Protec
A Bosch Company

Aspirating System Solutions


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Aspirating Detectors

Dependable, responsive, and adaptable for a variety of applications and environments

Rapid Detection

Aspirating detectors are specialised detection methods that actively sample air from a specific area to detect the presence of smoke or combustion particles. These detectors feature an internal fan, known as an aspirator, which continuously draws air from a network of sampling pipes. Each pipe has a series of holes, known as sampling points, through which air is drawn and analysed by the preferred fire or smoke particle detection methods. If smoke or combustion particles are detected, the detectors present the information as an alarm on the detector display and can, if required, send a signal to the central fire alarm system to initiate a building-wide alarm.

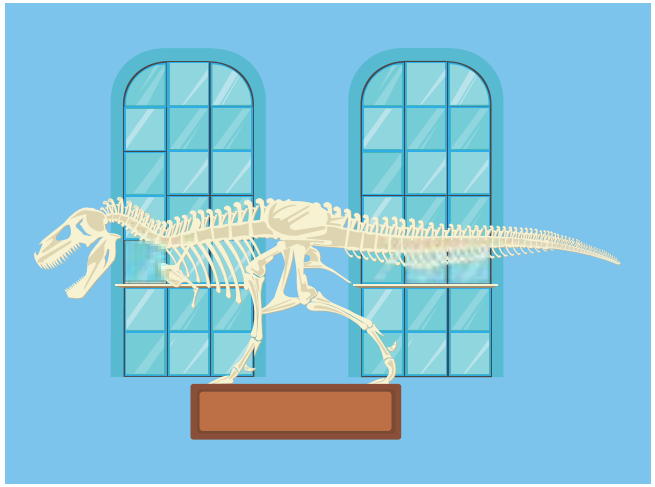
Protec can offer a variety of aspirating detectors to deliver the best solution for your needs. With over 25 years of experience in this specialised field, Protec leverages cutting-edge technology to create high-sensitivity sensors. These include traditional optical smoke detectors and an advanced Cloud Chamber technology, capable of detecting fires in their earliest stage (incipient stage), even when smoke is not yet present, but the potential danger exists.

Detecting a fire in its early stages gives you time to prevent it from spreading. After all, the earlier you detect a fire, the quicker you can contain and extinguish it.

A Class of Sensitivity

Protec aspirating detectors are designed to detect fire or smoke by measuring the size and quantity of these particles within the sampled air. These detectors are approved to the European and British industry standard; EN 54-20, where levels of sensitivity are evaluated during the testing process and categorised into three classes based on a set of fire tests parameters. These classes are defined as A, B & C for simplicity, and provide suitable sensitivity setting options for many different application types:

Class A - High Sensitivity Applications
Including Server Rooms, Cleanrooms, Data Centres, Control Rooms, Archive Storage and Energy Storage Systems.



Class B - Enhanced Sensitivity Applications
Including Heritage Buildings, Museums, Theatres, High Ceiling Areas, High Warehouses, Cold Storage and Atriums.

Class C - Normal Sensitivity Application
Including areas where point type detection can be used but aspirating is offered as an alternative solution, such as: Lift/Elevator Shafts, Specialist Production Facilities, Food Processing Areas, General Production Areas, Ceiling Voids, Escalators, Travelators, and General Warehouses.

What Makes an Aspirating System?

Aspirating systems consist of several components outside of the detector itself. These can be divided into various product ranges.

Aspirating Detector

Our product range detects smoke, fire or both, depending on the technology used.

Remote Display Programmer

Take full control of your aspirating systems remotely from single or multiple access points.

Pipes

A network of pipes is used to transport air from the protected space to the aspirating detector.

Filters

Protect your aspirating detector from dust and debris with our Inline 3 Stage or heavy-duty pipe filters.

Sampling Pipe Test Points

Enable ease of maintenance for aspirating pipework through strategically placed test points located in accessible positions.

Power Supplies

Fully monitored EN 54-4 approved remote power supply units to be utilised with our life safety systems.

Products you can Trust

Algorithm-driven aspirating detection for precise, reliable smoke detection

A World Full of Approvals and Accreditations

Collaboration is critical today, where approvals and regulations matter more than ever. We work closely with various global industry bodies to ensure our products meet the highest standards and accreditations while adhering to industry regulations and best practices.

Our products are designed to meet current British Standards expanding to meet other global specific needs and requirements. We easily navigate the complex landscape of standards and regulations. Our tailored approach ensures that our products are precisely tuned to the market's demands while maintaining the highest levels of quality and compliance.

Commitment to excellence drives us to engage with industry bodies continuously. Through this ongoing collaboration, we provide products that meet and exceed industry expectations to build trust and confidence with our customers world-wide.

ProPoint PLUS

Algorithm-driven aspirating detection for precise, reliable smoke detection

Precision Detection

Aspirating detection has become a popular solution in the fire detection industry. ProPoint PLUS is a well-established aspirating detection system that combines up to four individual detectors in a common aspirator enclosure. This means the system can detect up to four areas per aspirator, each with its own identifiable detector module.

ProPoint PLUS includes our high-sensitivity optical sensors “Scatter Chamber Detector” (SCD). These plug-in modules can be “Optical” or combined “Optical & CO” sensors. These use our specially designed algorithm to identify the visible smoke particles, reducing false alarms.

The Optical smoke element replicates that of point-type smoke detectors and is ideal for general-use areas. The ability to set various sensitivity classes (A, B, or C), ensures that the system specifier, designer, installer, and commissioning engineer can configure the ProPoint PLUS to the correct sensitivity for the specific application.

The CO (Carbon Monoxide) sensor element is ideally suited for small room applications, this means the ProPoint PLUS works excellently in applications such as small server rooms, escalator enclosures, in-cabinet detection applications and prison cells.

The installation, configuration, and commissioning of ProPoint PLUS detectors is simple and user-friendly. You can configure many functions of the detectors through a multilingual, multifunction OLED display without a laptop connection. Configuring aspirator fan speed and airflow is also straightforward, allowing ProPoint PLUS aspirating detectors to be installed in various applications with short or long pipe runs.

Key Features

1-4 SCD's per Aspirator

With one to four SCD's per aspirator it allows for fire identification per pipe in addition to individual pipe airflow monitoring.

OLED Display

The multifunction, multilingual OLED display allows for ease of operation regardless of the region you reside.

Programmable Alarm Outputs

Complete with up to five programmable alarm outputs, the ProPoint PLUS can be utilised to send signals to third party systems in the event of a fire.

Selectable Sensitivity

Highly versatile allowing you to select from all three detector classes (A,B or C)

Built in Algorithm

Inbuilt algorithm differentiates between smoke, dirt, and dust particles to reduce false alarms.

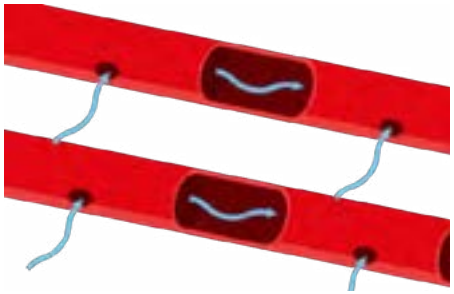
Multiple Detector Options

With the ability to specify Optical or combined Optical CO detector variations at order stage, it allows you to select the most suitable aspirating solution for your application.

Scatter Chamber Technology Explained

A scatter chamber is an industry-standard fire detection technology, as this form of detection is simple but effective. Our ProPoint PLUS aspirating smoke detector uses finely tuned, extremely sensitive optics to provide an early warning when only very small amounts of smoke are present.

1



Air is drawn into the system through the sampling holes and into the aspirating pipe.

2

Air enters the aspirating unit and is directed into the Scatter Chamber Detectors.

3

A beam of light is transmitted from the emitter.

4

This beam is scattered onto a light receiver when visible smoke particles are present.

5

An alarm condition is initiated when smoke particles are greater than the programmed smoke alarm thresholds.

6

Multiple alarm thresholds can be programmed per pipe.

For illustrative purposes only.

ProPoint PLUS

Lift Shafts

Advanced, Low-Maintenance Smoke Detection for Lift Shafts and Risers

Elevate your Detection

Lift shafts present unique challenges due to fluctuating air pressure, temperature variations, and limited accessibility, making traditional smoke detectors less effective and expensive to maintain. These shafts can serve as rapid conduits for smoke spread throughout a building, underscoring the need for a reliable detection system. ProPoint PLUS offers a significant advantage in minimising false alarms, as it is less affected by common disturbances like dust and humidity, which frequently occur in lift shafts and risers.

The standout feature of ProPoint PLUS is its maintenance efficiency. The system allows for remote testing and servicing, eliminating the need for direct access to the shaft or riser and minimising disruption to daily operations. This ensures consistent performance while keeping lift systems operational, ultimately reducing downtime, servicing costs, and enhancing safety.

One ProPoint PLUS detector can effectively monitor multiple lifts if these are within a single fire alarm zone, providing precise alarm location and status information. This capability is especially crucial in tall buildings, where safety and reliability are paramount. With enhanced detection capabilities and operational flexibility, ProPoint PLUS represents an effective and efficient fire detection solution for lift shafts and risers.

ProPoint PLUS

Escalators

Reduce False Alarms with Propoint PLUS Escalator Mode

Step up your Safety

Our bespoke ‘Escalator Mode’, certified to EN 54-20, is an innovative feature which utilises our specifically designed algorithm to enhance sensitivity by integrating data from the built in ‘optical’ and ‘CO’ sensors, significantly reducing false alarms in challenging escalator and travelator environments.

The ProPoint PLUS OP/CO detector delivers significant advantages to end users. By minimising false alarms, it reduces downtime and offers a more dependable fire detection solution compared to traditional optical-only smoke detectors or linear heat detectors. Additionally, it enhances life safety by providing earlier warnings of potential fire threats, improving both response times and user protection.

Maintenance is simplified because the system design provides external servicing at accessible locations and ensures maintenance tasks go virtually unnoticed. Cost savings are substantial, as a single ProPoint PLUS unit can protect up to four escalators or travelators.

The ProPoint PLUS OP/CO with ‘Escalator Mode’ is a reliable, efficient, and economical fire detection solution tailored for this specialist application.

ProPoint PLUS

Prisons

Prison Mode cuts false alarms, and improves in-cell life safety

Detain False Alarms

Protec has developed a specialised ‘Prison Mode’ application setting certified to EN 54-20, which is designed to meet the stringent requirements of the UK Ministry of Justice (MOJ) for in-cell detection. This innovative feature integrates a specifically designed algorithm which analyses data from the built-in Optical and CO sensors to ensure full compliance with MOJ specifications.

One of the key benefits of this advanced detection system is its ability to verify true alarms. The ProPoint PLUS OP/CO detector accurately confirms alarm signals from both smouldering and flaming fabric or paper, addressing the specific needs of this challenging application. This ensures a high level of reliability and safety within prison cells.

In addition to improving alarm accuracy, the ‘Prison Mode’ significantly reduces false alarms. By utilising a more reliable detection method that combines Optical and CO sensors, the system minimises disruption caused by false alarms from dust, steam, vaping, and cigarette smoke. This is a notable improvement over traditional optical-only aspirating detectors, enhancing overall operational efficiency.

The ProPoint PLUS OP/CO detector can monitor up to four separate cells, providing precise cell location and status information. This feature is crucial for maintaining security and safety within the prison environment.
When used with suitable sampling pipes and approved bespoke tamper-proof in-cell sampling points, the ‘Prison Mode’ offers a comprehensive installation solution.

Cirrus CCD

Robust and reliable Very Early Warning Fire Detection for a wide range of applications and environments

A Range of Environments

The Cirrus CCD's early detection capability is a unique technology within the aspirating detection world. It identifies combustion particles released when a material overheats, enabling it to detect fires during the true incipient stage before smoke is visible. This early detection capability empowers you to take prompt action, such as early evacuation or protecting valuable equipment, such as data centres and cleanrooms, ensuring the safety of your environment.

In some challenging applications, typical 'Optical only' aspirating detection systems can sometimes be prone to false alarms. However, a Cloud Chamber Detector (CCD) aspirating system like the Cirrus CCD significantly reduces these false alarms. This is achieved through its advanced technology, which focuses on detecting invisible combustion particles rather than visible smoke and some non-fire phenomenon.

Therefore, the Cirrus CCD technology offers an expansive sensitivity range from, cleanroom type applications, to much more challenging environments where dust, steam, condensation, and temperature changes may be present.

The integrated 7-inch full-colour LCD touchscreen replaces outdated buttons with modern touch screen intuitive menus. The Cirrus CCD's controls and environmental flexibility make it a standout solution in the aspirating detection industry.

Key Features

Earliest Warning

With the accuracy of Cloud Chamber Detection, combustion particles can be identified before smoke is generated.

Large Touch Screen

The 7” full-colour multi-function LCD display allows for ease of use through its intuitive menus.

Programmable Alarm Outputs

Complete with up to five programmable alarm outputs can be utilised to send signals to third party systems in the event of a fire.

Resistant to False alarms

The reliability of CCD technology means dust, humidity, and temperature changes don’t cause false alarms.

Cloud Chamber Detection

Our unique CCD works as the primary detection method for detecting fires at the earliest possible stage.

Individual Area Detection

With one to four detection areas per aspirator it allows for individual identification to determine the exact area of a fire.

Cloud Chamber Technology Explained

Protec has been manufacturing cloud chamber technology aspirating detectors for over twenty-five years these measure fire particles which are generated in the millions when combustion takes place. This unique technology has proven to be one of the most accurate types of detection in the fire industry for Very Early Warning Fire Detection (VEWFD) and false alarm resilience.

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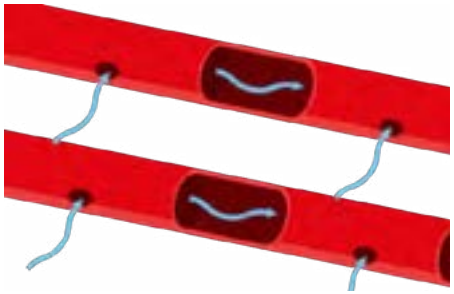
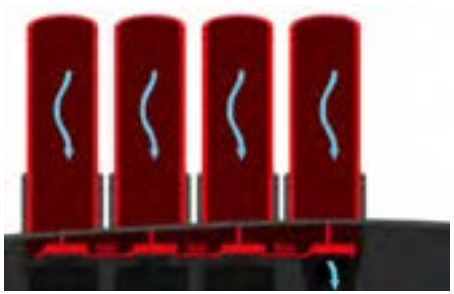


Air is drawn into the system through the sampling holes and into the aspirating pipe.

2



Air enters the aspirating unit and is directed into the Cloud Chamber Detector.

3

Pressure and temperature changes are initiated within the Cloud Chamber.

4

The result is the instant formation of water droplets on fire particles within the sampled air, thereby forming a cloud in the chamber.

5

The cloud density is measured in the cloud chamber sensor.

6

An alarm condition is initiated when combustion particles are greater than the programmed fire condition thresholds.

For illustrative purposes only.

Cirrus CCD

Cold Storage

Reliable fire detection for subzero conditions

Ice Cold Precision

Typically, subzero cold stores present difficulties for traditional smoke detection systems, such as condensation and sensor ice formation, which can lead to false alarms or detector failures. The Cirrus CCD is highly effective for cold stores due to its unique operational advantages in challenging environments. By continuously drawing air samples through the network of pipes into a central detection unit located outside the cold storage area, the Cirrus CCD eliminates the operational issues caused by the harsh environment.

One key advantage of Cirrus CCD in cold stores is its enhanced sensitivity and therefore early warning capability. Cold stores maintain a constant temperature using fan chillers which generate high airflows, the constant introduction of air can dilute any smoke present. Further, the air generated is dry, causing stored stock to be extremely combustible. The Cirrus CCD offers Very Early Warning Fire Detection for this high-risk application proving crucial in protecting property from fire.

System designs stipulate the detector to be located within adjoining ambient air areas. This facilitates the detector being configured and maintained without the requirement to enter the cold store area.

The Cirrus CCD offers superior reliability, sensitivity, and maintenance advantages, making it ideal for fire detection in cold storage facilities, as it ensures both safety and operational continuity.

Cirrus CCD

Dusty Plant and Control Rooms

Trustworthy fire detection in challenging environments

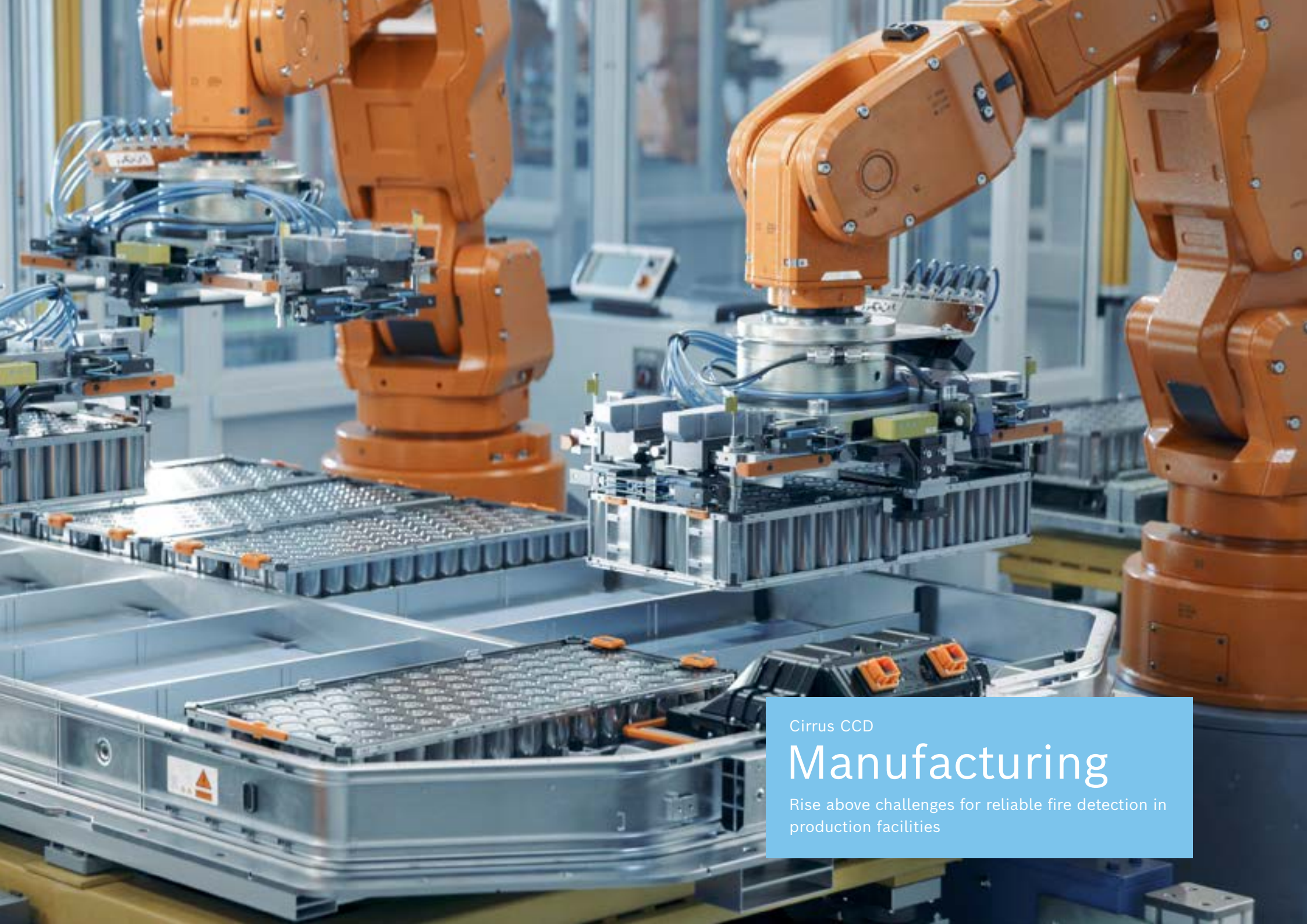
Full Control for Fire Detection

Control rooms, electrical and mechanical plantrooms, and even cable tunnels often provide some of the most important infrastructure in many industrial applications, and keeping these operational is essential for business continuity. Many of these areas and rooms can be considered as dirty and dusty simply because of the operational processes carried out within their vicinity. Cirrus CCD offers significant advantages for early warning detection even in dirty and dusty applications, when compared to other fire detection technology solutions.

Unlike typical optical detection systems, Cirrus CCD can function in these very challenging applications as it is not looking for visible smoke particles which often resemble dust particles. Instead, Cirrus CCD detectors utilise Cloud Chamber Technology, which ignores visible smoke and therefore dust particles and only responds to much smaller overheating combustion particles.

Additionally, several other environmental conditions such as humidity and temperature fluctuations and high airflow can be prevalent in this application, however Cirrus CCD is also unaffected by these conditions thereby providing a stable and reliable detection system, where other methods tend to fail.

Whether you’re looking to provide fire detection in general room spaces, forced ventilation systems or within critical electrical, control, or mechanical cabinets. The Cirrus CCD delivers exceptional sensitivity and reliability. Engineered to perform even in dirty and dusty environments, it ensures peace of mind, giving you confidence that you have the right solution for your application.



Cirrus CCD

Manufacturing

Rise above challenges for reliable fire detection in production facilities

Manufactured for Precision

Production facilities can sometimes be a very challenging application for traditional fire and smoke detection solutions. Beam detectors, optical smoke detectors and optical aspirating detection systems may either not function correctly or need to be de-sensitised significantly to function in this environment. The Cirrus CCD offers a solution for these difficult applications as it uses a totally unique technology.

Cloud Chamber Detection technology has proven to be very reliable in challenging production facilities. It is not a new technology but is a long established dependable one. Several challenges in these areas can be troublesome due to ambient dust, high humidity, condensation, and temperature changes. These environments can be difficult for optical detection systems due to frequent false alarms. In contrast, the Cirrus CCD proves indispensable, offering trustworthy fire detection tailored for demanding applications.

High ceiling spaces can also be a feature of many production facilities, which together with the processes carried out in this application, may create a delay in smoke reaching ceiling detection systems. The invisible combustion particles detected by the cloud chamber sensor of the Cirrus CCD can be more energetic and can be less challenged than smoke to reach higher spaces.

The Cirrus CCD provides a reliable fire detection solution in many areas where many other solutions fail, providing the business and operational continuity required for essential manufacturing and production.

Cirrus HYBRID

Combine technologies to combat fire, smoke and false alarms.

Combining Technologies

In the fire detection industry, speed and accuracy are critical, therefore, swift and reliable detection allows for immediate action for protecting both property and lives.

Our multi-award winning Cirrus HYBRID is the pinnacle of the technologies used for this purpose. It boasts a 7-inch full-colour LCD touchscreen, replacing outdated buttons with intuitive menus. This dynamic display enhances user experience, allowing seamless navigation through options and settings. In-built informative fault-finding and maintenance videos assist with problem rectification and enhance the engineer and user experience.

With Ethernet connectivity, the Cirrus HYBRID integrates seamlessly with a building's IP infrastructure, allowing remote monitoring. Up to 6 IP addressed cameras can provide coverage for protected areas from the detector, proving invaluable within in secure or remote areas.

The Cirrus HYBRID redefines fire detection, combining advanced technology, user-friendly features, and reliable remote monitoring for ultimate safety and convenience.

Key Features

Cloud Chamber Detection (CCD)

Our Unique CCD works as the primary detection method for detecting fires at the earliest possible stage.

Large Touch Screen Display

The 7” full-colour multi-function LCD display allows for ease of use through its intuitive menus and built in training videos.

Live Camera Stream

Connect up to 6 IP colour cameras which provides the ability to monitor detection areas visually from the detector.

Scatter Chamber Detection (SCD)

Equipped with up to four individual scatter chamber detectors that independently monitor specific areas, these provide a reliable secondary detection method.

Alarm Signal Decision-Making

Implementing intelligent decision making to ensure genuine alarms are only raised for true smoke and fire scenarios.

Large Sensitivity Range

Featuring a detection range of 0% to 20% obs/m, delivering dependable fire and smoke monitoring across a broad spectrum, making it essential for a variety of applications and environments.

Cirrus HYBRID Technology Explained

The Cirrus HYBRID offers unmatched early warning detection by combining the best of aspirating detector technologies. It utilises our Cloud Chamber technology for Very Early Warning Fire Detection (VEWFD) to identify invisible fire particles and is supplemented with optical sensors for Early Warning Smoke Detection (EWSD), to detect visible smoke. This dual-technology system provides the ultimate protection, ensuring both fire and smoke are detected accurately.

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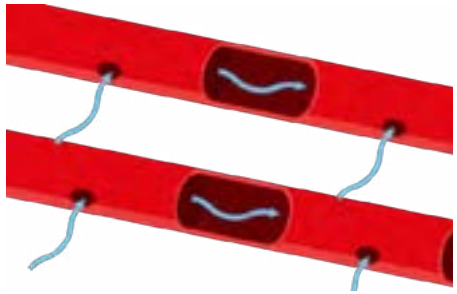


Air is drawn into the system through the sampling holes and into the aspirating pipe.

2

Air enters the aspirating unit and is directed into the Scatter Chamber Detector modules for optical analysis of visible smoke particles.

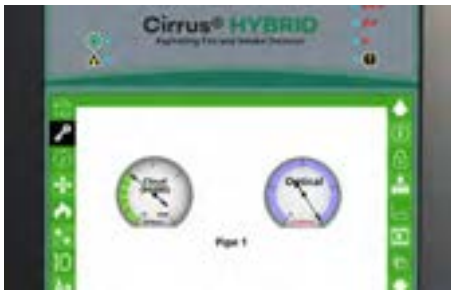
3

The air is drawn through the cloud chamber into a humid vacuum. The vacuum is removed. Moisture in the chamber condenses onto the fire particles, creating a cloud.

4

The cloud density is measured by the cloud chamber sensor.

5



AI technology combines the smoke signals from the optic sensors and the cloud chamber sensor, enabling only true alarms to be verified.

6

A fire condition is initiated if the fire/smoke particles are greater than the preset fire alarm thresholds.

For illustrative purposes only.

Cirrus HYBRID

Data Centres

Keeping data centres safe with algorithm driven fire and smoke detection

Data Critical Asset Protection

Data centres house valuable data, servers, and equipment essential for business operations, making early detection of fire and smoke crucial to preventing catastrophic damage and data loss. The Cirrus HYBRID is particularly advantageous in data centres due to its exceptional sensitivity and reliability in protecting critical infrastructures.

The primary benefit of the Cirrus HYBRID in data centres is its ability to detect fire threats at very early stages, often before visible smoke is present. This early warning capability allows for prompt response, minimising potential damage and downtime. Traditional smoke detectors might not be sensitive enough to detect small smouldering fires that can occur in electronic equipment. The Cirrus HYBRID can identify the invisible fire particles during the incipient stage of a fire, which in data centre applications can be many hours in advance of visible smoke.

Cirrus HYBRID is also advantageous in high-airflow environments typical of data centres. The constant air movement can dilute smoke, making it difficult for optical only aspirating detectors and conventional detectors to sense it. The Cloud Chamber sensor of the Cirrus HYBRID detector is much less susceptible to airflow dilution, therefore retaining the earliest possible warning of fire threats.

Our dual sensor algorithms significantly reduce false alarms by rejecting many non-fire phenomena which would alarm on optical only aspirating detectors, whilst maintaining high sensitivity detection. The unique dual sensor technology alarm conditions verify genuine alarms and may be used for the assured control of ancillary equipment.

The Cirrus HYBRID provides superior early detection, reliability in high-airflow conditions, and reduced false alarms, making it an ideal choice for safeguarding data centres against fire hazards and ensuring the security and continuity of critical operations.

Cirrus HYBRID

Automated Warehouses

Detect fires before they stack up with the Cirrus HYBRID

High Level Property Protection

Modern large, and high general warehouses, or fully automated warehouses, can contain all manner of stored products and materials. These vast areas with high ceilings and a variety of storage configurations can create so many different fire types. Some fires may contain significant amounts of visible smoke, some less so, with cleaner burning stored materials. Cirrus HYBRID dual sensor aspirating fire and smoke detectors revolutionise fire safety in warehouses.

The dual technology ‘cloud chamber’ and ‘optical’ sensors within Cirrus HYBRID detectors facilitate the widest range of fires to be detected. Due to stratification, smoke may struggle to reach the roof, which is not the case for the invisible particles that the cloud chamber detects. Therefore, for cleaner burning fires, the cloud chamber becomes the dominant technology identifying invisible combustion particles in tall warehouses.
For fires in warehouses where products and materials generate more visible smoke, the optical sensor provides the larger signal of alarm and is confirmed by the signal from the cloud chamber.

Typically, unheated tall warehouses can be exposed to environmental conditions such as cold temperatures in winter, and relatively high ambient temperatures, particularly under the roof in summer. The unwanted alarm resilience and application flexibility of the Cirrus HYBRID fire and smoke detector provides peace of mind that your warehousing facility is well protected throughout these environmental changes.

The dual sensor technology collaboration means the optical signal requires a confirmation from the cloud chamber to generate a fire signal, ensuring false alarms are prohibited in these business-critical applications.

Cirrus HYBRID

Heritage Buildings

Preserving the past with contemporary early warning, discreet, fire and smoke detection

Protecting History

Heritage buildings require both very early warning fire detection, and discrete detection, to best protect the building structures and architecture and precious artifacts and relics housed within these most valued assets. The Cirrus HYBRID which uses dual sensor aspirating fire and smoke detectors is an ideal solution to provide these requirements.

The cloud chamber sensor within the Cirrus HYBRID provides the very early warning fire detection, sensing a fire phenomenon before visible smoke, which can provide many hours of advanced notice before the fire condition develops into a more significant condition.

Additionally, if visible smoke is present the optical sensors within the Cirrus HYBRID detector will identify this and alarm when verified by the cloud chamber sensor. This dual sensor detection system ensures the earliest warning of possible fire threats, protecting valuable heritage buildings and their contents.

Discrete detection on ornamental ceilings and building structures and fixtures is often required to conceal the detection system from view. The network of sampling pipes and discrete capillary sampling points all feed back to the Cirrus HYBRID aspirating detector. The sampled air is taken through the cloud chamber sensor and optical smoke sensors to verify genuine alarms and be resilient to false alarms through our algorithms.

Remote Display Programmer

Remote control your aspirating detection

Remote Management

Remote access and control of aspirating detectors offer significant advantages, especially for detectors in hard-to-reach areas or where centralised monitoring is needed. In some large installations, an Aspirating Detector Remote Display Programmer (ADRDP) can be used as the central display location for multiple aspirating detectors, thereby reducing the requirement for full displays on each device, potentially providing a more economical solution.

The ADRDP connects up to 98 aspirating detectors, including Cirrus CCD, Cirrus HYBRID, and ProPoint PLUS models, via an RS485 wired network. Its sole purpose is to unite Protec aspirating detectors and identify detectors in alarm or fault conditions, enabling quick and appropriate actions. Additionally, it serves as a comprehensive access point for visual inspections, programming, and accessing logs and graphs for each device.

Each ADRDP is equipped with an internal buzzer to alert local personnel. Connectivity can also be achieved by an IP address and RJ45 connector, allowing integration into a site LAN for remote access from any location. The ADRDP features a 7-inch full-colour LCD display, identical to those in Cirrus CCD and Cirrus HYBRID detectors, providing an intuitive interface for monitoring and control.

For extended RS485 wired installations, the ADRDP also functions as a network communication booster, increasing the transmission range up to 1.2km. The ADRDP makes managing a network of aspirating detectors practical, efficient, and user-friendly.

Key Features

Current Generation Compatible

Designed to work with the current generation of Protec aspirating detectors such as ProPoint PLUS, Cirrus CCD and Cirrus HYBRID.

Remote Monitoring

View any aspirating detector status from more than one place by introducing an ADRDP onto the network.

Interrogate Key Information

Event logs, particle graphs and detector configuration data of any network detector are all on hand.

Network at a Glance

A single, simple, menu scren informs the user of the status of all networked detectors in normal state, alarm, or faults are identified instantly.

Remote Programming

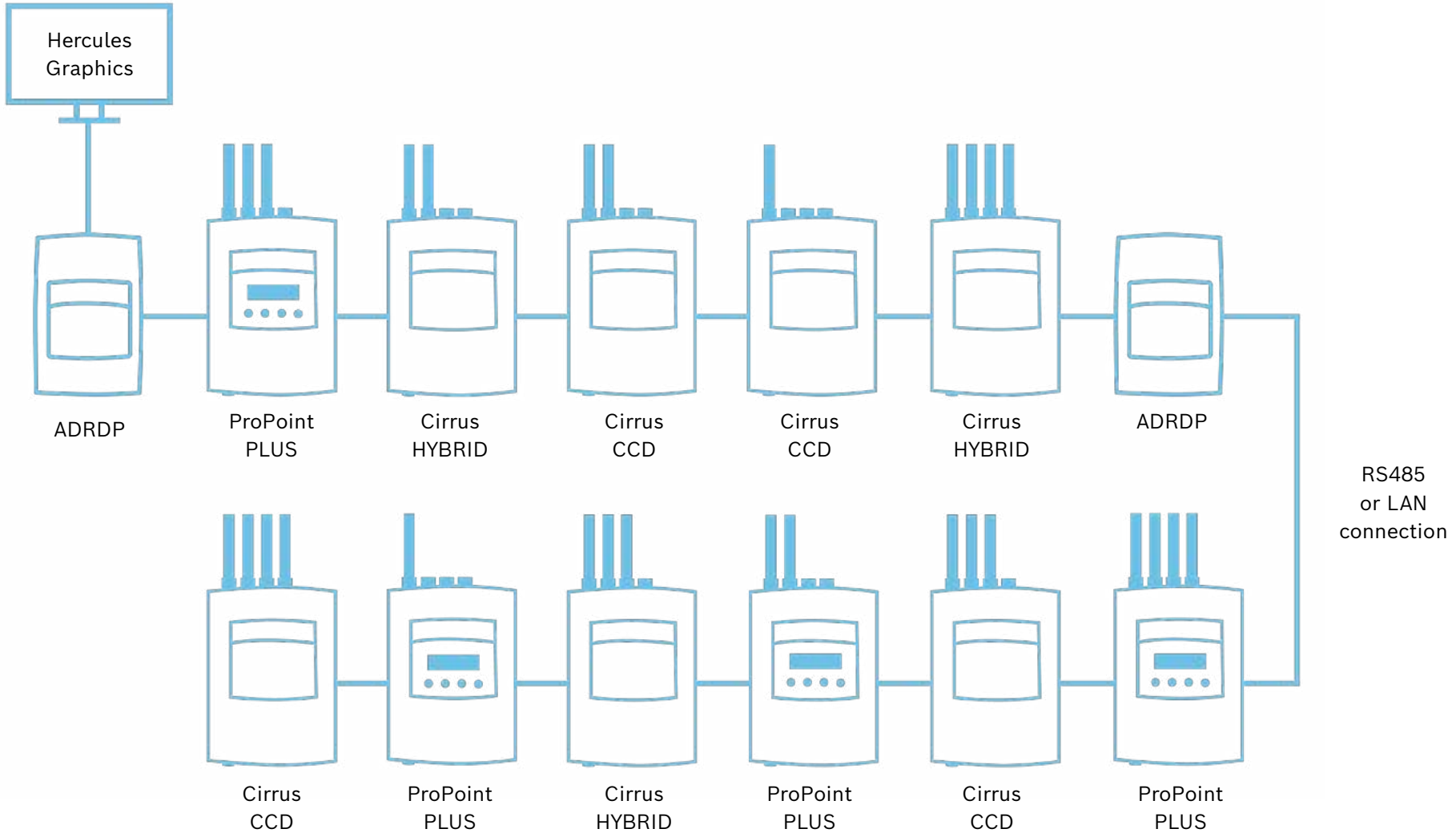
Fully control any aspirating detector status on the network from multiple locations.

1.2km Expansion Booster

Expand the communication network by a further 1.2km per ADRDP making large scale aspirating detection systems a breeze.

Aspirating Network Solution

The Aspirating Detector Remote Display Programmer (ADRDP) can connect up to 98 detectors, including Cirrus CCD, Cirrus HYBRID, and ProPoint PLUS models, via an RS485 wired network. It enables quick identification of alarms or faults and serves as a hub for visual inspections, programming, and accessing logs.



Graphics System

Take charge, stay informed, and elevate your fire safety measures, taking your fire safety experience to a whole new level

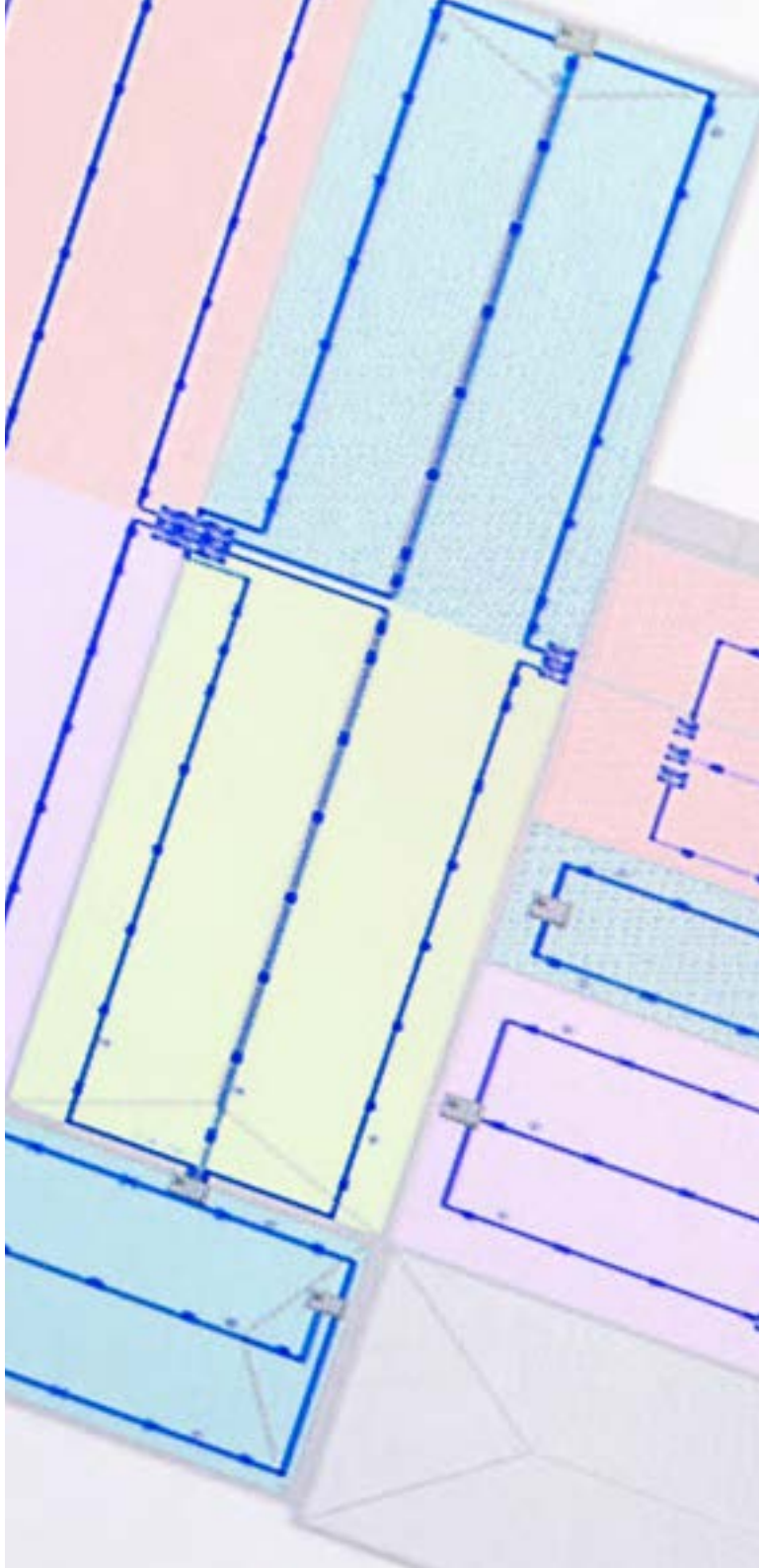
Life Safety Information

Hercules 6 software is a powerful alarm management tool and intuitive graphical user interface designed for seamless integration with Protec aspirating detectors. Whether you need a solution for a single detector or a multi-site setup, Hercules 6 offers an economical and efficient way to monitor your aspirating systems from one or more convenient locations.

With Hercules 6, you have the power to review your system from any Hercules 6 workstation, accessing current and historical event information with a simple click. This robust system ensures that alarms are swiftly detected and addressed. It continuously monitors for connection failures between the network and the PC, alerting you immediately if any faults are detected. Connections to aspirating systems are Ethernet-based, requiring only local network access, providing you with a secure and reliable monitoring solution.

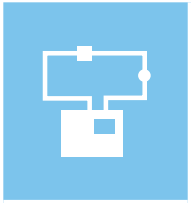
In addition to real-time alarm information, Hercules 6 diligently records system events and faults, enabling you to generate detailed reports for analysis and compliance. The user-friendly interface features a series of graphic screens displaying the status and location of all aspirating detectors. Large areas are divided into sub-screens for easy navigation, with active devices highlighted for quick identification during alarms, faults, disablements, or tests, ensuring you are always well-informed and prepared.

Experience the simplicity and power of Hercules 6 software. Manage your safety systems efficiently, ensuring quick detection and response to any issues.

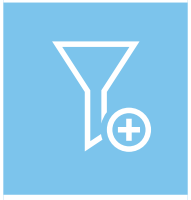


Powerful Aspirating Management

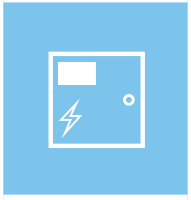
Protec Hercules 6 software revolutionises aspirating system control and management with unmatched features and seamless integration across our range of aspirating detectors to ensure enhanced fire safety measures.



Cost-effective and Versatile
No matter the scale or complexity of your installation, Hercules 6 offers a cost-effective solution. This powerful software proves indispensable in managing diverse life safety systems, from single detector applications to expansive multi-site networks.

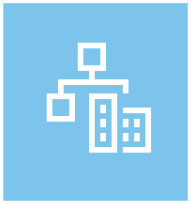


Control at your Fingertips
Hercules 6 software provides a complete control of your aspirating system from one or more locations. Each workstation offers real-time insights, allowing you to easily access current and historical event information.



Ease of Navigation
Navigating through different screens is a breeze on our Hercules 6 touchscreen variations, thanks to our user-friendly selection system. During critical conditions like alarms or faults, flashing crosshatched sections for aspirating detector and pipework highlighting the exact location of active devices, ensuring swift response and resolution.

Robust Monitoring and Reliability
We understand the paramount importance of reliability in fire safety systems. Hercules 6 software ensures that any connection failures between the aspirating detectors and the PC are closely monitored, promptly notifying you of potential issues.

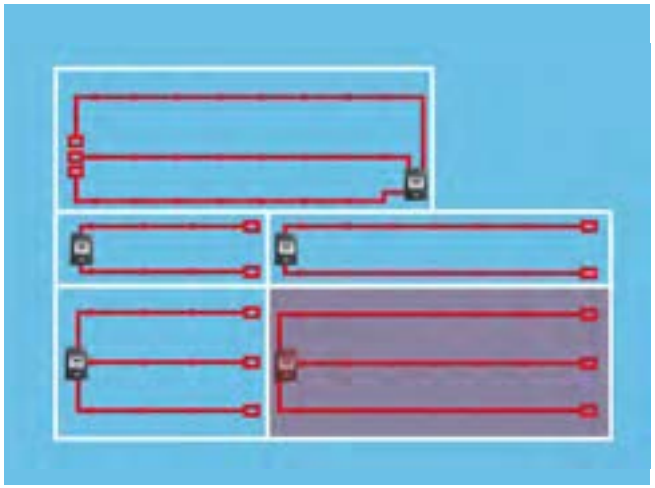


Powerful Reporting and Visualisation
Our graphics screens provide purpose-made visual maps of all your aspirating detector locations, clearly indicating their statuses. Hercules 6 software isn’t just about real-time system monitoring. The software records system historical events and faults, enabling you to generate detailed reports quickly.

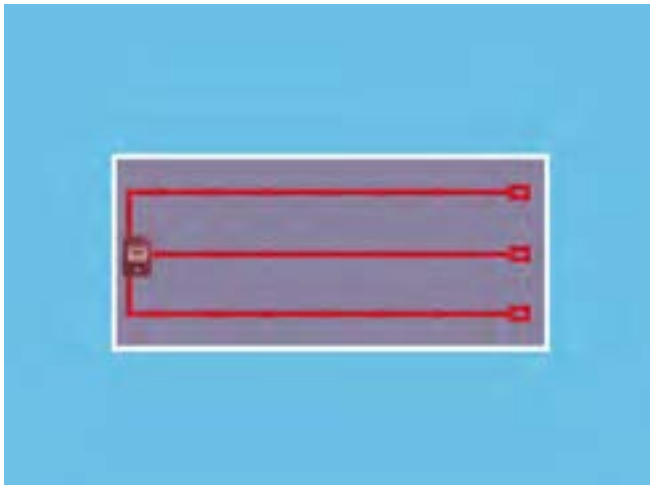
Focus on the Area in Question

One of the standout benefits of the Hercules 6 software is its compatibility with both desktop and touch screen computers. Designed with touch screens as a priority, the system features an intuitive layout that lets you navigate from full site layouts to single detector/pipe with just a few taps. The large, easy to use format is perfect for facilities managers negotiate around a site to control and review various life safety systems.

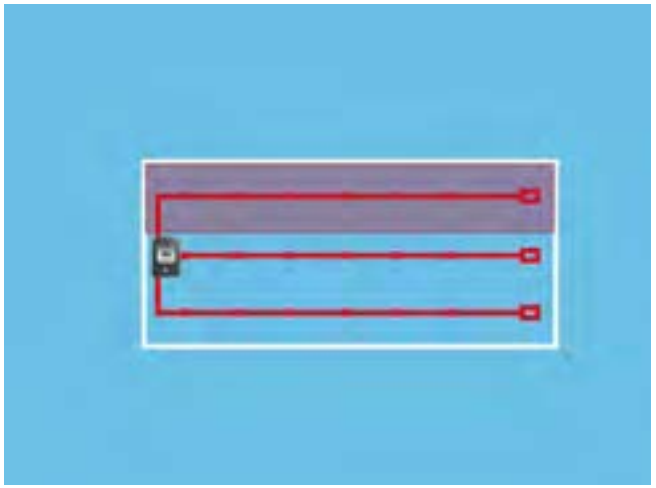
Forget about tedious complicated menus or cumbersome controls. Hercules 6 makes accessing the information you need straightforward and hassle-free. Whether you're zooming in on a specific area, or pinpointing a specific pipe, Hercules 6 ensures you can do it quickly and efficiently, saving you time and reducing frustration.



Full Scale View
Overview of the whole site showing every pipe.

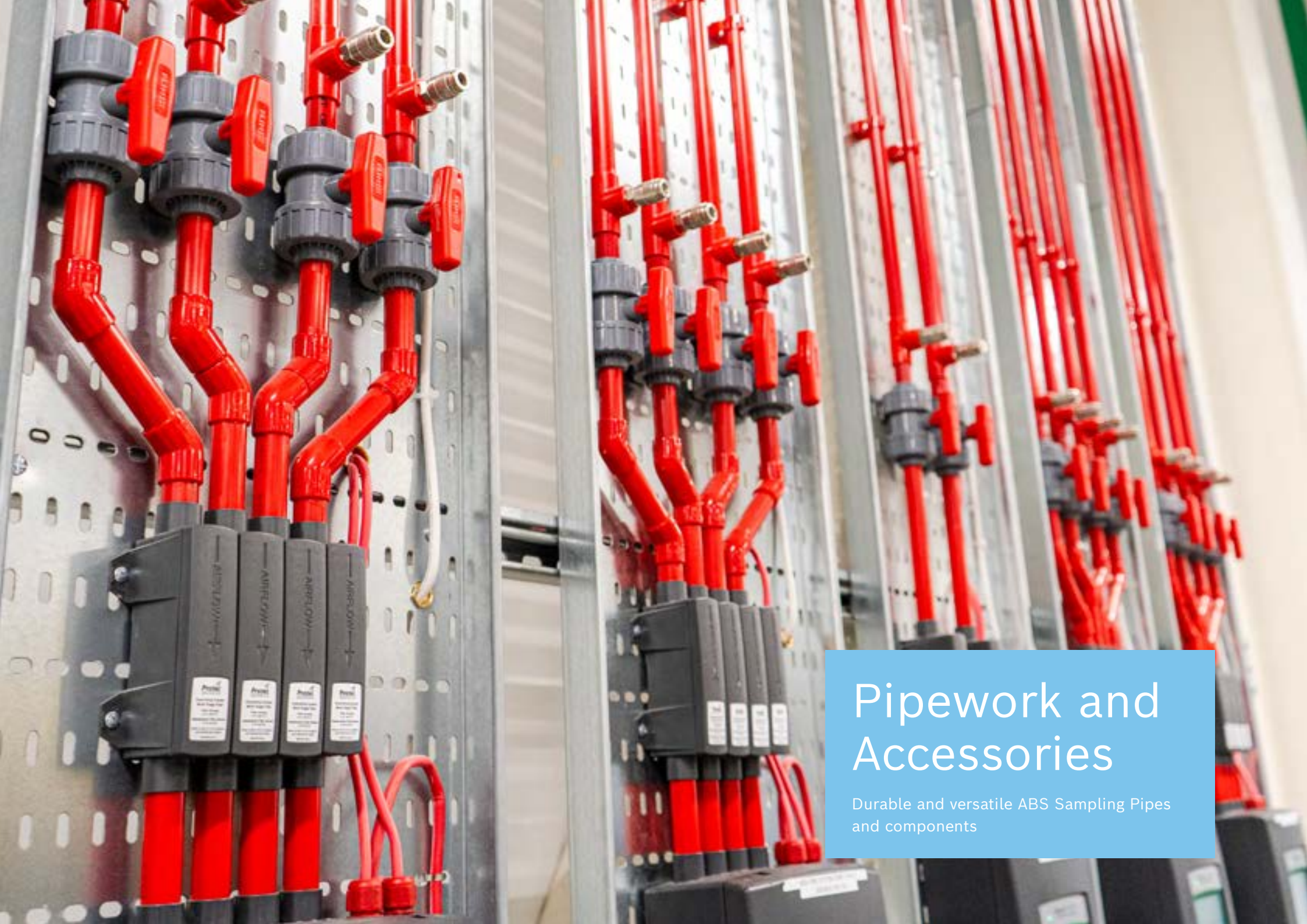


Single Area View
Shows all pipes per area.



Single Device View
Shows each individual pipe in alarm or fault.

For illustrative purposes only.



Pipework and Accessories

Durable and versatile ABS Sampling Pipes and components

A Network of Detection

Protec offers a complete range of 25mm Acrylonitrile Butadiene Styrene (ABS) sampling pipes and accessories for our aspirating detection system installations. Industry standard ABS is known for its excellent chemical resistance, high impact strength, and suitability for low temperatures (down to -40°C). It's easy to join, making it ideal for various installations and applications. Available in red, white, and grey, these pipes are complemented by standard components like couplings, bends, tees, as well as specialised items such as filters, HIT clips, and condensation traps.

ABS Pipe

3m Impact resistant ABS aspirating pipes available in red, white and grey.

Fixed Bends

Available in 45º and 90º bends the ABS plastic joints fit onto the pipe and are held in place with ABS cement.

Joints

Join lengths of aspirating pipes together with the ABS joints. These fit onto the aspirating pipes and are held in place with ABS cement.

Tee Joint

Connect pipes together into one with a tee joints. These fit onto our standard aspirating pipes and are held in place with ABS cement.

Clips

Fix aspirating pipes to walls and ceilings securely with our interconnectable pipe clips. The ratchet style method of attaching pipe makes securing pipework quick and easy.

Flexible Pipe

Negotiate complex angles with our flexible pipe fittings. These 30cm and 100cm flexible pipes fit onto our standard aspirating pipes and are held in place with ABS cement.

Unobtrusive Detection and Testing

Protec offers a complete range of capillary and dedicated sampling pipe test points, for professional aspirating detection system installations.

Flexible Pipe with Conical Capillary Head

Allows for aspirating detection to suspended ceiling with the use of the capillary system. The conical head aspirating point makes for easy identification of aspirating points on a suspended ceiling.

Flexible Pipe with Flush Capillary Head

Allows for aspirating detection to areas with a suspended ceiling via the use of the capillary system. The flush aspirating point makes for easy identification without the obtrusive conical capillary point.

Discreet Capillary Head

Providing aspirating detection to areas where detection needs to go unnoticed the discreet capillary is used in ceilings where aesthetics is crucial.

Capillary Test Point

Dedicated sampling pipe test point for pipe integrity testing on a suspended ceiling.

End Cap Test Point

Dedicated sampling pipe end cap test point, for remote testing of the aspirating pipe in accessible locations.

Condensation Traps

To assist in collecting condensation from the aspirating pipework use our handy condensation trap range. These fit onto our standard aspirating pipes at a lower level than the aspirating unit to allow gravity to force the moisture to the lowest point of the pipe network.

Pipe Purge Fittings

Improve system functionality and performance by purging air through the aspirating pipework to ensure the system is free from dust and contaminants via the use of an airline or canister.

Reduce Contaminents

For several reasons, aspirating detection systems are increasingly being installed in a wide range of applications. Many of these environments have increased ambient dust levels, requiring additional filtration before the sampled air enters the aspirating detector.

Inline Filter
The Protec aspirating system's 'In-line Filter' offers a perfect solution for tackling dust. Engineered with precision to clip multiple filters together, the filter features a versatile three-stage cartridge to capture dust particles of various sizes or a specialised single-stage 'fine' filter mesh for environments with smaller dust particles.

The innovative angled positioning of the cartridge within the filter housing maximises the filter material's surface area, significantly extending its lifespan and minimising pressure loss.

During installation, it is recommended that inline sampling pipe filters be installed on each aspirating detector pipe.

Heavy Duty Filter
Enhance the performance of aspirating detection systems with our heavy-duty dust and humidity filter. These use a combined sampling pipe filter/condensation trap for pipes exposed to heavy dust or condensation, ensuring cleaner airflow into the detector.

Hole Identification Tags (HIT)

Identify sampling holes quickly from the ground

Colour Co-Ordinated Simplicity

Identifying the size and location of existing sampling holes on sampling pipes has always been challenging due to the small hole sizes and the often-high installation of these pipes.

Protec Hole Identification Tags (HIT's) make aspirating system sampling points accurate and easily identifiable. These tags can be used in many diverse applications to clearly indicate the location and hole size of each sampling point along the sampling pipes.

Each HIT is colour-coded to indicate the diameter of its specific sampling hole. The colour coding allows for easy identification of the different sampling hole sizes and locations, for the benefit of commissioning and servicing engineers, clients, and project auditors.

Additionally, the traditional method of manually drilling sampling holes in pipes can lead to variability and airflow inefficiencies caused by imperfect diameters, drilling debris, and environmental contaminants. To address this each HIT incorporates a 'chamfered' hole to ensure a smooth airflow entry, which significantly reduces the build-up of dust and debris over time.

Engineered for reliability, each HIT features a secure 'cable-tie' style attachment method, and a secondary wrap-around mechanism to ensure stability on the sampling pipe. A universal 8mm diameter hole suffices for all sampling hole locations, streamlining set-up and reducing complexity. Protec HIT's integrate with the ProFlow sampling pipe calculation program confirming design accuracy.

Power Supply

Ensure your critical systems stay powered and protected

Reliable and Efficient Power Management

Protec’s power supplies are manufactured to power our range of life safety and security systems. Adding intelligence to a simple power supply through our system monitoring makes our units ideal candidates for power and battery backup to life-critical safety systems.

10 Amp Power Supply Unit - EN54C-10A

The EN 54C-10A power supply and charger is a lightweight and efficient unit that complies with the latest version of EN 54-4. It is designed to work seamlessly with Protec’s 24 Volt dc equipment range, delivering a consistent 24 Volt dc output from a 230 Volt ac mains input. In the event of a mains power outage, the unit automatically switches to a standby battery supply. The standby batteries are intelligently charged and monitored to ensure they are in optimal condition if they are needed.

Key Benefits

- EN 54-4 compliance
- Mains battery switching
- Intelligent battery charging
- Battery monitoring
- LED status indication
- 24V dc output

Notes

Protec
A Bosch Company

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