

# Cerberus PRO Planning Tool – panels, network, and accessories

To enable remote operation with Cerberus-Remote, the PC has to be connected to an Ethernet switch of the backbone. Access to a certain panel in a cluster will be granted by installing an L1 license key into this panel.

## Backbone (C-WEB/LAN)

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

### Characteristics of networking via backbone

- Ethernet switch to connect a cluster to the backbone
- 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-conform system-wide control
- Configurable view of single panels
- All panels can be used as router panel (for further information on FC726, please have a look into the 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): 3,000 m
- \* and more with respective system topology  
The following guidelines must be observed  
– To fulfill the EN 54 norm, you need only 1 Ethernet switch to connect control panels with less than 512 fire detectors to the backbone.

## Cluster (C-WEB/SAFEDLINK)

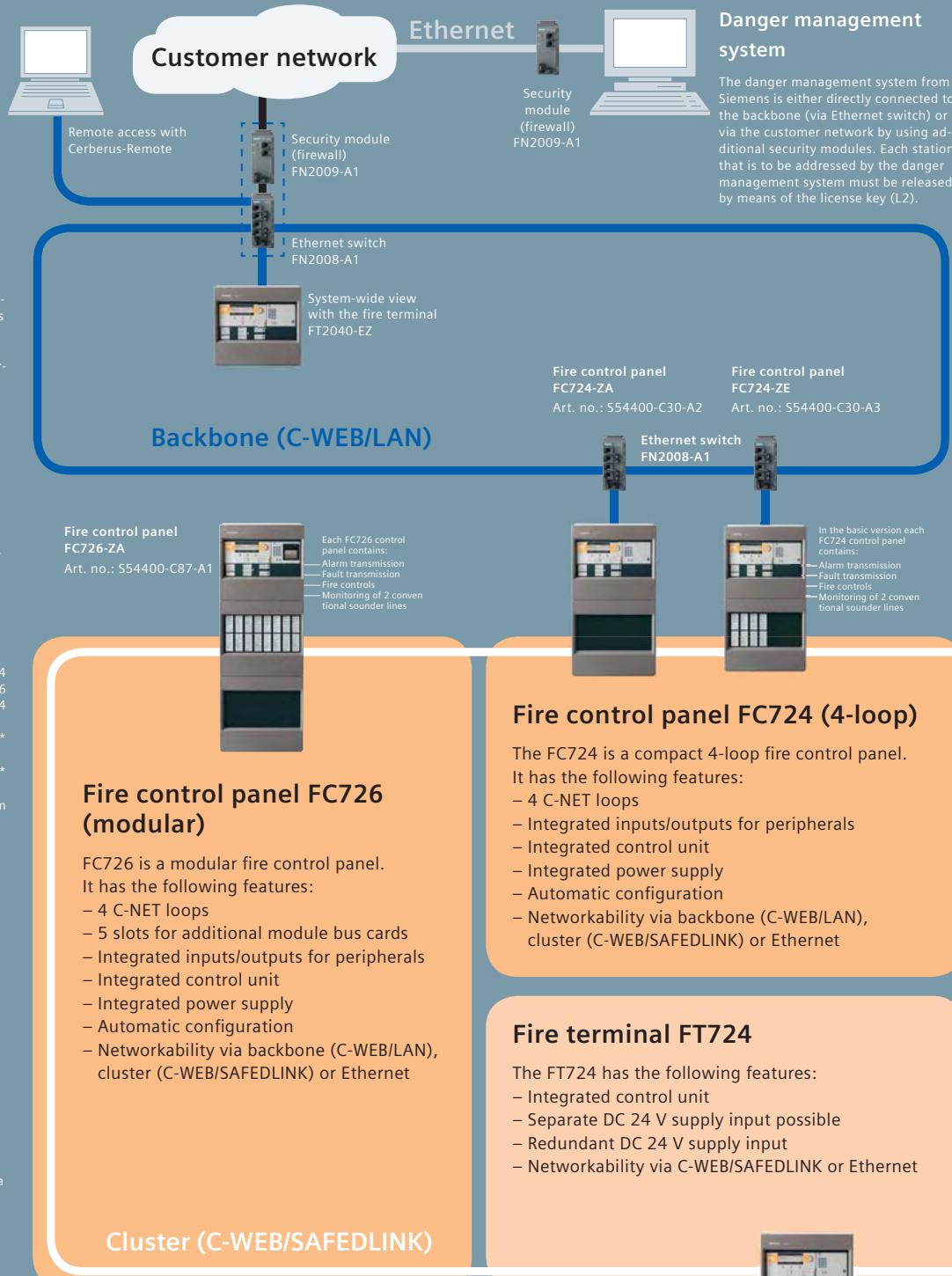
Via the powerful cluster, up to 32 panels can be networked (fire control panels and fire terminals).

### Characteristics of networking via the system bus

- Wiring with two wires
- 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 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: 1,000 m
  - with repeater: 2,000 m
- Max. distance between panels with fiber-optic cable
  - multi mode: 2,500 m
  - single mode: 15,000 m
- Max. number of panels with system-wide view: 5



## C-NET

The C-NET is a modern, multi-purpose bus system. It allows rapid, fail-safe communication between the Cerberus® PRO bus elements and the fire control panel.

### Characteristics of networking via the detector bus

- Use of all cable types (shielded or unshielded)
- Integration of star-shaped cable networks without modifications to cable network
- Shielding not necessary

- 2-wire loop
- Power supply to all bus elements via the C-NET (except transponder FDCIO223, LaserFOCUS, extinguishing control unit XC10)

### Key data

- Up to 40 T-taps
- Up to 126 bus elements on one loop
- Cable lengths up to 3.3 km with up to 126 bus elements

## C-NET

(For further details see also the Cerberus PRO Planning Tool – C-NET devices)



Fire terminal FT724-ZZ  
Art. no.: S54400-C31-A2

## C-NET

(For further details see also the Cerberus PRO Planning Tool – C-NET devices)

### Network components

<b>Backbone</b>
Security module (firewall) FN2009-A1 Art. no.: S54400-F95-A1
Ethernet switch FN2008-A1 Art. no.: S54400-F94-A1
<b>Cluster</b>
Network module (SAFEDLINK) FN2001-A1 Art. no.: A5Q00012851

### Housings

Housing (Eco) FH7201-Z3 Art. no.: S54400-B72-A1	Housing (Large) FH7205-Z3 Art. no.: S54400-B86-A1
Housing (Standard) FH7202-Z3 Art. no.: S54400-B70-A1	Housing (Large Extension) FH7204-Z3 Art. no.: S54400-B89-A1
Housing (Comfort) FH7203-Z3 Art. no.: S54400-B71-A1	19" mounting kit FHA2016-A1 Art. no.: A5Q00020179

### Expansion options

Sounder module FCA2005-A1 Art. no.: A5Q00014866
RS232 module (isolated) FCA2001-A1 Art. no.: A5Q0005327
RS485 module (isolated) FCA2002-A1 Art. no.: A5Q00009923
License key L1 FCA2012-A1 Art. no.: A5Q00018856
License key L2 FCA2013-A1 Art. no.: A5Q00018857

**Fire control panel FC722 (2-loop)**

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 backbone (C-WEB/LAN), cluster (C-WEB/SAFEDLINK) or Ethernet

In the basic version each FC722 control panel contains:

- Alarm transmission
- Fault transmission
- Fire controls
- Monitoring of conventional sounder line

**Fire control panel FC721 (1-loop)**

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

**Module bus cards for FC726**

Line card (C-NET) FCL2001-A1 Art. no.: A5Q00009875	I/O card (programmable) FCI2008-A1 Art. no.: S54400-A6-A1
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**Operating add-ons**

Operating add-on (2xLED-ind.) FCM7211-Y3 Art. no.: S54400-F75-A1	Key switch Nordic FTO2006-B1 Art. no.: A5Q00010129
Operating add-on (4xLED-ind.) FCM7212-Y3 Art. no.: S54400-F88-A1	Event printer FTO2001-A1 Art. no.: A5Q00010126
Key switch Kaba FTO2005-C1 Art. no.: A5Q00010113	Event printer DL3750+ Art. no.: A5Q00023962

**Power supply**

Power supply kit (70 W) FP2003-A1 Art. no.: A5Q00016005	Additional power supply (150 W) FP2005-A1 Art. no.: A5Q00018779
Power supply kit (150 W) FP2004-A1 Art. no.: A5Q00020825	

**Legend for the interfaces and networks:**

<b>Serial interfaces</b>	One optional RS232 and/or one RS485 interface (also freely combinable) per panel or fire terminal
<b>Backbone (C-WEB/LAN)</b>	Network to connect clusters
<b>Cluster (C-WEB/SAFEDLINK)</b>	Network to connect panels
<b>C-NET</b>	Network to connect Cerberus PRO devices

# Cerberus PRO Planning Tool – C-NET devices

