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Cerberus PRO – C-NET devices

Planning Tool

Answers for infrastructure.

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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 answers. 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.

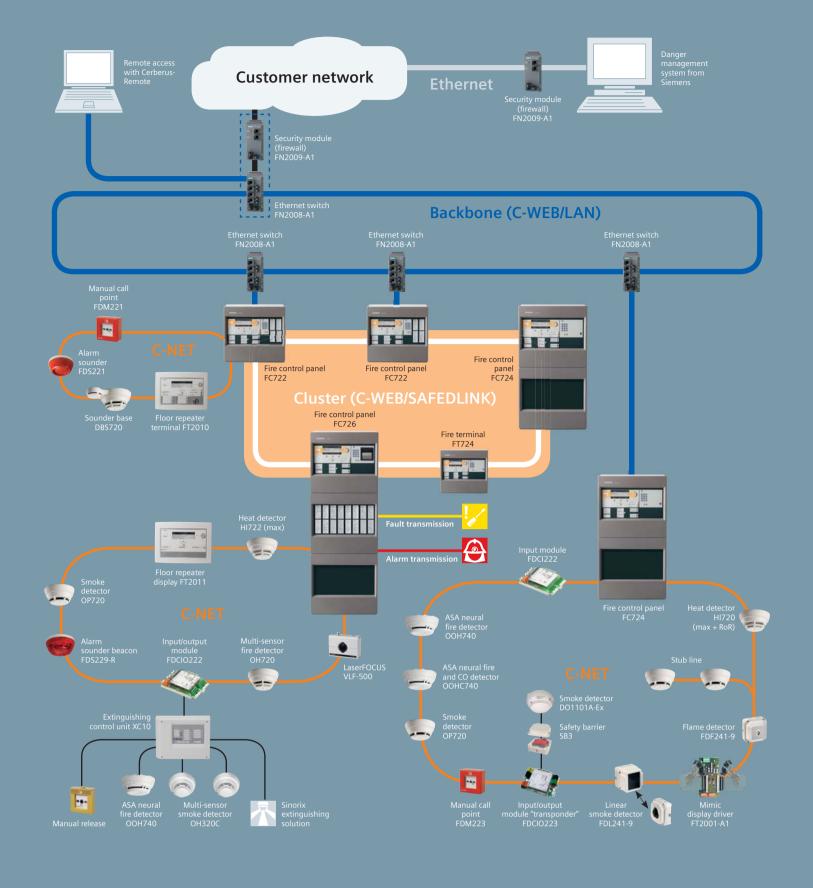
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Panel overview

	FC721-ZZ/-YZ	FC722-ZZ/-YZ	FC722-ZA/-ZE	FC724-ZA/-ZE	FC726-ZA	FT724-ZZ	
	Housing Eco	Housing Standard	Housing Comfort	Housing Comfort	Housing Comfort	Housing Eco	
Mains voltage	AC 85 265 V	AC 85 265 V	AC 230 V	AC 230 V	AC 230 V	-	
Power supply	70 W	70 W	150 W	150 W	150 W	option PSU 70 W	
Operating voltage	DC 21 28.6 V	DC 21 28.6 V	DC 21 28.4 V	DC 21 28.4 V	DC 21 28.4 V	DC 21 28.4 V	
Operating current							
Battery capacity	2x12 V, 7 Ah	2x12 V, 7 12 Ah	2x12 V, 26 Ah	2x12 V, 26 Ah	2x12 V, 45 Ah	option 2x12 V, 7 Ah	
Emergency power supply							
Connectable detector series	Cerberus PRO FD720 (C-NET)	Cerberus PRO FD720 (C-NET)	Cerberus PRO FD720 (C-NET)	Cerberus PRO FD720 (C-NET)	Cerberus PRO FD720 (C-NET)	-	
	1 2 -	2 (4) 4 (8) -		4 (8) 8 (16) -		- - -	
Number of addresses	max.126	max. 252	max. 252	max. 504	max. 1,512	-	
Networkable	-	✓	✓	✓	✓	✓	
Integrated inputs/outputs - Relay outputs • RT alarm • RT fault - Monitored outputs • Alarm • Fault • Horn - Freely programmable inputs/outputs	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 2	1 1 1 1 2 12 (72) ²⁾	- - - - -	
Operating unit	integrated	integrated	integrated	integrated	integrated	integrated	
Display groups integrated, each with one red & yellow LED	−/up to 24	−/up to 24	−/up to 48	−/up to 48	-	-	
Plug-in position for RS232, RS485 serial ports	1	2	2	2	2	2	
	1	1	1	1	1	1	
Dimensions (WxHxD)	430x398x80 mm	430x398x160 mm	430x796x160 mm	430x796x160 mm	430x796x260 mm	430x398x80 mm	
Approvals – CPD – VdS – LPCB	0786-CPD-20767 - 126aw-(cl-2)	0786-CPD-20721 G209076 126aw-(cl-2)			0786-CPD-20983 G210084 pending	 G209078 126aw-(cl-2)	

Cerberus PRO – enjoy protecting

Powerful control panels, clever fire detectors, and smart peripheral devices. This is what our comprehensive Cerberus® PRO family offers. The brief overview below demonstrates the most important system components.



Alarm sounder tones

No.	Tonality	Frequency pattern Sweep from – to	Pulse pattern	Adjustable FDS221 and FDS229 sound intensity level (typ. values in [dBA/1m]*)		Norm	
				at 12 V	at 32 V		
2	Intermittent	950 Hz	1s 1s	96 87 79	100 91 81	"alert" BS 5839 Part 1 1988	
		1200 Hz – 500 Hz	15			DIN-Tone DIN33404 Part 3	
	Slow-whoop Sweep-up, linear	500 Hz – 1200 Hz	3.5 s	97 88 81	101 92 82	NEN2575 (Netherlands)	
5		500 Hz	0.15 s 0.1s				
6	Intermittent	500 Hz	0.15 s 0.6 s	93 84 75	96 87 75	Swedish Standard SS 03 17 11, No. 6 "Local Warning"	
		500 Hz	_{0.1s}				
8	Alternating	560 Hz 440 Hz	0.4 s	94 85 75	98 89 76	"French fire sound" NF S 32-001-1975	
			0.6 s 0.65 s				
10	Slow-whoop Sweep-up, linear	500 Hz – 1200 Hz	3.75s 0.25s	96 89 81	100 93 82	Australia "Action" AS 2220 -1978	
		970 Hz	0.5 s 	99 89 82	102 92 83	ISO 8201 US Temporal Tone LF	

Robust or sensitive? The solution often lies somewhere in between.

High Suppression (PS8)	Suppression (PS5)	Suppression CO (PS12)	High Compensation (PS7)	Robust (PS2)	Balanced (PS4)	Balanced CO (PS10)	Fast Response (PS6)	High Sensitive Fast (PS9)
Sensitive PS8	PS5 Robust	PS 12 PS 12	PS7 PS7	PS2 PS2	PS4 PS4	PS 10	PS6 Robust	Robust Robust
Application area For operating conditions susceptible to heavy optical deceptive phenomena. Examples include dance floors in discotheques (deceptive phenomena: dry ice) or churches during special services (deceptive phenomena: frankincense). Description In this parameter set, the signal from the smoke sensor will not be allowed to create a fire alarm signal until a simultaneous increase in the thermal signal is also detected. In the event of dry ice, there is no temperature increase and the detector will not create an unwanted alarm. With a rise in temperature of only 8K (open fire), the optical sensors will be further analyzed and if the signal corresponds to a fire, an alarm will be triggered. In addition, the detector will also trigger an alarm as a rate of rise heat detector or if its static temperature limit is exceeded. Expert advice "High Suppression" has clear advantages over traditional concepts where smoke detection is turned off completely and replaced by thermal detection during events where dry ice is used. This parameter set allows much faster detection than switching to purely thermal detection. This enhances safety at critical times where visibility is reduced and large numbers of people are in attendance. Further options include the ability to switch between parameter sets so that a more sensitive detection mode can be used when no dry ice is likely. The detector complies with the norm EN 54-5 and in some jurisdictions heat detector spacing may be applicable.	Application area Difficult environments subject to heavy deceptive phenomena. Application examples include canteen kitchens or manufacturing areas with operational-related deceptive aerosols. Description Highly robust behavior, therefore very suitable for applications with deceptive phenomena such as steam, heavy cigarette smoke or exhaust gases. At the same time, the detector reacts with the ASA parameter set quickly and reliably in case of a real fire due to the dynamic influencing of the parameters.	Application area Difficult environments subject to heavy deceptive phenomena. Application examples include manufacturing areas with operational-related aerosols. Additional separate CO toxic gas detection and environmental monitoring. Description Highly robust behavior, therefore very suitable for applications with deceptive phenomena such as steam, cigarette smoke etc. At the same time, the detector reacts with the ASA parameter set quickly and reliably in case of a real fire due to the dynamic influencing of the parameters. Sensitivity is also influenced by the CO concentration. Separate CO alarming and control for the detection of unhealthy or dangerous carbon monoxide build up. Separate signaling of environmental thermal thresholds.	Application area Applications with deposits resulting from excessive dust or dirt over a long time period. Here, optical detectors usually reach their limit quickly, resulting in a reduced operational lifetime. Description This parameter set is identical to the Robust setting except that the drift compensation is extended. This parameter set is therefore especially suited for rooms in which a lot of dust and other deposits can be expected to build up over a period of time. The detector maintains the set detector sensitivity and resistance to deceptive phenomena. The detector reacts quickly and reliably in case of a real fire.	Application area Difficult environmental conditions. Examples are event locations or underground garages with moderate deceptive phenomena and risks to individuals. Description Designed for robust behavior. This ASA parameter set is particularly suitable for applications with deceptive phenomena such as cigarette smoke, dust, and exhaust gases. At the same time, the detector reacts very quickly and reliably in case of a real fire. Compared to the 'Suppression (PS5)' parameter set, the 'Robust (PS2)' parameter set may be used to improve detection speed on higher ceilings while still retaining sufficient resistance to false alarms.	Application area Standard applications. Rooms with moderate deceptive phenomena. Description For use in normal environments. This parameter set has a balanced response characteristic; sensitive in case of a fire but still tolerant of transient deceptive phenomena. Due to its distinct dynamic, the detector reacts quickly to open fires as well as smoldering fires. This ASA parameter set reacts robustly to deceptive phenomena such as cigarette smoke or small amounts of steam. Additional information This parameter set is often used when the system is set in unmanned mode (e.g. at night).	Application area Rooms where an increased CO concentration in the event of fire is possible. Moderate deceptive phenomena. Description Using the three criteria: smoke, heat, and CO the device is more sensitive to fires creating CO than the parameter set 'Balanced (PS4)' without the CO signal. The device is robust with deceptive phenomena such as cigarette smoke or a small amount of steam. This parameter also offers early alarming in the event of fires generating a large amount of CO, e.g. mattress fires.	Application area Rooms in which sensitive and quick detection is essential such as rooms with high ceilings, warehouses with flammable material (increased risk of fire), and application areas where the detectors trigger an extinguishing system. Description This parameter set reacts in a fast and highly sensitive manner. It is thus especially suited for rooms without deceptive phenomena, where the priority is on detecting fires as early as possible. Expert advice The high thermal influence from open fires transports the dark smoke particles that are typical for this kind of fire quickly to the ceiling. Due to the backward scattering and the "Fast Response" setting, the detector is highly sensitive. This makes the detector a perfect replacement in situations where ionization detectors would normally have been considered optimal.	Rooms in which an especially high sensitivity to smoldering and open fires is required. Examples include museums with high ceilings, clean production halls or applications where adequate life protection can only be ensured by the fastest possible detection. Due to special thermal algorithms, usage at low temperatures is also possible. Description This parameter set allows for the fastest possible detection for both open and smoldering fires. It is therefore intended for use in clean environments with no deceptive phenomena.
Complies with the norm EN 54-5	Complies with the norm EN 54-5, EN 54-7	Complies with the norm EN 54-5, EN 54-7	Complies with the norm EN 54-5, EN 54-7	Complies with the norm EN 54-5, EN 54-7	Complies with the norm EN 54-5, EN 54-7	Complies with the norm EN 54-5, EN 54-7	Complies with the norm EN 54-5, EN 54-7	Complies with the norm EN 54-5, EN 54-7
Application examples Multi-purpose halls, theater stages, churches, dance floors in discotheques	Application examples Canteen kitchens, production areas with operational-related deceptive phenomena	Application examples Production areas with operational-related deceptive phenomena	Application examples Paper mills, carpenters workshops, textile production, recycling plants	Application examples Event locations, conference rooms, smoking rooms, gastronomy, industry, production, underground garages	Application examples Offices, open-plan offices, hallways, hotel rooms, out of hours use in harsh environment areas	Application examples Same as for 'Balanced (PS4)', but with higher robustness against deceptive phenomena	Application examples High-ceilinged rooms, storage rooms/warehouses with flammable material, IT rooms, and control of extinguishing systems	Application examples Hospital rooms, museums, operating rooms, cold storage, high-ceilinged rooms, when highly sensitive detection is of great importance

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