



SIEMENS

# Cerberus<sup>®</sup> PRO intelligent fire protection

A comprehensive portfolio of innovative and  
industry-leading technology

[www.usa.siemens.com/cerberus-pro](http://www.usa.siemens.com/cerberus-pro)

# Cerberus® PRO – the comprehensive fire protection system

Intelligent protection for a wide variety of environments, from simple to complex



Fire safety is all about protecting people and assets and securing business processes and continuity. Cerberus® PRO is an intelligent and comprehensive fire protection system that offers fast and reliable fire detection, alarm signaling, voice communication, and control for all kinds of applications. Whether you need a fire-only solution or the additional benefits of integrated intelligent voice communication with mass notification, the Cerberus PRO family adeptly meets your requirements.

## Fire control panels with or without voice – scalable to meet your requirements

The Cerberus PRO control panel portfolio offers fast, reliable fire detection, intelligent emergency communication capability, and complete operator control, making them the perfect solution fit for all types of facilities.

Designed without the complexity and costs of modular voice systems, the Cerberus PRO Intelligent Voice Communication System is a cost-effective solution for buildings that would normally use only horn appliances for audible signaling. This equips buildings with emergency communication

capabilities that can address urgent events and everyday announcements, including customized messaging to precise locations.

- Compact, networkable control panels, with or without voice, meet a variety of applications and are easy and intuitive to operate. Required information is displayed in a clear and comprehensible way.
  - See all fire and non-fire emergency events on a single display
  - Control a network of systems as though it were all on a local panel
  - Enjoy the flexibility and peace-of-mind of communicating everyday and emergency messages when you select a panel with voice
- A networkable fire terminal enables operation remote from the control panel
- A stand-alone control panel covers less complex applications
- Marine and harsh environment approved enclosure and accessories provides outstanding protection under challenging conditions

### Smart and powerful detectors with a No False Alarm Guarantee

A broad range of standard and advanced multi-criteria detectors, with more than 20 selectable detection profiles, provides coverage for clean to dirty environments.

The detector line features advanced detectors with patented, award-winning Advanced Signal Analysis technology, **ASAt**technology™, for detection reliability – even in demanding environments – that is backed by a No False Alarm Guarantee. **ASAt**technology™ prevents false alarms caused by deceptive phenomena like steam, dust or machine exhaust gases.

Additionally, their selectable detection profiles and dynamic algorithms interpret signals in real time. Innovative technologies such as forward and backward light scattering and redundant sensors further increase the detection capability and reliability of Cerberus PRO detectors. This ensures business continuity without unnecessary and costly interruptions and increased fire safety for people and assets, without the threat of false alarms.

The installation of the detectors on the C-NET circuit increases safety. In case of a broken wire, the system can be designed so alarms are simply redirected the other way to the control panel.

### Peripheral devices provide a complete solution

Air duct housings, innovative audible sounder bases, including 520 Hz low frequency capabilities to meet requirements for sleeping spaces, NACs, and speakers enable comprehensive safety.

### Scalable system meets your budget and changing requirements

Versatile **ASAt**technology™ detectors are adaptable to the expected environmental conditions, deceptive phenomena, and fire risks. Should the building layout or space utilization change in the future, up to 26 detection profiles adapt easily to meet the new requirements. The networkable control panels allow system layout changes at a later point in time, without requiring any significant additional planning effort.

Remote viewing and evaluation of the Cerberus PRO system increases service efficiency and minimizes on-site maintenance time, which helps save time and money.

### Certified expertise and support from your local partner

Your Siemens Solution Partner is your best local resource for regulatory knowledge and design, installation and maintenance of fire and life safety systems.

### Siemens legacy of protection

Siemens is known for innovation, technology leadership, and superior quality. Our products are backed by 160 years of experience in fire safety and the knowledge we've gained through worldwide installations. No one understands fire better than Siemens. We will continue to further extend our Cerberus PRO product portfolio and ensure compatibility with future innovations, preserving your investment.

## Highlights

- Stand-alone and networkable control panels offer coverage for simple to complex environments
- Cerberus PRO Intelligent Voice Communication provides mass communication capabilities, including customized messaging that addresses urgent events and everyday announcements
- Flexible and scalable fire protection system can be adapted to new conditions and expanded as requirements change
- Advanced detectors with patented **ASAt**technology™ technology and a No False Alarm Guarantee offer up to 26 selectable profiles for reliable detection
- Cost-effective and efficient system maintenance with remote analysis and evaluation capabilities
- Marine approved enclosure and accessories available for marine and harsh environments
- Siemens Solution Partner, backed by a global technology leader, ensures an optimally performing fire and life safety system throughout a building's lifecycle



# Intuitive and intelligent Cerberus PRO control panels

Flexibly meet a building's needs, today and tomorrow



Cerberus PRO fire control panels combine high security standards with the latest technology. They are the ideal choice for a variety of applications.



The Cerberus PRO panel family comprises networkable control panels with optional voice, a stand-alone control panel, and a networkable fire terminal for operation remote from the control panel.

Emergency situations are stressful. This is why Cerberus PRO control panels and fire terminals are easy and intuitive to operate. They display the required information in a clear and comprehensible way. Customized messages are easy to understand and follow in the event of an alarm.

Unique features let you quickly put a system into operation from one access point. For example, you can manually adjust the detection profile of each connected detector at the control panel. The intelligent auto-configuration function supports finding the connected devices automatically. As a result, Cerberus PRO offers instant fire detection capability without delays created by manual configuration. In addition, the networkable control panels have an integrated degrade mode that is automatically activated. It ensures that notification appliances or other

outputs are activated in the event of failure, and that alarm conditions of connected C-NET devices are forwarded to reach security personnel, occupants, or the fire department on time.

## Networkable control panels with optional voice communication

Networkable control panels with or without voice communication can easily accommodate all types of applications. Control panels with voice allow facilities that are currently using horn-only appliances to implement mass communication capabilities. Voice communication can be used to address emergency events and everyday communication, including customized messaging to precise locations.

Flexible circuit wiring and single control panels, with models that connect up to 252 or 504 detectors and peripheral devices, make Cerberus PRO a scalable solution that can be modified to accommodate future changes in building structure. Additionally, the networkable panels can also be managed through the Cerberus DMS management station from Siemens.

**Networkable control panels with optional voice communication**

With a compact footprint, FC922 (fire) or FV922 (fire with integrated intelligent voice communication) accommodates up to 252 devices.



For more complex applications, FC924 (fire) or FV924 (fire with integrated intelligent voice communication) accommodates up to 504 devices.




- Flexible circuit wiring allows each group of 252 devices to be split between one to four circuits
- Two notification appliance circuits (expandable to four with expansion module) for visual indication appliances
- Peer-to-peer networking allows up to 16 panels to be connected
- Optional releasing module for a pre-action deluge or clean agent extinguishing system
- Optional Digital Alarm Communication Transmitter (DACT) sends system information to off-site monitoring stations

- Application areas:**
- |  |  |
|--|--|
| Data centers                                   | Low mid-rise hotels and motels           |
| Schools  | Retail (mall, convenience)               |
| Libraries                                      | Medical office/ office parks             |
| Banquet halls                                  | Sporting venues/ theaters/ concert halls |
| Industrial buildings/ manufacturing facilities | Banquet halls                            |
| Power generation                               | Churches                                 |
| K-12 schools and campuses                      | Apartment complexes                      |

**Stand-alone fire control panel**

Control panel FC901, for simpler applications, connects up to 50 devices via either one class A or two class B circuits.



**Networkable fire terminal**

The fire terminal, FT924, allows full access to system controls and maintenance of the networkable panels at additional points in a building.



- An RS485 connection allows you to install remote terminals to view and operate the panel from another location in the building.
- A built-in Digital Alarm Communication Transmitter (DACT) sends system information to off-site monitoring stations.

- Same view, control functionalities, and maintenance and reporting capabilities as control panels

- Application areas:**
- Retail shops
  - Medical offices
  - Dry cleaners
  - Small restaurants
  - Strip malls
  - Banks
  - Small office or commercial buildings

- Application areas:**
- In a hotel lobby, e.g., a control panel would be installed where it is inconspicuous with the terminal in a more accessible area

# Standard and advanced detectors with patented *ASAtechnology*<sup>™</sup>

A comprehensive offering of standard detectors and advanced detectors with *ASAtechnology*<sup>™</sup> offer versatility to protect clean, dirty, or normal environments.



Data centers, telecommunications facilities, office buildings, or industrial production facilities – Cerberus PRO offers a detector for any application.



## Eliminating false alarms and increasing safety

Demanding applications like data centers or industrial production facilities require exceptional detection technology. Advanced detectors with *ASAtechnology*<sup>™</sup> come with a No False Alarm Guarantee and offer an extremely fast and highly reliable detection response, whether in a sensitive or harsh environment. Designed with intelligent technology, the detectors quickly and reliably analyze the main criteria for fire, smoke, heat, and carbon monoxide. They are also immune to deceptive phenomena like steam, dust, or gas. This helps to enable business continuity without unnecessary and costly interruptions.

The basis for *ASAtechnology*<sup>™</sup> is the photo sensor arrangement that uses state-of-the-art forward and backward light scattering technology. It provides optical analysis of smoke particles and improves the detection capability of the detectors, making them virtually immune to false alarms. Additionally, they provide enhanced detection equivalent to ionization detectors due to their forward and backward light scattering technology. This makes *ASAtechnology*<sup>™</sup> detectors a perfect “green” solution.

Advanced detectors offer up to 26 application-specific detection profiles that can be set to meet the exact,

prevailing environmental conditions. Should the room usage change frequently, you can also easily and quickly switch between selected detection profiles. This ensures that your application is permanently and reliably protected.

Advanced detectors also have two optical and two thermal sensors. The redundant sensors improve the reliability of the detectors, meaning if one sensor should fail, the detector will still provide highly reliable operation. The detectors comply with NFPA 76 (Telecommunication Standard) and are classified as Very Early Warning Fire Detectors (VEWFD). This means they are extremely sensitive and thus provide very early detection.

## Detecting carbon monoxide

For maximum life safety, Cerberus PRO also offers an advanced detector for all fire criteria: smoke, heat, and carbon monoxide (CO). The additional CO sensor ensures earliest detection of all CO-generating fires. It can also detect CO independently from fire. Therefore, when an application requires both fire and CO detection, only one detector is needed. This minimizes product, installation and maintenance costs. The CO detection profile can be set separately from the *ASAtechnology*<sup>™</sup> detection profiles and complies with the requirements of the fire safety and carbon monoxide codes and standards UL 2075 and NFPA 720.

## Advanced detectors with ASAtechnology™

### Fire detector OOH941



- 26 detection profiles to meet specific environmental conditions
- Unique dual optics (forward and backward light scattering technology) offer the most reliable detection with virtually no false alarms
- Redundant optical and thermal sensors for maximum reliability
- UL listed as a high sensitivity pre-alarm
- Meets NFPA 76 requirement (Telecommunication Standard) as a VEWFD (Very Early Warning Fire Detector)
- 8 selectable temperature settings, ranging from 135°F (57°C) to 175°F (79°C)
- Offers programmable options for fixed temperature, rate-of-rise, and a selectable “Low Temperature” warning should the temperature drop below 40°F (4°C)
- RoHS compliant

### Multi-purpose fire and CO detector OOH941



- Identical features to the OOH941, plus an additional CO sensor:
- Selectable as a multi-criteria addressable detector, smoke detector, heat detector, or independent CO detector
  - Detects CO-generating fires as well as CO independent from fire
  - Only one detector is needed for fire and CO (instead of two) to comply with life safety regulations
  - UL 2075 listed as a CO Life Safety detector and meets NFPA 720 requirements
  - Provides field programmable, customizable supervisory signals for temperature or CO levels

## Standard detectors

### Multi-criteria fire detector OH921



- Multi-criteria addressable detector
- Single optical (photoelectric) and thermal (heat) sensor
- Utilizes detection algorithms for early detection of a wide range of fire signatures
- Selectable sensitivity levels

### Optical (photoelectric) smoke detector OP921



- Photoelectric, light-scattering, addressable point detector
- An economical solution and perfectly suitable for normal commercial applications
- Operating temperature range of 32°F (0°C) to 120°F (49°C)
- UL listed for direct in-duct plenum usage (without a duct housing)

### Thermal (heat) detector HI921



- Intelligent thermistor-based heat detector
- 8 selectable temperature settings, ranging from 135°F (57°C) to 175°F (79°C)
- Offers programmable options for fixed temperature, rate-of-rise, and a selectable “Low Temperature” warning should the temperature drop below 40°F (4°C)

### Input module FDCIO422



- Provides addressable control inputs and outputs simultaneously
- 4 inputs and 4 outputs that can be used independently
- Both class A and B monitoring available

Siemens Industry, Inc.  
8 Fernwood Road  
Florham Park, NJ 07932  
Tel (973) 593-2600  
Fax (973) 593-6670

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.

All rights reserved. Printed in USA 153-FIS-112 (06/15)  
©2015 Siemens Industry, Inc.