHA2016-A1
Enables all fire control panels and operator terminals to be mounted in a 19" frame; 430x100x324 mm (WxHxD)
Order no.: A5Q00020179

Power supply

Power supply kit A (70 W) FP120-Z1
The autonomous power supply converts the mains voltage to system voltage and charges the batteries.
Order no.: S54400-S122-A1

Power supply kit (70 W) FP2015-A1
For the independent power supply of fire terminals such as FT2040.
Order no.: S54400-B121-A1

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

Additional power supply (150 W) FP2005-A1
Additional power supply can be connected in the housing directly after FP2004-A1.
Order no.: A5Q00018779

Operating add-ons

Extinguishing terminal (1 sector) XCM2002-A2
Consisting of:
– 1 extinguishing terminal
– Configurable leds and push buttons
– 4 digit display to show countdown pre-warning time
Order no.: S54392-B3-A1

Extinguishing terminal (4 sectors) XCM2003-A2
For FC2080 only.
Consisting of:
– 4 extinguishing terminals
– Configurable leds and push buttons
– 4 digit display to show countdown pre-warning time
Order no.: S54392-B4-A1

Operating add-on (2xLED incl.) FCM2038-A2
This contains 48 display groups each with one green/red and one yellow LED. Any events can be allocated to the LEDs; 427x200x25 mm (WxHxD). Optional: event printer FTO2001-A1
Order no.: S54400-B146-A1

Operating add-on (4xLED incl.) FCM2036-A2
This contains 96 display groups each with one green/red and one yellow LED. Any events can be allocated to the LEDs; 427x200x25 mm (WxHxD).
Order no.: S54400-B147-A1

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

Extinguishing key switch Kaba XTO2002-C1
Order no.: S54392-B12-A1

Key switch Nordic FTO2006-B1
Key set with mounting accessories. Optionally applicable for operation clearance.
Order no.: A5Q00010129

Extinguishing key switch Nordic XTO2003-B1
Order no.: S54392-B11-A1

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.
Order no.: A5Q00010126

Event printer DL3750+
Monitored external event printer for serial connection or via Ethernet.
Optional: RS232 module (isolated) FCA2001-A1
Order no.: A5Q00023962

Fire control panel FC2020 (2-loop)

Description
The FC2020 is a compact 2-loop fire control panel.
It has the following features:
– 2 FDnet loops with 1.5 A line driver
– Integrated inputs/outputs for peripherals
– Integrated operating unit
– Integrated power supply
– Automatic configuration
– Networkability via FCnet/SAFEDLINK or Ethernet

Technical data
FDnet detector lines
– Number of addresses: max. 252
– Number of loops/stubs: 2/4
– Optional 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 V
– 1 Ethernet connection (RJ45)
– Optional: sounder module for splitting the sounder line output into 4 monitored outputs (2 A)

Fire control panel FC2020-AZ
consisting of:
Operating unit
– Optional: event printer FTO2001
– Optional: key switch KABA FTO2005
Housing
– Standard: 430x398x160 mm (WxHxD)
– 70 W power supply
– Max. battery capacity: 2x12 Ah
Order no.: S54400-C33-A1

Fire control panel FC2020-EZ
consisting of:
Operating unit
– 24 display groups each with one green/red and one yellow LED
– Optional: key switch KABA FTO2005
Housing
– Standard: 430x398x160 mm (WxHxD)
– 70 W power supply
– Max. battery capacity: 2x12 Ah
Order no.: S54400-C33-A3

Fire control panel FC2040 (4-loop)

Description
The FC2040 is a compact 4-loop fire control panel.
It has the following features:
– 4 FDnet loops with 1.5 A line driver
– Integrated inputs/outputs for peripherals
– Integrated operating unit
– Integrated power supply
– Automatic configuration
– Networkability via FCnet/SAFEDLINK or Ethernet

Technical data
FDnet detector lines
– Number of addresses: max. 504
– Number of loops/stubs: 4/8
– Optional 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 V
– 1 Ethernet connection (RJ45)
– Optional: sounder module for splitting the sounder line output into 4 monitored outputs (2 A)

Fire control panel FC2030 (modular)

Description
The FC2030 is a modular fire control panel.
It has the following features:
– 4 FDnet loops with 1.5 A line driver
– 2 slots for additional module bus cards
– Integrated inputs/outputs for peripherals
– Integrated operating unit
– Integrated power supply
– Automatic configuration
– Networkability via FCnet/SAFEDLINK or Ethernet

Technical data
FDnet detector lines
– Number of addresses: max. 756
– Number of integrated loops/stubs: 2/4
– Optional: extendable up to 12/24 loops/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 V
– 1 Ethernet connection (RJ45)
– Optional: sounder module for splitting the sounder line output into 4 monitored outputs

Fire control panel FC2060 (modular)

Description
The FC2060 is a modular fire control panel.
It has the following features:
– 4 FDnet loops with 1.5 A line driver
– 5 slots for additional module bus cards
– Integrated inputs/outputs for peripherals
– Integrated operating unit
– Integrated power supply
– Automatic configuration
– Networkability via FCnet/SAFEDLINK or Ethernet

Technical data
FDnet detector lines
– Number of addresses: max. 1,512
– Number of integrated loops/stubs: 4/8
– Optional: extendable up to 28/56 loops/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 V
– 1 Ethernet connection (RJ45)
– Optional: sounder module for splitting the sounder line output into 4 monitored outputs

Fire control panel FC2080 (modular)**

Description
The FC2080 is a modular fire control panel.
It has the following features:
– Housing (19", pedestal cabinet)
– Processor unit (19", FC2080) with
• CPU card
• Communication card
• SAFEDLINK modules
• Optional: redundant 2nd CPU card (hot pluggable)
• Slots for max. 7 module bus cards
– Power supply up to 450 W
– Optional operating unit
– Networkability via FCnet/SAFEDLINK or Ethernet

Technical data
FDnet detector lines
– Number of addresses: max. 5,000
– Optional: extendable up to 120/240 loops/stubs
Options
– Max. 6 additional card cages (5 slots)
– Max. 37 slots for additional module bus cards
• Max. 30 FDnet line cards
• Max. 30 collective line cards
• Max. 30 MS9i line cards
• Max. 30 AnalogPLUS line cards
• Max. 30 interactive line cards
• Max. 30 interactive Ex line cards
• Max. 7 I/O cards for alarm and fault transmission
• Max. 10 programmable I/O cards
• Max. 7 I/O cards for monitored sounder lines
• Max 16 extinguishing sectors (8 sectors per housing)

Note: Picture shows FC2080 with optional fire terminal (touch) FT2080 and operating add-ons FCM2007-A1 and SCM2003-A2 built in.

** for further details, please see front page

Fire control panel with extinguishing control

Fire control panel FC2020/2040-AA with extinguishing control
consisting of:
Fire control panel
– 2-loop panel FC2020-AA
Order no.: S54400-C33-A6
– 4-loop panel FC2040-AA
Order no.: S54400-C35-A1
Extinguishing terminal (1 sector) XCM2002-A2
Order no.: S54392-B3-A1
Extinguishing control kit (1 sector) XCA2005-A1
– Extinguishing card XCI2005-A1
– Card cage (1 sector exting.) FCA2046-A1
– Accessory kit FCA2047-A1
– Card cage connection FCA2006
Order no.: S54392-S20-A1

Optional remote panel XT2001-A2
Order no.: S54392-F2-A1

Fire terminal FT2040/FT2080

Description
The FT20xx has the following features:
– Integrated operating unit
– Separate DC 24 V supply input possible
– Redundant DC 24 V supply input
– Networkability via FCnet/SAFEDLINK or Ethernet

Technical data
– DC 24 V system power supply
– Alarm current: 130 mA
• FT2040: 430 mA
• FT2080: 700 mA

Fire terminal FT2040-AZ
consisting of:
Operating unit
– Optional: event printer FTO2001
– Optional: key switch KABA FTO2005
Housing
– Eco: 430x398x80 mm (WxHxD)
– Optional: 70 W power supply
– Max. battery capacity: 2x7 Ah
– Optional: 48 or 96 display groups each with one green/red and one yellow LED in Eco housing with 48 display groups (FH2001-E1) or with 96 display groups (FH2001-G1)
Order no.: A5Q00016702

Fire terminal (touch) FT2080-A1
consisting of:
Operating unit
– 12" color display
– Resolution 1280x800 pixels
Order no.: S54400-C120-A1
Housing
– Standard (FH2002-A1)*
– Desktop (FHA2040-A1)*
– Back (FHA2039-A1)*
– Fire terminal board (FTI2001-A1)*
* must be ordered separately

Fire control panel FC2030-AA
consisting of:
Operating unit
– Optional: event printer FTO2001
– Optional: key switch set KABA FTO2005
Operating add-on
– Optional: 48 or 96 display groups, each with one green/red and one yellow LED (overall)
Housing
– Large: 430x796x260 mm (WxHxD)
– 150 W power supply
– Optional: up to two 150 W additional power supplies (FP2005-A1)
– Max. battery capacity: 2x45 Ah
Order no.: S54400-C36-A1

Fire control panel FC2060-AA
consisting of:
Operating unit
– Optional: event printer FTO2001
– Optional: key switch set KABA FTO2005
Operating add-on
– Optional: 48 or 96 display groups, each with one green/red and one yellow LED (overall)
Housing
– Large: 430x796x260 mm (WxHxD)
– 150 W power supply
– Optional: up to two 150 W additional power supplies (FP2005-A1)
– Max. battery capacity: 2x45 Ah
Order no.: S54400-C36-A1

Repeater (SAFEDLINK) FN2002-A1
The repeater doubles the range between 2 FCnet stations (from 1,000 m to 2,000 m). A separate power supply is needed.
Order no.: S24236-B2502-A1

FDnet

Floor repeater display FT2011
Used for the display of messages from the monitored area.
Order no.: A5Q00017706
Shared properties
– Backlit display with plain text display (6 lines of 40 characters each)
– Power supply and communication (individually addressed) via FDnet, additional 24 V supply possible
– 282x207x79 mm (WxHxD)
– Max. 8 FT2010/FT2011 per FC2020
– Max. 16 FT2010/FT2011 per FC2040
– Max. 50 FT2010/FT2011 per FC2060

Floor repeater terminal FT2010
Used for the display and control of messages from the monitored area.
Order no.: A5Q00014104