SIEMENS

Cerberus™ PRO

Fire control panel

FC726

Modular, pre-assembled fire control panel for large applications and the option of gradual migration to Cerberus PRO.

- Fire control panel for max. 1512 addresses
- Can be used as a standalone version or networked with up to 64 stations, such as control panels and terminals
- Redundant network node with degraded mode operation according to EN 54
- Option to connect to Siemens 'Cloud for Buildings'
- Emergency power supply for emergency operating time of up to 72 hours
- Recognition, automatic read-in and immediate operational readiness of all C-NET devices with auto-configuration
- Flexible configuration of complex applications and controls
- Configuration data can be uploaded/downloaded via remote access
- Time and situation-dependent changeover of detector parameter sets
- Card cage for additional module bus cards (line and I/O cards)
- Hot plug system: Module bus cards can be changed during operation
- Extensions: Printer, key switches, LED indicators

System

The diagrams have been simplified and do not include additional network hardware or security components. Permissible applications are described in the A6V101039439 Network Security Guidelines document. Contact your Siemens IT security expert for more information.

System overview

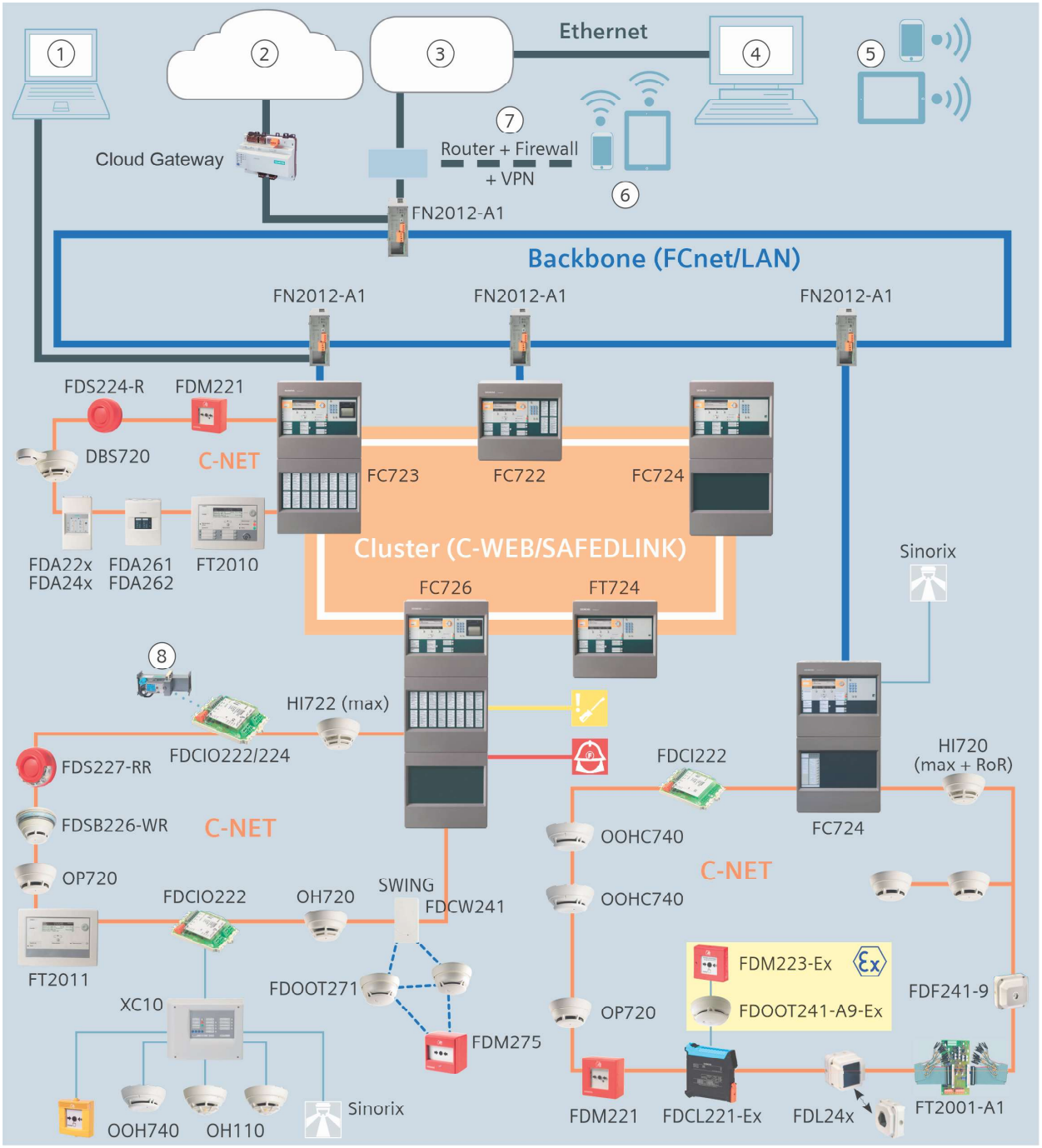


Fig. 1: System overview

1	Remote access with Cerberus-Remote
2	'Cloud for Buildings'
3	Customer network
4	Management platform
5	Remote access to management platform
6	Remote access with Cerberus Mobile
7	Router + firewall + virtual private network
8	Fire damper with actuator
	Transmission of a fault signal
	Transmission of an alarm signal

You will find a detailed labeled version of the diagram above along with further information in the A6V10332842 planning guide, see chapter 'Product documentation'.

Optional module bus cards for card cage with 5 slots

Type	Designation	Properties
FCL2001-A1	Line card (FDnet/C-NET)	4x loops of 0.5 A and max. 252 addresses per loop and max. 252 addresses per line card
FCL2008-A1	Line card (FDnet/C-NET, P)	4x loops of 1.5 A and max. 252 addresses per loop and max. 252 addresses per line card
FCL7201-Z3	Line card (SynoLOOP)	4x loops each with a maximum of 128 addresses, max. of 512 addresses per line card
FCI2007-A1	I/O card (RT)	Outputs for alarm, fault, local alarm
FCI2008-A1	I/O card (programmable)	12x freely programmable inputs/outputs per I/O card
FCI2009-A1	I/O card (horn/monitored)	8x monitored horn outputs or monitored outputs

Networking of fire control panels

The diagrams have been simplified and do not include additional network hardware or security components. Permissible applications are described in the A6V101039439 Network Security Guidelines document. Contact your Siemens IT security expert for more information.

Up to 32 control panels and terminals can be linked to form one C-WEB network. If the C-WEB network is connected to a danger management system via BACnet, up to 16 control panels and terminals can be networked.

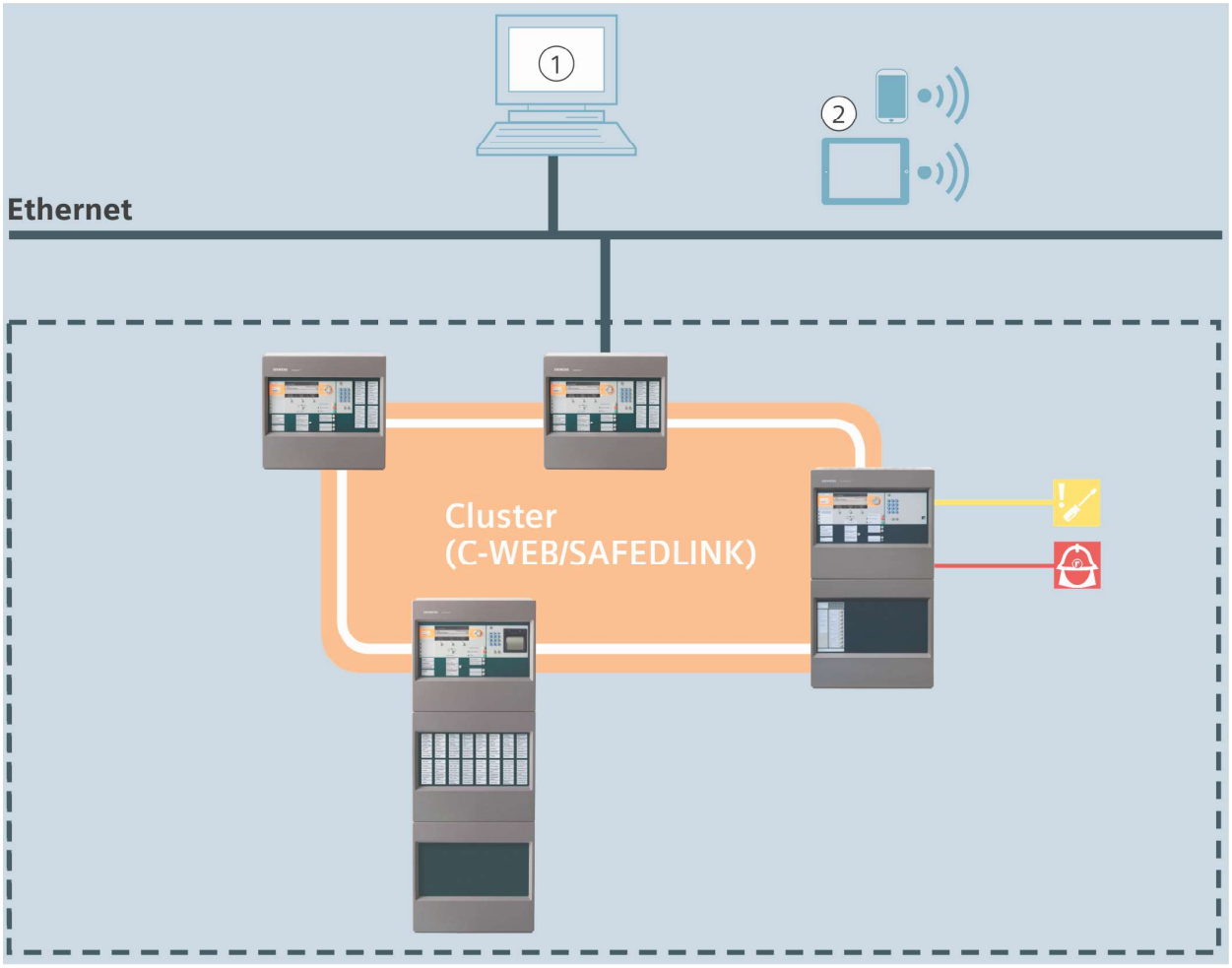


Fig. 2: Sub-net

1	Management platform
2	Remote access to management platform
	Transmission of a fault signal
	Transmission of an alarm signal

An optical C-WEB/LAN network allows up to 14 sub-nets with up to 16 stations to be operated in one network. A maximum of 64 stations is supported in total.

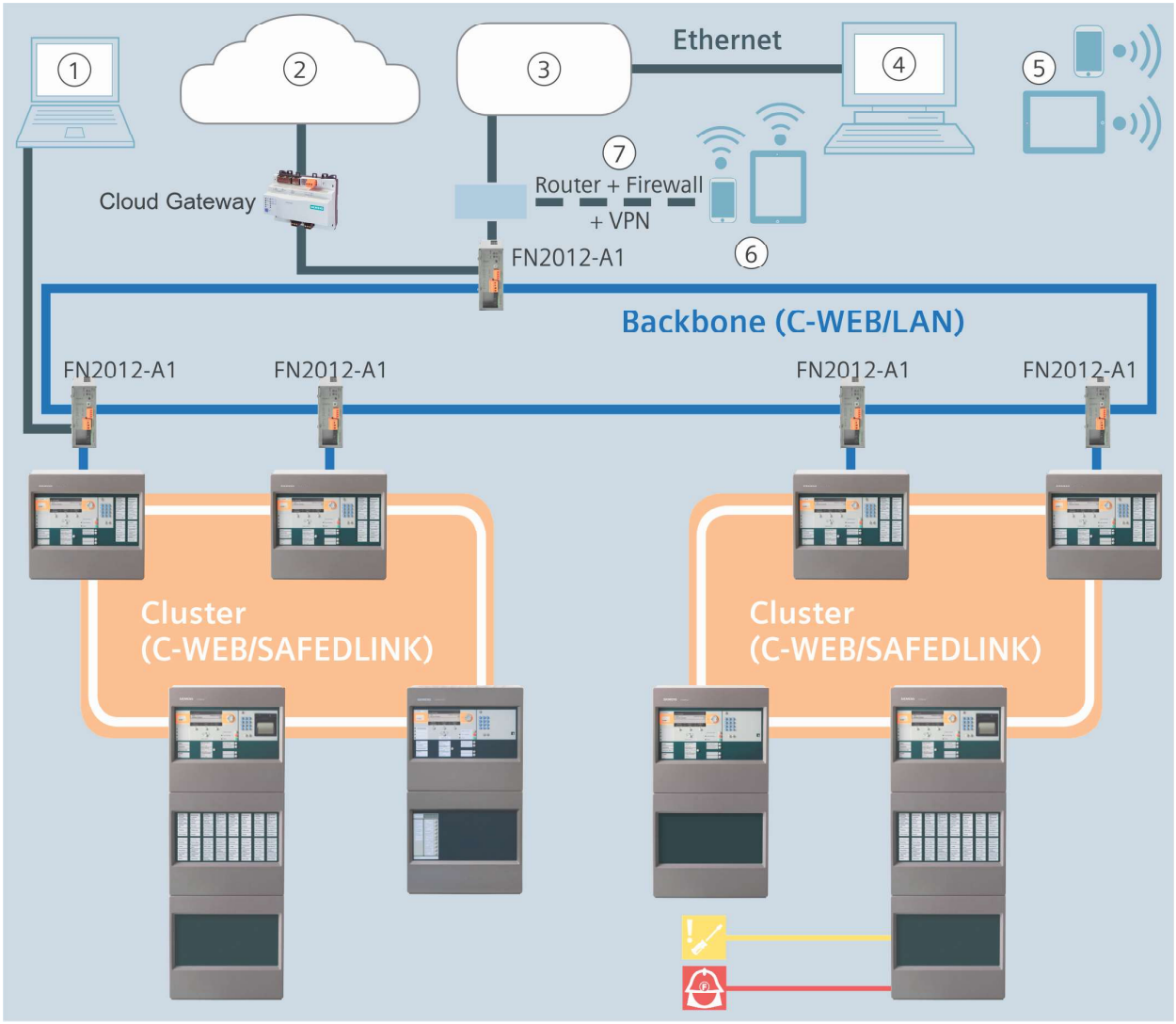


Fig. 3: Backbone

1	Remote access with Cerberus-Remote
2	'Cloud for Buildings'
3	Customer network
4	Management platform
5	Remote access to management platform
6	Remote access with Cerberus Mobile
7	Router + firewall + virtual private network
	Transmission of a fault signal
	Transmission of an alarm signal

You will find a detailed labeled version of the diagram above along with further information in the A6V10332842 planning guide, see chapter 'Product documentation'.

General features and functions

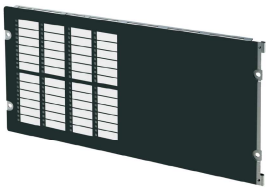
- Fast Ethernet interface for a heterogeneous network
- Processes signals from the detector series Cerberus PRO FD720 as well as signals from earlier detector series
- Interface to Siemens danger management system
- Slots for RS232 and RS485 serial interfaces
- Floor repeater displays, terminals and alarm devices on the C-NET detector line with power supply via C-NET
- All detector lines are monitored for ground faults.
- Mixed use of all module bus cards (line and I/O cards) possible.
- Integrated degraded mode function
- Freely configurable, time-dependent controls with optional weekly, monthly, and yearly switching programs
- Time and situation-dependent changeover of detector parameter sets
- Controls for synchronous activation of sounder bases/sounders (acoustic, optical, language)
- The control panel and the fire detection system are custom-configured using the 'Cerberus-Engineering-Tool' software
- Firmware for all processor-controlled control panel components can be updated
- Customer texts can be adapted directly on the operating unit of the control panel or with the 'Cerberus-Engineering-Tool' software
- Up to 13000 events can be called up from the event memory and filtered based on various criteria
- Automatic summer/normal time changeover

Control panel-specific features

From IP8, the fire control panels can be ordered with a periphery board with a 0.5 A or 1.5 A output current per C-NET line.
To convert existing fire control panels, the periphery board with 1.5 A per C-NET line can be ordered separately.

FC726-ZA	Housing (Large)
	C-NET detector line: • Max. 1512 addresses • 4 loops/8 stubs • Can be extended up to 28 loops/56 stubs Extra module bus cards (option): • Line card (FDnet/C-NET) FCL2001-A1 • Line card (FDnet/C-NET, P) FCL2008-A1 • Line card (SynoLOOP) FCL7201-Z3 • I/O card (programmable) FCI2008-A1 • I/O card (horn/monitored) FCI2009A1 • I/O card (remote transmission) FCI2007-A1 Features: • Operating unit • Operating add-on (empty) • Card cage (5 slots) • 150 W power supply • Max. battery capacity 45 Ah Operating unit options: • Event printer FTO2001-A1 • Key switch (Kaba) FTO2005-C1 • Key switch (nordic) FTO2006-B1 • Operating add-on (2xLED indicator) FCM7213-Y3 • Operating add-on (4xLED indicator) FCM7214-Y3

Extensions

FCM7213-Y3	Operating add-on (2xLED indicator)
	• Optional operating add-ons with 48 indicator groups and two LEDs each: 1x red/green LED and 1x yellow LED

FCM7214-Y3	Operating add-on (4xLED indicator)
	• Optional operating add-ons with 96 indicator groups and two LEDs each: 1x red/green LED and 1x yellow LED

FH7204-Z3	Housing (Large Extension)
	• Empty housing for free use • 443 x 404 x 288 mm • E.g., for extra batteries, operating add-ons, or event printer • Space for the following battery configurations: – 2x FA2007-A1 (45 Ah) or – 2x FA2008-A1 (65 Ah) • The mounting kit for the batteries FHA2061-A1 must be ordered separately.

FH7205-Z3	Housing (Large)
	• Empty housing for free use • 443 x 802 x 288 mm • E.g., for extra batteries, operating add-ons, or event printers • Space for the following battery configurations: – 2x BAT12-25 (25 Ah) or – 2x FA2007-A1 (45 Ah) or – 2x FA2008-A1 (65 Ah) • The mounting kit for the batteries FHA2061-A1 must be ordered separately.

FTO2001-A1	Event printer
	• Thermal printer for installation in operating units or operating add-ons • Can be controlled via the RS232 module FCA2001-A1 (order separately) • Logs all important events, such as alarms, faults, isolations, and test functions

DL3750+	Matrix printer (external)
	• External matrix printer recommended by Siemens • Supports monitoring for printing faults • Can be controlled via the RS232 module FCA2001-A1 (order separately) • Can be controlled via Ethernet via the print server PS104 from SEH

Use

For large applications, e.g., for industrial plants, office complexes, or production halls.

As part of a modernization process, for a gradual and seamless transition from older systems to Cerberus PRO.

Design

Function elements

Operating unit

The following elements are available on the operating unit:

- CPU module and electronics
- Ethernet connection
- Slots for RS232 and RS485 modules and network modules (SAFEDLINK)
- Space for 'Kaba' or 'nordic' key switch
- Space for event printer (depending on version)
- Peripheral data bus connection for optional LED modules

Periphery board

From IP8, the fire control panels can be ordered with a periphery board with a 0.5 A or 1.5 A output current per C-NET line.
To convert existing fire control panels, the periphery board with 1.5 A per C-NET line can be ordered separately.

The following elements are available on the periphery board:

- Connection terminals for:
  - C-NET lines
  - Remote transmission (alarm, fault)
  - Horn output
  - Configurable control inputs and outputs
  - Monitored alarm and fault output
  - Power supply and emergency supply
- 2x slot for loop extension (C-NET)

Card cage

There is a card cage mounted on the rear housing panel for inserting a maximum of five module bus cards.

Power supply unit 150 W, emergency power supply

The power supply feeds the hardware and charges the batteries.

In the event of a power cut, the batteries provide emergency current.

Housing

An FHA2007-A1 pivoting mounting plate can be fitted for the following elements above the periphery board on the rear housing panel:

- 1x fire brigade periphery module (for Germany)
- 2x sounder modules (as an alternative to mounting on U-rail TS35)
- 1x Connect X200 Gateway

Configuration

The following software allows the system to be customized:

- Cerberus-Engineering-Tool

Operation

Each control unit has an integrated operating unit. The control panel can also be operated via a separate fire terminal FT724.

You will find details and more information in product data sheet A6V10207898.

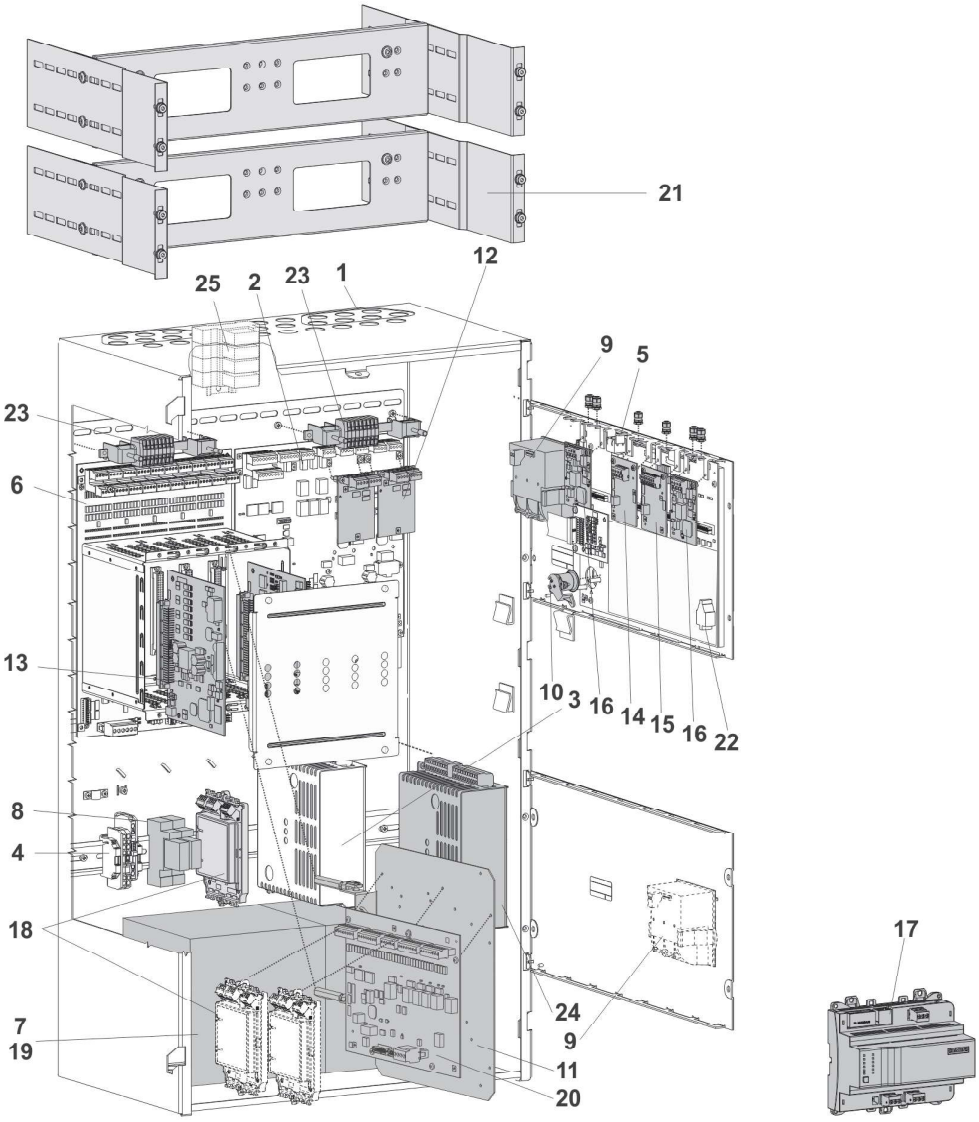


Fig. 4: Layout of FC726

Position	Designation	Type	Comment
Basic equipment			
1	Housing (Large)	FHA7205-Z3	Items 1–6: Basic equipment.
2	Periphery board (4 loops)	FCI2004-A1	The periphery board (4 loops, P) can be ordered separately to convert the station to the 1.5 A C-NET line.
	Periphery board (4 loops, P)	FCI2024-A1	
3	Power supply (SV 24 V-150 W)	V24230-Z6-A5	
4	Mains terminals on TS35 DIN rail	-	Space for socket, relay modules, etc.
5	Operating unit	FCM72xx-xx	Operating unit with CPU
6	Card cage (5 slots)	FCA2008-A1	For five module bus cards
7	Space for batteries	-	2x 12 V / 17…45 Ah
Extensions			
8	Relay module	Z3B171	Relay for fire controls
9	Event printer	FTO2001-A1	For logging events

Position	Designation	Type	Comment
10	Key switch (Kaba)	FTO2005-C1	For operating access authorization
	Key switch (nordic)	FTO2006-B1	
11	Mounting plate	FHA2007-A1	e.g., for fire brigade periphery module or Connect X200 Gateway
12	Loop extension (C-NET)	FCI2003-A1	For loop extension of the periphery board (4 loops) FCI2004-A1 from two to four loops, number of addresses remains the same
	Loop extension (FDnet/C-NET, P)	FCI2025-A1	For loop extension of the periphery board (4 loops, P) FCI2024-A1 from two to four loops, number of addresses remains the same
13	Module bus cards:		
	Line card (FDnet/C-NET)	FCL2001-A1	For four extra C-NET lines
	Line card (FDnet/C-NET, P)	FCL2008-A1	For four extra C-NET lines of 1.5 A each
	Line card (SynoLOOP)	FCL7201-Z3	For four addressable SynoLOOP lines
	I/O card (programmable)	FCI2008-A1	For twelve configurable inputs/outputs
	I/O card (horn/monitored)	FCI2009-A1	For eight monitored horn outputs
	I/O card (RT)	FCI2007-A1	For extra alarm and fault outputs
14	RS485 module (isolated)	FCA2002-A1	For peripheral devices with RS485 interface
15	RS232 module (isolated)	FCA2001-A1	For devices with an RS232 interface
16	Network module (SAFEDLINK)	FN2001-A1	For networking several stations
17	Connect X200 Gateway	CXG3.X200	For connecting an FS720 station to Cloud for Buildings The mounting plate FHA2007-A1 and the accessory set + ACDC (X200) FCA2056-A1 or the mounting plate (X200) FHA2063-A1 and the accessory set + ACDC (X200) FCA2056-A1 must be ordered separately.
18	Sounder module	FCA2005-A1	For splitting one conventional sounder into four
19	Battery (12 V, 25 Ah, VdS)	BAT12-25	For the emergency power supply
	Battery (12 V, 45 Ah, VDS)	FA2007-A1	
20	Fire brigade periphery module	FCI2001-D1	For Germany (FBF, FSD, ÜE, FSE, ÖA, KL)
21	19" mounting kit	FHA2016-A1	For installation in 19" third-party housing
22	License key Sx	FCA20xx	For special functions
23	Cable kit (communication)	FCA2014-A1	For flexible connections running to the modules on the operating unit
24	Power supply kit (150 W, B)	FP2005-A1	For extra power supply
25	Relay module/U-rail	Z3B171	Space for U-rail TS35 L=70 mm with max. four relay modules
	Repeater (SAFEDLINK)	FN2002-A1	Not in overview, as not an installation part. For extending the system bus C-WEB from 1000 m to 2000 m between two stations. Max. 1x repeater (SAFEDLINK) between two stations.

Type Overview

	Housing (Large)
Type	FC726
Number of C-NET addresses	1512
Loops (with loop extension) or	4 (8)
Stubs (with loop extension)	8 (16)
Power supply	150 W
Max. battery capacity	45 Ah
Max. number of module bus cards in the card cage	5

Details for ordering

Fire terminals

Type	Designation	Weight	Order number
FC726-ZA	Fire control panel (modular)	21.143 kg	S54400-C87-A1
FC726-ZA	Fire control panel (modular, P)	21.181 kg	S54433-C116-A1

Extensions

Type	Designation	Weight	Order number
FCA2001-A1	RS232 module (isolated)	0.033 kg	A5Q00005327
FCA2002-A1	RS485 module (isolated)	0.027 kg	A5Q00009923
FCA2005-A1	Sounder module	0.100 kg	A5Q00014866
FCA2014-A1	Cable kit (communication)	0.126 kg	A5Q00023027
FCI2003-A1	Loop extension (C-NET)	0.030 kg	A5Q00010136
FCI2024-A1	Periphery board (4-Loop, P)	0.119 kg	S54400-A184-A1
FCI2025-A1	Loop extension (FDnet/C-NET, P)	0.030 kg	S54400-A185-A1
FCI2007-A1	I/O card (RT)	0.111 kg	S54400-A20-A1
FCI2008-A1	I/O card (programmable)	0.097 kg	S54400-A6-A1
FCI2009-A1	I/O card (horn, monitored)	0.109 kg	S54400-A21-A1
FCL2001-A1	Line card (FDnet/C-NET)	0.119 kg	A5Q00009875
FCL2008-A1	Line card (FDnet/C-NET, P)	0.119 kg	S54400-A182-A1
FCL7201-Z3	Line card (SynoLOOP)	0.120 kg	S54400-A116-A1
FCM7214-Y3	Operating add-on (4xLED indicator)	3.905 kg	S54400-B150-A1
FCM7213-Y3	Operating add-on (2xLED indicator)	2.516 kg	S54400-B149-A1
FH7204-Z3	Housing (Large Extension)	11.729 kg	S54400-B89-A1
FH7205-Z3	Housing (Large)	16.079 kg	S54400-B86-A1
FHA2007-A1	Mounting plate	0.800 kg	A5Q00010151
FHA2016-A1	19" mounting kit	3.000 kg	A5Q00020179
FN2001-A1	Network module (SAFEDLINK)	0.022 kg	A5Q00012851
FN2002-A1	Repeater (SAFEDLINK)	0.105 kg	S24236-B2502-A1
FN2006-A1	Fiber network module (SM)	0.792 kg	S54400-A109-A1
FN2007-A1	Fiber network module (MM)	0.792 kg	S54400-A110-A1
FTO2001-A1	Event printer	0.141 kg	A5Q00010126
-	Spare printer reels (10 reels)	0.090 kg	A5Q00017619
FTO2005-C1	Key switch (Kaba)	0.083 kg	A5Q00010113
FTO2006-B1	Key switch (nordic)	0.046 kg	A5Q00010129
Z3B171	Relay module 250 V AC / 10 A (1 relay)	0.042 kg	4843830001

Auxiliary power supply

Type	Designation	Weight	Order number
FP2004-A1	Power supply kit (150 W, A) for EN-compliant installation in empty housing	1.286 kg	A5Q00020825

Type	Designation	Weight	Order number
FP2005-A1	Power supply kit (150 W, B) for extension	1.181 kg	A5Q00018779

Network (backbone)

Type	Designation	Weight	Order number
FCA2031-A1	Connection module (MoNet)	0.081 kg incl. cable	S54400-A153-A1
FHA2029-A1	Mounting kit (switch)	1.261 kg	S54400-B79-A1
FN2012-A1	Ethernet switch (modular)	0.600 kg	S54400-B152-A1
VN2002-A1	Ethernet module (MM)	0.026 kg	S54400-A43-A1
VN2003-A1	Ethernet module (SM)	0.026 kg	S54400-A44-A1

Cloud Gateway

Type	Designation	Weight	Order number
CXG3.X200	Connect X200 Gateway	0.300 kg	S55842-Z131-A100
FCA2056-A1	Accessory kit + ACDC (X200)	0.200 kg	S54400-S115-A1
FHA2063-A1	Mounting plate (X200)	0.269 kg	S54400-B116-A1

Battery

Type	Designation	Weight	Order number
FA2005-A1	Battery (12 V, 17 Ah, VdS)	5.700 kg	A5Q00019677
BAT12-25	Battery (12 V, 25 Ah, VdS)	7.8 kg	S54302-Z102-A1
FA2007-A1	Battery (12 V, 45 Ah, VdS)	14.500 kg	A5Q00022897
FA2008-A1	Battery (12 V, 65 Ah, VdS)	21.300 kg	A5Q00019357
FHA2061-A1	Mounting kit for batteries	–	S54400-B91-A1

License keys

Type	Designation	Weight	Order number
FCA2033-A1	License key (S1)	0.010 kg	S54400-P154-A1
FCA2034-A1	License key (S2)	0.010 kg	S54400-P155-A1
FCA2035-A1	License key (S3)	0.010 kg	S54400-P156-A1
FCA2036-A1	License key (S4)	0.010 kg	S54400-P157-A1

External printer

Type	Designation	Weight	Order number
DL3750+	Matrix printer (external)	7.300 kg	A5Q00023962
-	Color ribbon for matrix printer DL3750+	0.078 kg	A5Q00023963

Product documentation

Title	Document ID
System documentation	
System description	A6V10210355
Product data	A6V10210368
Planning	A6V10210362
Mounting/Installation	A6V10210390
System data sheet	
FS720 – Fire detection system	A6V10227649
Data sheets	
FC721 - fire control panel	A6V10203220
FC722 - fire control panel	A6V10206525
FC723 - fire control panel for modernization	A6V10379246
FC724 - fire control panel	A6V10207176
FC726 - fire control panel (modular)	A6V10263277
FT724 - fire terminal	A6V10207898
Fire detection system with integrated single-sector extinguishing	A6V11480005
Network Security Guidelines	A6V101039439
Planning overview	A6V10332842

Related documents such as the environmental declarations, CE declarations, etc., can be downloaded from the following Internet address:

www.siemens.com/bt/download

Guarantee

The application-specific technical data is guaranteed only in combination with the Siemens products listed in the 'Device combinations' section. If third-party products are used, any guarantee provided by Siemens will be invalidated.

Technical data

Fire control panel (modular)/(modular, P) FC726 in housing (Large)		
Supply	Mains voltage	AC 115 / 230 V +10/-15 %
	Power supply	150 W
	Operating voltage	DC 21…28.4 V
	Operating current	Max. 5 A
	Battery capacity	2x 12 V, max. 45 Ah
	Battery monitoring	Yes
	Network monitoring	Yes
Inputs / outputs	Connectable detector series	Cerberus PRO
	Other addressable detectors which can be connected	SynoLOOP
	Number of addresses	Max. 1512
	Number of integrated line cards	2
	Number of integrated lines:	
	• Loops (with loop extension) or	4 (8)
	• Stubs	8 (16)
	Number of additional lines:	
	• C-NET (4 loops or stubs per line card)	Max. 20 loops/stubs
	• SynoLOOP (4 loops or stubs per line card)	Max. 20 loops/stubs
	Integrated inputs/outputs:	
	• Alarm RT relay output	1
	• Fault RT relay output	1
	• Monitored alarm outputs	1
	• Monitored fault outputs	1
	• Monitored horn outputs	2
	• Freely programmable inputs/outputs	12
	Additional I/O cards:	
	• Programmable	12x configurable inputs/outputs 2x supply outputs 24 V
	• Horn/monitored	8x horn output monitored
	• RT	1x alarm relay output 1x fault relay output 1x voltage output 24 V 2x GPIO (General Purpose Input/ Output) 1x fault output monitored 2x configurable output monitored

Fire control panel (modular)/(modular, P) FC726 in housing (Large)		
Interfaces	Operating unit	Integrated
	Slots for serial interfaces RS232, RS485	2
	Slots for network modules	2
	Slots for loop extension	2
	Slots for module bus cards (on integrated card cage)	5
	Mounting spaces for cable kit (communication)	2
	Sounder module	Max. 2
	Ethernet port RJ45	1
Ambient conditions	Operating temperature	-8…+42 °C
	Storage temperature	-20…+60 °C
	Air humidity (no condensation permitted)	≤95 % rel.
	Maximum height above sea level	3,700 m
Mechanical data	Dimensions (W x H x D):	
	• Without cover cap	430 x 796 x 265 mm
	• With cover cap	443 x 802 x 288 mm
	Protection category (IEC 60529)	IP30
	Color:	
	• Housing	~RAL 7035 light gray
	• Cover cap	~RAL 000 50 00
Approvals	VdS	G210084
	LPCB	126bn/08
	FM	3051081

Issued by
Siemens Switzerland Ltd
Smart Infrastructure
Global Headquarters
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www.siemens.com/buildingtechnologies

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Document ID A6V10263277_I_en_--
Edition 2023-07-06