

The background of the slide is a photograph of a modern, bright office interior. In the foreground on the left, the side of a dark-colored car is visible, parked. The office space features a high ceiling with recessed lighting, a large glass-walled staircase on the left, and several workstations with white desks and green office chairs. A curved white partition wall is in the center-right. The floor is made of large, light-colored tiles.

## The 6100 Addressable Solution





# Contents

<b>8</b>	6100 Fire Alarm System
<b>12</b>	Products You Can Trust
<b>14</b>	6000PLUS Protocol
<b>24</b>	6000PLUS Sensor Range
<b>32</b>	Manual Call Points
<b>36</b>	Addressable Interfaces
<b>40</b>	Local Control Module
<b>44</b>	6000 Sounder Range
<b>48</b>	Visual Alarm Devices

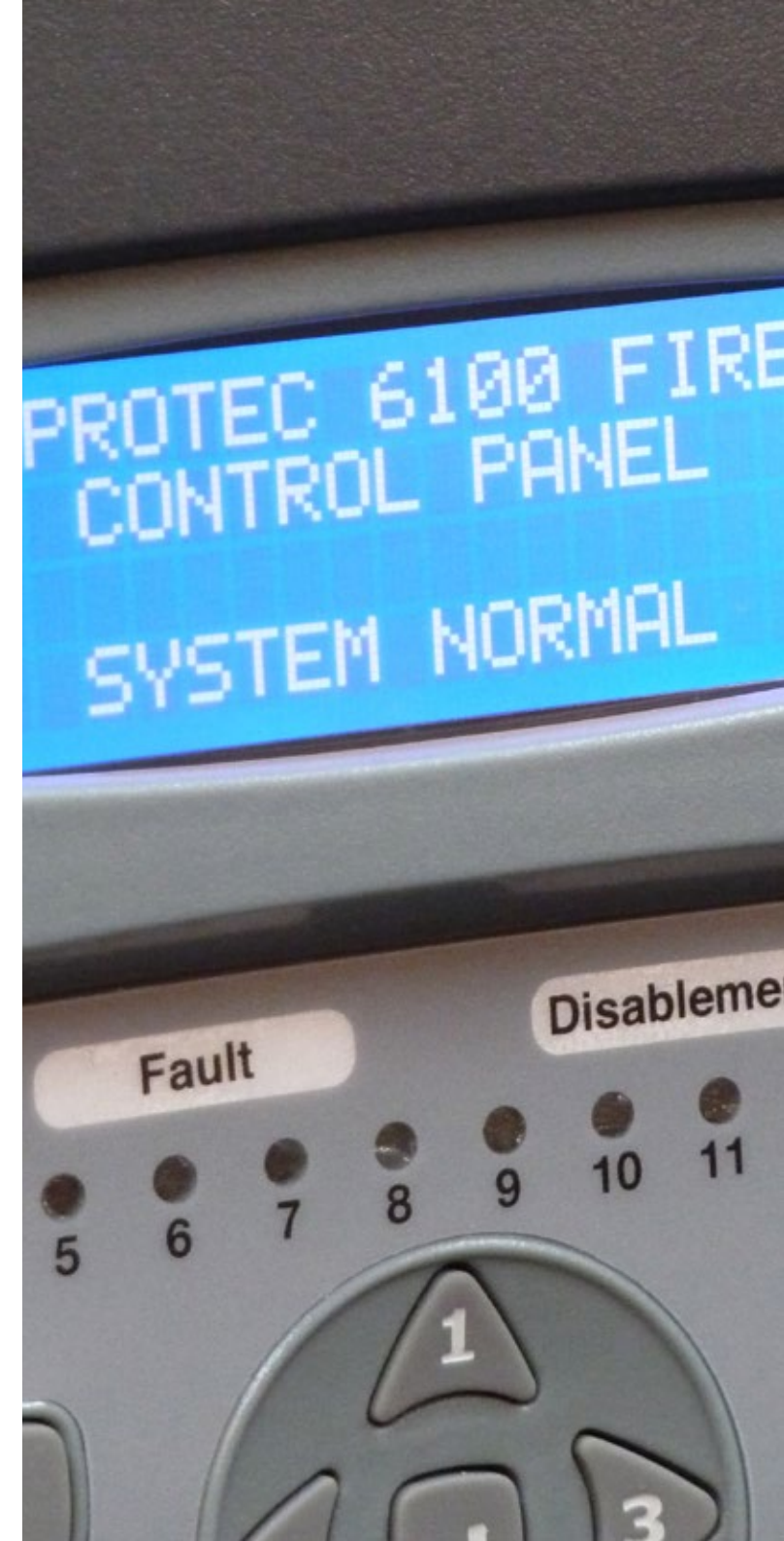


# Compact Design, Powerful Protection

The Protec 6100 offers reliable fire safety for small properties. This one-loop fire alarm system supports up to 192 addressable devices across 32 zones, providing thorough coverage. Designed with the Protec 6000PLUS protocol, it ensures straightforward installation and maintenance. Additionally, the advanced Algo-Tec™ software significantly minimises the risk of false alarms.

Thanks to its loop wiring methodology and our FAST™ commission method, installing and commissioning the Protec 6100 is a breeze. The Open Protocol nature of the fire alarm control panel ensures that any competent fire alarm company can maintain the system, making it a versatile choice for any provider.

Operating the Protec 6100 is simple with its easy-to-read, illuminated LCD display. The panel is multilingual, offering more than 10 European language options, and can be customised with different fascia designs to suit various countries. The EN 54 approved 6100 is ideal for protecting small to medium facilities across Europe, providing reliable fire safety wherever it's needed.



# 6100 Fire Alarm System

The Algo-Tec™ 6100 is a cutting-edge fire detection system featuring a highly interactive single detection loop, powered by the advanced 6000PLUS protocol. Each high-capacity loop can support up to 192 devices through a single 2-core cable, offering powerful performance and simplicity in installation.

The 6000PLUS protocol integrates a wide range of addressable devices into one cohesive system, delivering a state-of-the-art solution for your fire detection needs. This includes a comprehensive selection of products, such as loop-powered multi-criteria sensors, aspirating detectors, alarm sounders, visual alarm devices, interfaces, and manual call points, all engineered for maximum safety and efficiency.

To ensure quick and easy identification of real-time events, the panel is equipped with zonal fire LED indicators, along with system LED indicators that display mandatory information for essential status updates.

We also simplify the commissioning process with Windows-based text software, allowing project managers or clients to prepare device and location data in advance. On installation day, engineers can quickly upload this information to the panel, making last-minute adjustments effortlessly and saving valuable on-site time.

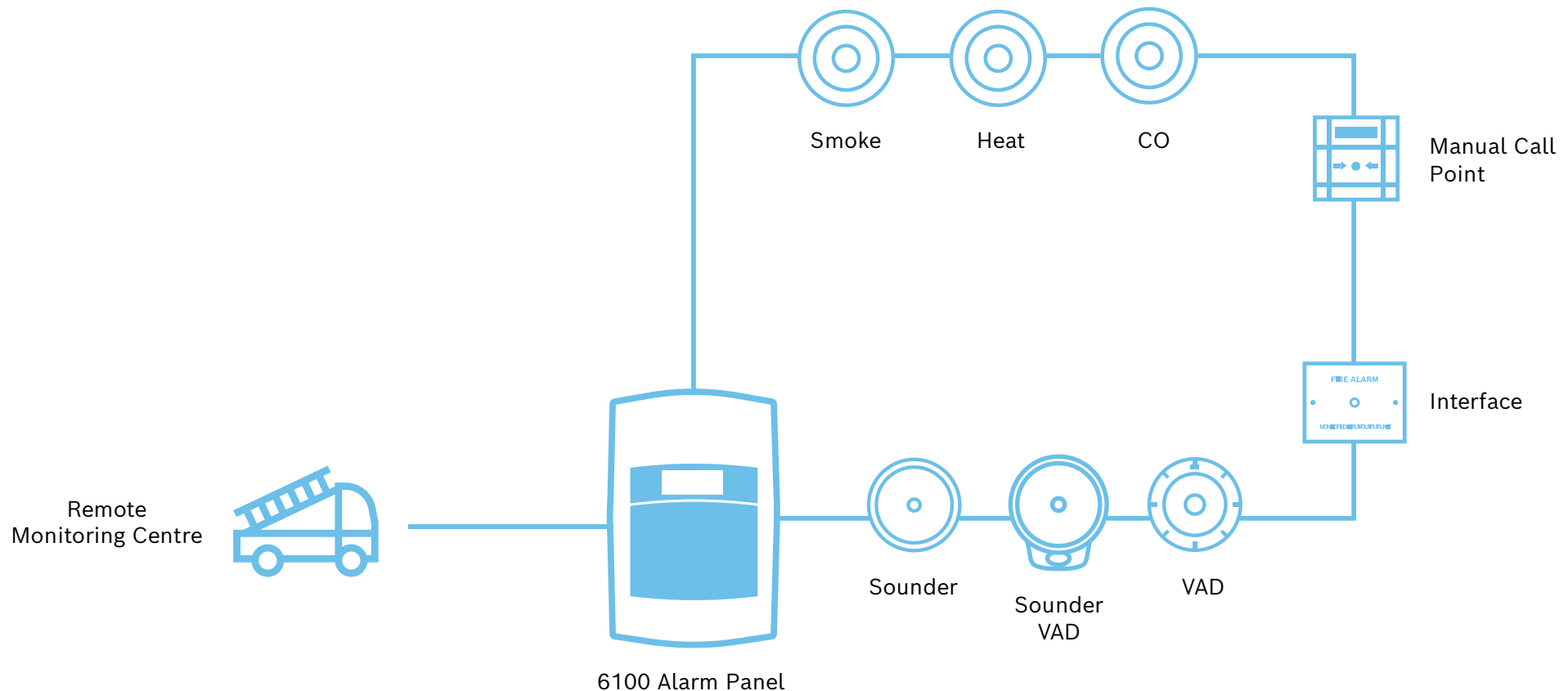
The panel's sleek, storm-grey, minimalist design seamlessly integrates into modern architectural environments. Its durable polycarbonate enclosure offers both strength and style, making it a perfect fit whether surface-mounted or recessed, ensuring it complements any building aesthetic.



# Powerful Protection in One Loop

The 6100 is a state-of-the-art digital addressable fire detection and alarm system, perfect for small to medium-sized buildings like shops, hotels, and offices. Designed to meet multiple EN 54 standards, this reliable system features a sleek storm grey polycarbonate enclosure that can be surface or recessed mounted.

The 6100 control panel includes a high-capacity Algo-Tec™ digital addressable data loop, supporting up to 192 addresses. This versatile loop accommodates 6000PLUS sensors, interfaces, Manual Call Points (MCPs), loop-powered sounders, Visual Alarm Devices (VADs), and optical beam detectors.



# What Makes a 6100 System?

The 6100 utilises the 6000PLUS protocol to unify the range of Protec addressable devices into one comprehensive system, providing a cutting-edge solution to your detection needs. This includes an extensive array of advanced products such as loop-powered multi-criteria sensors, aspirating detectors, alarm sounders, Visual Alarm Devices (VADs), interfaces, and Manual Call Points (MCPs), all designed to provide maximum efficiency and safety.



## 6100 Panel

The 6100 is an economical digital addressable fire alarm control panel perfect for small to medium size projects.



## Sensors

The 6000PLUS Sensor range combines detection and alarm technologies into one addressable sensor head.



## Manual Call Points

Sound the alarm and instigate an evacuation with the push of a button with our range of Manual Call Points.



## Interface

A wide range of fire alarm interfaces and control modules allow third-party system integration with a 6100 fire alarm system.



## Sounders and VADs

Raise the alarm to evacuate a building quickly and efficiently with the 6000 sounder and VAD range.



## Power Supply

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



# 6100 Fire Alarm Control Panel

Ensure your peace of mind with the small yet powerful solution that delivers unparalleled protection and ease of use



# Simplistic Fire Detection

Elevate the safety of your building with the state of the art Protec 6100, an interactive digital addressable fire detection and alarm solution packed full of features which prove perfect for small to medium-sized establishments like retail units, schools, and offices.

With user access codes, the system is easy to control. Functions like SILENCE, SOUND ALARMS, RESET, and ACCEPT are easily managed through navigation buttons. The 4 x 20 character liquid crystal display shows the current date and time, or a 40-character user message. During alarms or faults, it provides detailed information, including device, address, zone number, and user-definable location text.

The system includes two fully monitored alarm outputs for flexible wiring arrangements and one set each of global fire and fault changeover contacts. Our Windows®-based text software, provided free of charge, allows you to easily enter and modify location text, speeding up the configuration process.

The 6100 control panel comes with an integral 1A dc switch mode charger and accommodates two 12V 3.3 Ah sealed lead acid batteries. On-site programming is straightforward, with all configuration data managed and backed up via our Windows®-based software, making re-configuration and text amendments easy.

Ensure your peace of mind with the small yet powerful solution that delivers unparalleled protection and ease of use.



## Did you know?

Exported to over 70 countries, the 6100 has been a worldwide single loop fire detection solution since 2011

# Key Features

## Easy Location Text Setup

Use our free Windows®-based software to input device location text. This flexible process allows for last-minute changes and speeds up commissioning.

## Auxiliary Contacts

One set of global fire, and one set of fault changeover contacts.

## Dynamic LCD Display

An 80-character LCD ensures you stay informed with the current date, time, system status and fire condition all programmable with Protec 6100 software allowing for on-site customisation.

## Surface or Recess Mountable

Its sleek, storm grey polycarbonate enclosure can be mounted both on the surface and recessed, seamlessly blending with your interior design.

## Internal Power Supply

Built-in 1A dc switch mode charger and supports two 12V 3.3 Ah sealed lead acid batteries, ensuring uninterrupted performance and reliability.



# Key Figures

**192**

addresses per loop

**16**

fire zone LED's

**10**

languages available

**600mA**

loop load

**32**

input groups

**32**

output groups





# Products you can Trust

Have peace of mind with products that  
always meet the relevant standards

# 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.







**Protec**

D5E69229

CE 0905 15

D5E69229

**6000P/OPHTCO/SVAD**

Optical Heat CO Sensor  
With Sounder VAD

IP21C Type A 18-27Vdc 320mW 13.5mA

EN54-5:2000 Class A2, EN54-7:2000

EN54-3:2001, EN54-17:2005

MADE IN UK: 27/04/2021 247918

EN54-23:2010 MAX C-3-7.5

PFD-CPR-0091

Refer to DEL2130

RDL0253/3

NELSON, UK - BB9 6RT

Intertek

## 6000PLUS Protocol

The digital language of intelligence,  
accessibility, and simplicity



# Open or Closed Protocols?

When choosing a fire alarm system, clients must decide between an Open or Closed Protocol, which significantly influences the options for service and maintenance.

## **Open Protocol**

In fire alarm systems, Open Protocol refers to the system's accessibility; the software and access codes are publicly available, allowing any competent fire alarm engineer to service and maintain the system.

This flexibility offers clients freedom but can also introduce security vulnerabilities due to software and engineers codes being easily accessible online. Therefore, it is crucial to ensure that a competent, well-trained company is responsible for maintaining the system to guarantee its proper functioning, safety, and security.

## **Closed Protocol**

On the other hand, Closed Protocol systems provide enhanced security. Access to these systems are restricted to the designated fire alarm companies who control all software and commissioning capabilities. This ensures the system is consistently updated and fully operational, minimising risks for the building owner. Closed Protocol systems are ideal for high-security environments such as airports, prisons, and hospitals, where false alarms or unauthorised evacuations could have severe consequences.

With decades of experience in the fire alarm industry, Protec is committed to collaborating closely with clients to deliver bespoke, high-quality fire alarm systems tailored to specific requirements.



Did you know?

Protec is not just a Closed Protocol manufacturer

# Protocol Explained

The 6000PLUS Protocol is open to anyone, allowing any competent fire alarm company to service and maintain a Protec 6000PLUS system.



## Myth

“Protec isn’t Open Protocol”

“You can mix detector manufacturers on an Open Protocol system.”

“An Open Protocol system can only be installed by the manufacturer of the system.”



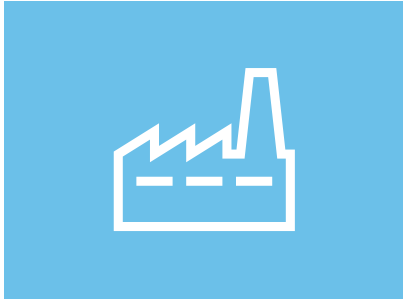
## Fact

Protec can be Open Protocol

Fire alarm systems must use the same manufacturer detectors across a detection loop.

Both Open and Closed Protocol systems can be bought off-the-shelf and installed by any competent fire alarm company.

# What Makes us Open Protocol?



## **Open from Factory**

All our fire alarm panels leave the factory unlocked ready for the level of access to be determined by the end user, or their fire system provider.



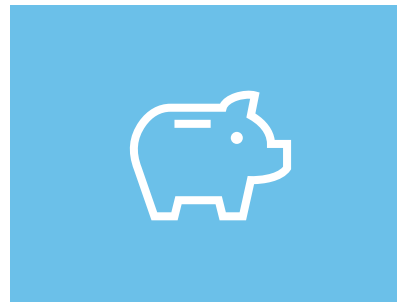
## **Easy Access to Software and Information**

The software and updates for our fire alarm panels can be accessed by any competent fire system provider through our client support portal.



## **Open to Anyone**

Any trained competent fire system company can service and maintain our current generation fire alarm systems.



## **No Subscription Assistance**

Documentation and videos are available without the need of a subscription through our client support portal and technical training videos\*.

\*Further complex training and personal assistance available upon request.



# Free From Interference

The 6000PLUS protocol operates on a low-voltage data transfer, which is crucial for its effective performance. This data transfer is of utmost importance, and it must be done instantly without any interference from external factors. That is why our products that use the 6000PLUS protocol undergo rigorous testing to ensure their safety from a variety of potential scenarios.

**In accordance with the EN standards, the 6000PLUS Product range is safe from:**



## **Radio Frequencies**

Safe from RF interference (radio frequencies) affecting the fire alarm devices.



## **Mobile Phones**

Immune to interference created by mobile phones and Wi-Fi.



## **Conducted Immunity**

Safe from electrical disturbances from nearby devices powered by the same power network.



## **Energy Surges**

Offers good resistance from large instantaneous voltages on devices integrated with the system.



## **Fast Transients**

Safe from high-frequency pulses caused by sparks when ac/dc connections are made to the system.



## **Electrostatic Discharge**

It is protected against damage to system components from static electricity.

# RVAV™

'Remote Visual Address Verification' (RVAV) is a feature that makes it easier for engineers to identify a device address. Engineers can determine a device's unique loop address by simply looking at the LED on a detector, manual call point or interface. When activated, the LED on each device flashes in a Morse code-like state. You can quickly determine the device's unique loop address by counting the time between flashes.

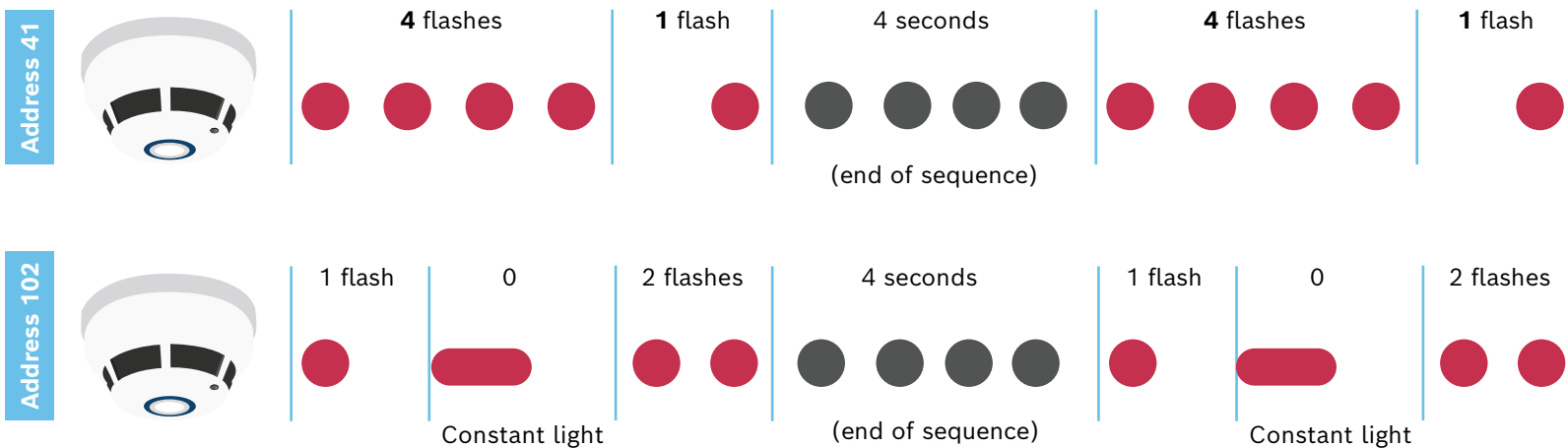


LED Indicator - OFF



LED Indicator - ON

## Identification sequence examples



# FAST™ Addressing

Firmware Addressed Secure Technology (FAST™) uses a simple barcode scanning procedure to commission the sensor, removing the time-consuming task of setting of address cards, DIL switches or specialist programming tools.

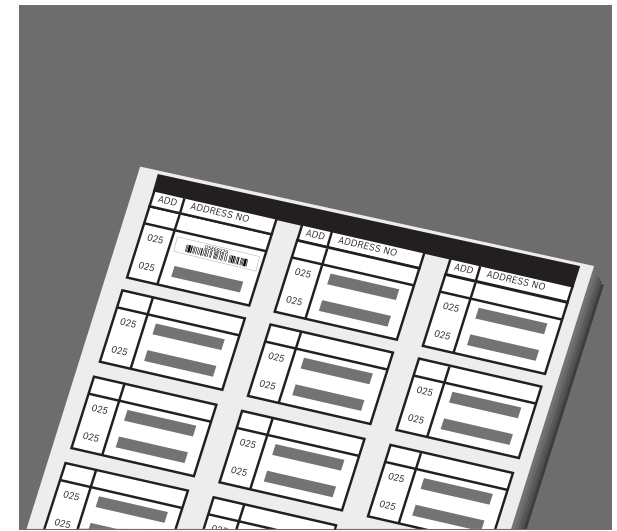
## FAST™ addressing in three simple steps



- 1 Locate the barcode on the inside of the sensor



- 2 Peel the sticker from the sensor. Place the sticker in the commissioning booklet at the desired address, with a note on location in the text box.



- 3 Hand the booklet over to the commissioning engineer to scan the barcodes into the site file on the PC application or Android Commissioning app.



# Streamline Commissioning

The Protec 6100 is engineered with simplicity at its core, ensuring a seamless experience from installation to commissioning. We've prioritised the installer and user throughout the design process to make it as straightforward as possible.

With a spacious termination chamber and easily accessible terminals, engineers can effortlessly view and access components without the hassle of removing gear trays or cable covers. This design not only saves time but also enhances efficiency.

Commissioning is quick and effortless with the 6100 FAST™ addressing system, a feature of the advanced 6000PLUS protocol that allows you to simply scan, log, go. This protocol also features the same RVAV technology that helps pinpoint device locations in the field, while the Algo-tec™ software significantly reduces false alarms.

The user interface is thoughtfully designed with distinct access levels for users and engineers, displaying only the relevant information for each. Navigation is intuitive, thanks to a horizontal menu format that allows for simple left and right swipes, followed by a quick press of 'Enter' to access the desired function.

The Protec 6100's straightforward approach to fire detection has made it a popular choice among installers and end users across various industry sectors.

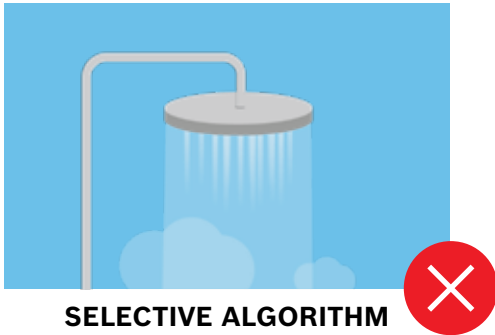


# Algo-Tec™

The Algo-Tec™ software empowers all 6000PLUS sensors to accurately differentiate between smoke, steam, dirt, and other contaminants. This advanced technology enhances the sensor's precision and reduces false alarms significantly, providing reliable and trustworthy results.

## Residential Mode

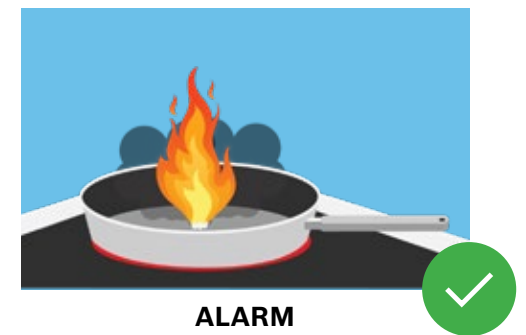
Bathroom Steam



Aerosols

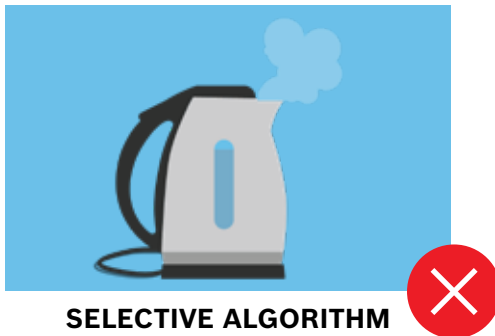


Cooking Fire

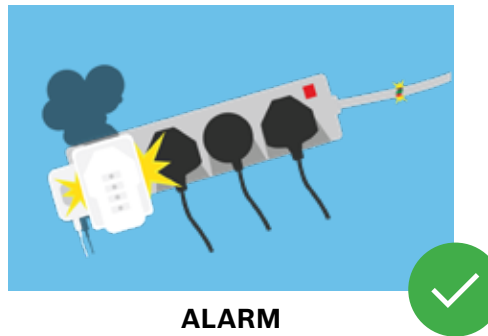


## Office Mode (High Performance)

Kitchen Steam



Electrical Faults

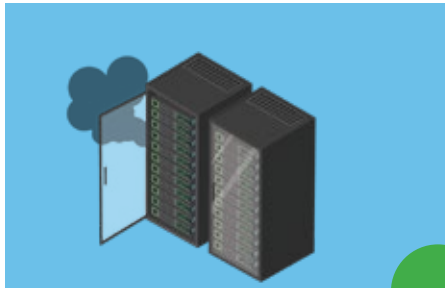


Computer Fire



## Clean Mode (Extra High Performance)

Server Fire



**ALARM**



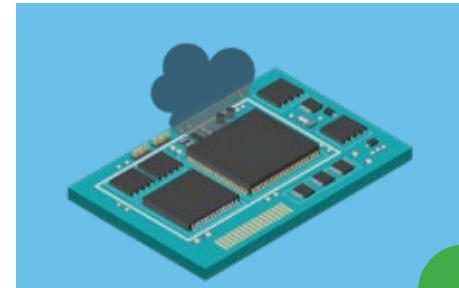
Chemical Fire



**ALARM**



Component Fire

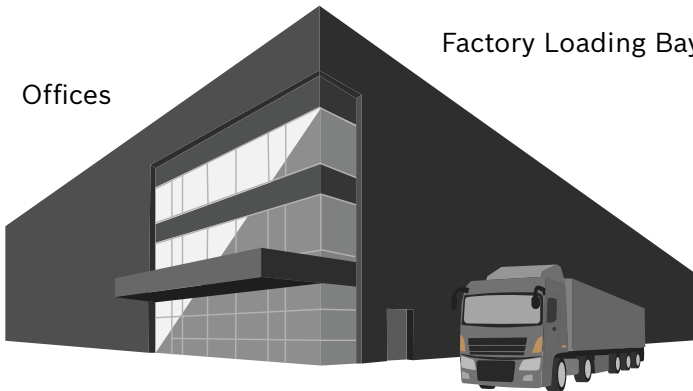


**ALARM**



## Day Mode

Offices



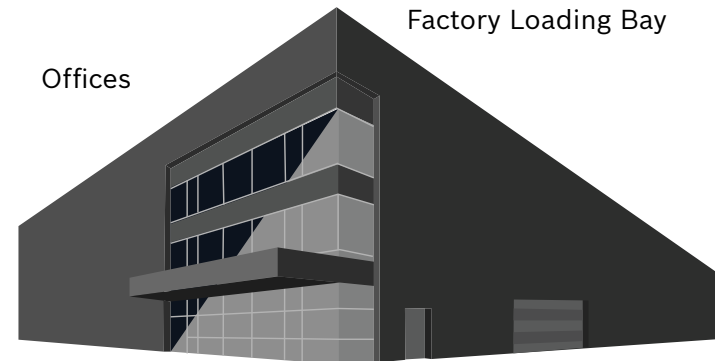
**Office:**  
High Performance

Factory Loading Bay

**Factory Loading Bay:**  
Heat Detection Only

## Night Mode

Offices



**Office:**  
Extra High Performance

Factory Loading Bay

**Factory Loading Bay:**  
Smoke & Heat Detection

Note: The given illustrations demonstrate how a well-designed BS5839 system responds to occasional contaminants and fire. These examples show some of the system's decision-making algorithms, specifically for the 6000PLUS/OPHT model.

## Benefits of Algo-Tec™

- Reduced false alarms
- Enhanced performance
- On-site flexibility
- Reduced maintenance costs
- Adjustable sensitivity
- Intelligent fire detection
- Time-controlled sensitivity
- Low failure rate
- Low current consumption



# 6000PLUS Sensor Range

The perfect fusion of technology,  
innovation, and style



# A Sense of Protection

The Protec 6000PLUS sensor range is a leader in digital addressable fire detection. Our cutting-edge sensors take fire safety to the next level by seamlessly integrating our state-of-the-art detection and alarm technologies into one sleek, compact sensor head.

The sensor range utilises our innovative 6000PLUS Protocol, bringing many innovations together. Engineers and end-users benefit from the FAST™ addressing and RVAV™ identification, making fieldwork a breeze. Thanks to our Algo-Tec™ software, false alarms are reduced, and maintenance events are tracked in real time, ensuring your devices always perform optimally.

The 6000PLUS sensor doesn't demand multiple addresses or additional supplies. Its loop-powered design is an all-in-one solution that saves space, time, and resources, making it the ultimate fire-detecting powerhouse.

Embrace the future of life safety with the all-in-one solution for detecting fires, minimising false alarms, and ensuring safe evacuations.



# Key Features

## Base

The universal Protec base allows the sensors to be mounted directly to any flat surface or Besa box.

## Ident Rings

Ident rings make for easy recognition of the sensor features.

**Ident ring identification**  
**Page 28**

## Anti-Tamper

Anti-tamper locking ensures no sensors can be removed without a tool.

## Advanced Sensing Technology

The Protec Algo-Tec™ 6000PLUS interactive programmable algorithms evaluate the intelligent sensor data. Sensors are available in many variants allowing for use in any application.

## Suitable for any Application

Developed to incorporate advanced fire sensing technology, electronic sounders, high-intensity LED visual alarm devices (VAD) and speech-enhanced talking sounder capability.



# The Identity of Versatility



## Sensor

A solid band identifies a detection-only sensor head. The various colours symbolise the four types of detection used: Optical (Grey), Heat (Red), Optical Heat (Blue) and our Optical, Heat and CO (Black)



## Sounder

A band with three perforations highlights our 'S' (Sounder) head, including a sensor with traditional audible tones. Each sounder head comes with multiple tones, which can be used for fire alarm evacuation cause and effects.



## Visual Alarm Device (VAD)

A large lens mounted on top of sensor identifies the VAD incorporated into the head. Our VAD models provide a low power consumption, variable output flashing LED alarm with a wide angle of coverage.



## Talking Sounder

A band with six perforations shows our 'TS' (Talking Sounder) variant, which delivers intelligible, pre-configurable alert and evacuation messages. The vocal alarm proves indispensable for reducing confusion during emergency evacuations.

## Did you know?

Protec manufactures 250,000 sensors on average every single year



# 6000PLUS Sensor Identification

The 6000PLUS range includes different types of sensors that cater to various fire detection methods. These sensors range from standard optical or heat formats to multi-detection offerings such as Optical/Heat and Optical/Heat/Carbon Monoxide. Our engineer-friendly approach for identifying the sensor type is straightforward due to the unique colour-coded ident ring. With this feature, there's no need to remove the sensor.

Did you know?

Protec started using 'Ident Rings' in the 1990s

## Temperature Sensor



Heat Sensor



Heat Sensor,  
Sounder



Heat Sensor,  
Sounder, and VAD



Heat Sensor c/w  
Talking Sounder  
and VAD

## Optical Sensor



Optical  
Smoke Sensor



Optical Smoke  
Sensor, Sounder

## Optical/Heat



Optical Heat  
Sensor



Optical Heat  
Sensor, Sounder



Optical Heat  
Sensor, VAD



Optical Heat  
Sensor, Sounder,  
and VAD



Optical Heat  
Sensor, Talking  
Sounder



Optical Heat  
Sensor, Talking  
Sounder and VAD

## Optical/Heat/CO



Optical Heat  
CO Sensor



Optical Heat CO  
Sensor, Sounder



Optical Heat  
CO Sensor,  
VAD



Optical Heat CO  
Sensor, Sounder,  
and VAD

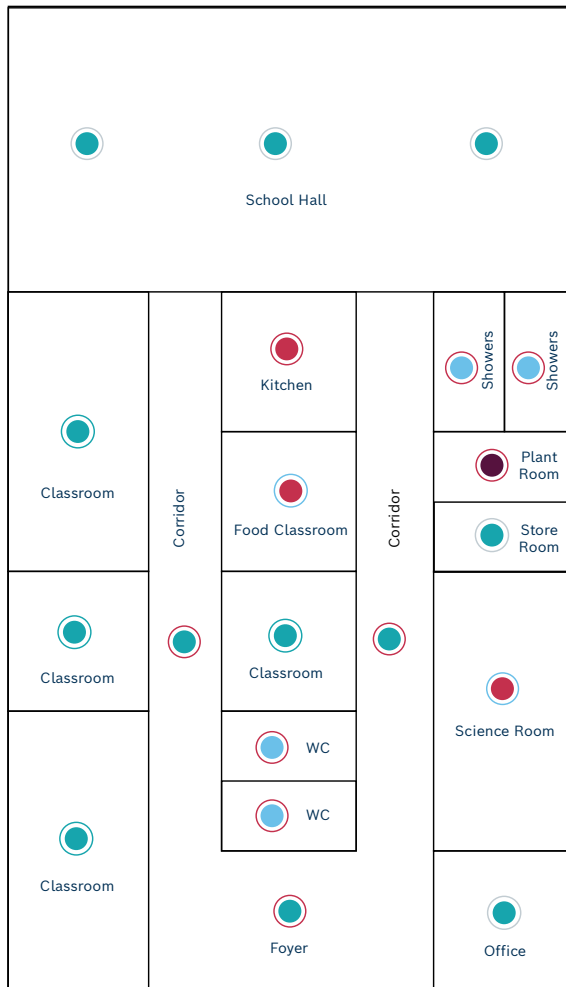


Optical Heat CO  
Sensor, Talking  
Sounder and VAD



# One Sensor, One Solution

The 6000PLUS sensor range offers multiple variations to choose from. These sensors use various technologies that work together to create a complete compliant system. With only 6000PLUS sensor heads, there is no need for additional wall sounders, visual alarm devices, or multiple base types.



- **6000PLUS Optical** – Ideal for ceiling voids, lift shafts, risers, offices, server rooms.
- **6000PLUS Heat** – Best used in kitchen and plant rooms where smoke from cooking can cause false alarms.
- **6000PLUS Optical/Heat** – Our optical heat sensors prove the ideal solution for differentiating between smoke and steam when areas have high humidity, such as shower lobbies.
- **6000PLUS Optical/Heat/CO** - The combination of these technologies within one fire sensor head proves excellent in detecting free-burning chemical fires or deep-seated smouldering fires, which produce little heat and smoke but large amounts of CO2.
- **6000PLUS Sounder** – Quick and efficient way of raising the alarm and starting an evacuation.
- **6000PLUS with Sounder VAD** – In areas with lots of noise or where the hearing impaired may be left alone, the sounder VAD shines, ensuring visual notification across a room.
- **6000PLUS with Talking Sounder** – Adding a talking sounder sensor means you have the traditional tones of the sounder variant for fire alarms, but you have the use of other tones, such as our ‘bell tone’, enabling the fire alarm system to be used for the class change in school.
- **6000PLUS with Talking Sounder VAD** – When a VAD is added to a sensor with a talking sounder, it offers a visual identification of an alert scenario as well as a vocal alert.

Drawing for illustration purposes only. Not to scale or BS 5839 compliant.

# Accessories

In addition to the versatile nature of the 6000PLUS sensor range, we also provide several accessories to provide extra protection, safety, and accessibility.



## Remote Indicators

When detectors are in those hard-to-see places, such as ceiling voids or risers, our remote indicators link to our detector bases to show the status of a sensor from a more accessible location.



## Anti-Ligature Base

When settings call for extra safety, we have devised our magnetic anti-ligature base. When excessive stress is applied to the sensor head, the sensor removes from the base instantly.



## Standard Base

Protec standard base is a universal base that works with our 6000 addressable range of automatic point detectors.



## Duct Detector

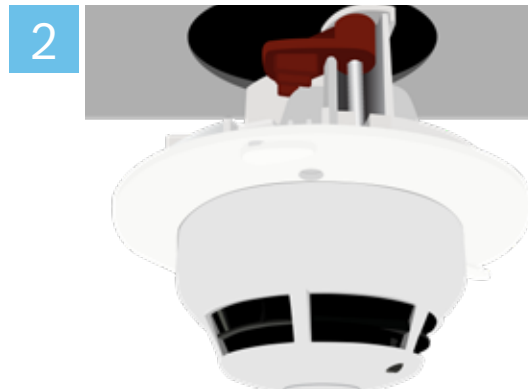
The duct smoke detector enclosure aids in detecting smoke and fire particles in HVAC ducts using a 6000PLUS/OP digital addressable head. Its unique 'one pipe system' employs the Venturi principle to enable maximum airflow through its chamber housing.

# Fast Installation

Modern buildings are all about aesthetics, so our Protec sensors blend seamlessly with contemporary spaces. With our fast-fix base, installing becomes effortless. Our detectors can be installed even before the ceilings are completed without the need for disconnecting the base to install onto the ceiling after, this can speed up the installation process and streamline commissioning on busy worksites. The fast-fix base also results in a lower profile, visually pleasing appearance.



1 Cut a hole in the suspended ceiling and pull through the detector.



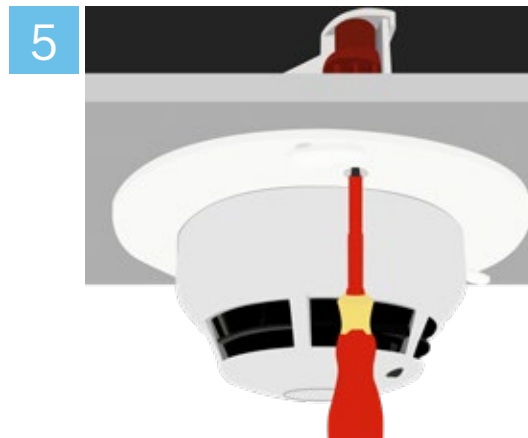
2 Place the fast-fix trim onto the detector base.



3 Turn the trim clockwise to lock into position.



4 Push the detector back into the hole.



5 Tighten the three detector screws until firmly mounted in position.



6 Spin the screw covers into position.



# Manual Call Points

The 6000 MCP ensures no uncertainty around safety



# Immediate Action

The Protec addressable Manual Call Point (MCP) is a reliable and responsive fire alarm device that is easy to maintain. When the call point is pressed, it sends an immediate signal thanks to our fully monitored 6000PLUS Protocol. Made from high-impact ABS plastic, this MCP is strong and robust. It is ideal for use in most indoor applications. For outdoors or in moisture-rich environments, our 6000/MCP/WP comes in a complete weatherproof enclosure.

Commissioning the device is easy with our FAST™ addressing method, and the RVAV feature shows the device address when requested at the panel. Furthermore, the tamper-proof removal method ensures that the addressable MCP can only be removed using the specialist test key.

Our addressable MCP meets industry recommendations, including adding hinged covers to prevent accidental triggering. A bright LED on the front of the addressable MCP indicates the device's status and illuminates in solid state when the device is activated.

Trust the Protec addressable MCP to deliver a full-scale alarm or evacuation when you need it most.



# Key Features

## Engineer Friendly

FAST™ addressing allows for the quick commission of Protec fire alarm devices.

## BS 5839-1:2017, EN 54-11 Compliant

Fully compliant with BS 5839-1:2017.

## Integral Isolator

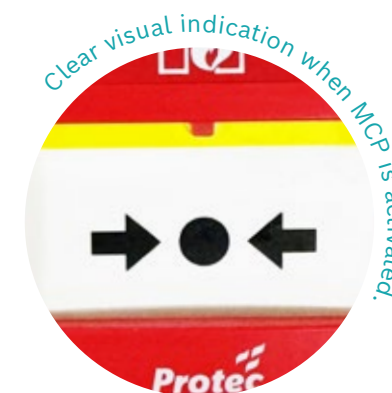
Integral circuit isolator protects the loop from short circuit faults.

## LED Indication

LED shows device status and allows RVAV™ indication.

## Third-Party Compatible

A host of third-party manual call point accessories, such as stoppers and alarm-hinged covers.



# Embrace the Environment

The Protec addressable weatherproof Manual Call Point (MCP) is engineered with a focus on installation efficiency, adaptability, and full compliance with the latest industry standards.

Building on the advanced features of Protec's addressable MCP including FAST™ addressing, RVAV™ identification, and including an integral fire alarm isolator. The weather-proof MCP combines these capabilities within a rugged IP67-rated waterproof enclosure. This design ensures optimal performance in dusty and moisture-rich environments, making it suitable for a wide range of challenging project applications.

The IP67 sealing offers exceptional protection against water and dust, guaranteeing reliable operation even in harsh conditions. This enhanced environmental resistance makes it an ideal choice for settings where moisture, dirt, and debris are common.

To simplify installation, the weatherproof MCP uses an innovative terminal block that serves as a centralised connection point for initial wiring. Once connected, the terminal block securely attaches to the back of the weatherproof MCP, streamlining the process by eliminating the need for re-termination saving time out in the field.

The unit also comes equipped with three standard 20mm knock-outs, allowing for seamless integration with various surface wiring configurations, providing maximum installation flexibility.

With these combined features, the weatherproof MCP ensures robust performance and adaptability while meeting the highest standards of safety and durability.







## Addressable Interfaces

Integrating systems to provide a safer  
environment



# Bringing Systems Together

Our advanced addressable fire alarm systems are equipped with a wide range of interfaces that can effortlessly and efficiently integrate third-party systems. Our cutting edge 6000PLUS protocol is used for comprehensive system monitoring, ensuring that in the event of an emergency, third-party systems such as gas, plant machinery, lifts, Automatic Opening Vents (AOV's), etc., are promptly activated or shut down to minimise damage and ensure the safety of the building and its occupants.

To make the commissioning process simple, we have incorporated our FAST™ commissioning method and equipped the interface range with an inbuilt loop short circuit isolator to enhance reliability and safety. Our fire alarm system continuously monitors our interfaces to ensure maximum protection for the building and its occupants.



# Input/Output Interfaces

Our comprehensive range of input/output interfaces are designed to seamlessly integrate with our addressable systems ensuring reliable performance and compatibility with various applications. These interfaces cater to diverse operational needs, from single-channel solutions to multi-channel configurations, while maintaining a focus on efficiency and ease of integration.



## **Single Channel Interface - 6000/MICCO**

Our single channel interface is a loop-powered fault-monitored input and a volt-free clean contact output interface. An on-board isolator protects against loop short circuits on incoming or outgoing loop connections.



## **Two-channel Input/Output Interface - 6000/2IO**

Our dual input/output interface is a loop-powered input/output device providing two individually monitored inputs and two volt-free changeover contacts, best used to connect ancillary equipment to a Protec fire alarm system.



## **Four-channel Input/Output Interface - 6000/4IO**

The quad input output interface is a auxiliary powered input/output device that provides two local zones of conventional detectors, two monitored inputs, two local monitored alarm outputs and two volt-free changeover contacts. The four-channel Input/Output Interface is best used to connect ancillary equipment to a Protec fire alarm system.



## **Addressable Beam Interface - 6000/BEAM/IF**

The Protec addressable beam interface is designed to effortlessly integrate ancillary conventional devices like beam detectors and linear heat detection into Protec's state-of-the-art addressable fire alarm systems. This interface unit is loop-powered, removing the need for an additional external power supply.

# Zone Alarm Interfaces

Our range of zone alarm interfaces bridges the gap between conventional detection systems and advanced addressable fire alarm systems. These interfaces are designed to seamlessly integrate conventional devices and sounders into Protec addressable loops, providing flexibility, reliability, and scalability for various fire safety applications.



## **Addressable Loop Powered Zone Alarm Interface - 6000/LPZA**

The Protec loop powered zone alarm interface integrates simple conventional detectors with our addressable systems and supports up to ten conventional detectors. The on-board switches enable selectable zone end-of-line settings monitoring the circuit for open and short circuit faults with the ability to drive up to 50mAh sounder circuits without external power per LPZA.



## **Addressable Ancillary Powered Zone Alarm Interface - 6000/APZA**

The Protec ancillary powered zone alarm interface connects a Protec digital addressable loop to a zone of conventional devices and a sounder circuit. It integrates small conventional fire detection with Protec addressable systems. Powered externally from an ancillary 24 Volt supply, it provides a larger output capability allowing for ten Protec conventional sounders per APZA.



## **Addressable 2-Way Loop Powered Zone Alarm Interface - 6000/2LPZA**

The loop-powered zone alarm interface is a dual input/output device which provides two local zones of conventional detectors and two locally monitored alarm outputs.



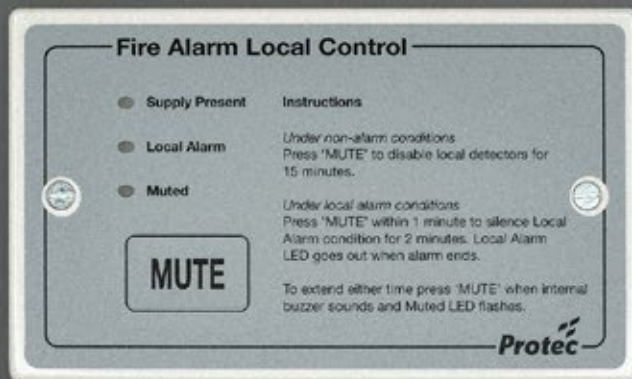
## **Addressable 2-Way Ancillary Powered Zone Alarm Interface - 6000/2APZA**

Protec's dual auxiliary powered zone alarm interface is an addressable input/output device which provides two local zones for conventional detectors in addition to two locally monitored alarm outputs.



## **Addressable 16-way Ancillary Powered Zone Alarm Interface - 6000/16WAY ZAI**

Our addressable 16 channel auxiliary powered zone alarm interface provides input/output device allows for up to 16 local zones of conventional detectors and two locally monitored alarm outputs to integrate with a Protec addressable system. The 16-way board can also be supplied with monitored inputs and clean contact outputs if required.



# Local Control Module

Locally combat false alarms to prevent false evacuations



# Truly Identifying Fires

The Protec 6000 Local Control Module (LCM) is designed to seamlessly integrate a Protec addressable fire detection system into Houses of Multiple Occupancy (HMOs). It is specifically developed to handle false and nuisance alarms in residential and student accommodations, making it a reliable choice for property owners.

The module provides tenants with an element of fire alarm self-sufficiency in their apartments. Simultaneously, it keeps the landlord's master fire alarm control panel informed about individual apartment fire alarm status at regular intervals, ensuring a sense of dependability.



False alarms make up over 95% of automatic fire alarm-confirmed incidents

\* Based on Home Office statistics



# Key Features

## Conventional Compatibility

Compatible with Protec's range of conventional fire alarm devices.

## Visual Device Indication

Multiple LED indicators offer visual system status. Highlighting supply, local alarm, and muted conditions.

## One Button Operation

Allows for both mute and disablement options by pressing and holding for a length of time to ensure no false operations are made.

## Loop Powered

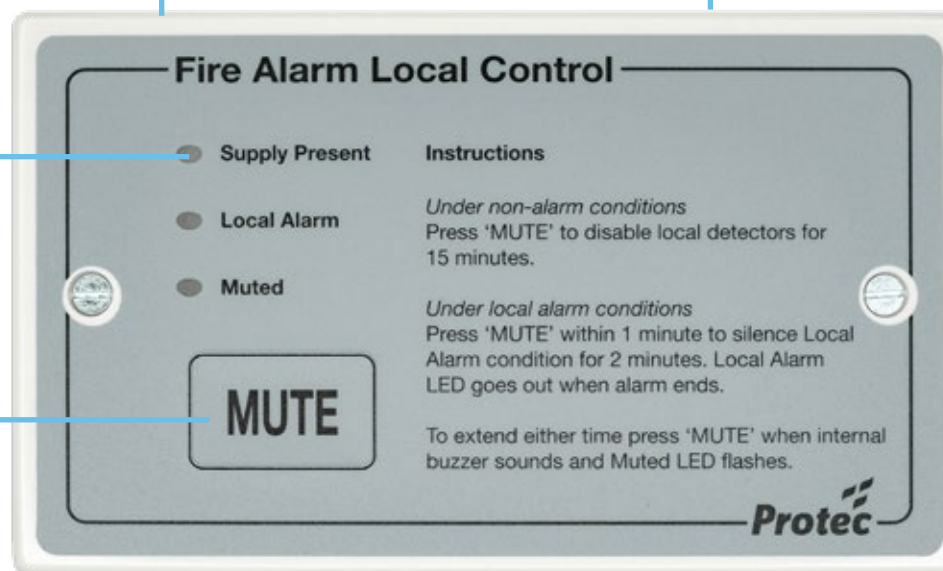
Powered by the 6000PLUS digital addressable loop, ensuring a low current fully monitored method of operation.

## Internal Audible Indication

The integral buzzer indicates the unit is in alarm or, when in an isolated condition, or when the muted condition is about to expire.

## Industry Certification

Approved to EN 54-17, and EN 54-18.



# How Does it Work?

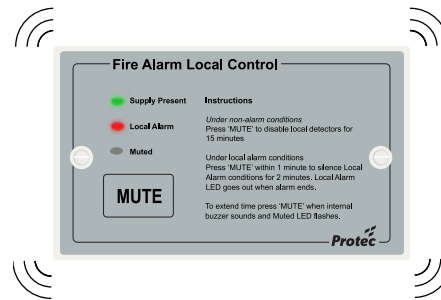
When an apartment conventional detector triggers, an automatic countdown begins, allowing the occupant to investigate the cause and identify an actual fire. If a false alarm is created by sources such as vape smoke or burnt toast, it allows adequate time for the 'mute' button to be pressed. If the investigation period isn't cancelled, The Local Control Module will continue to sound the building-wide alarm to notify people of a potential fire in the building.

1



Detector senses smoke.

2



LCM buzzer sounds.

3



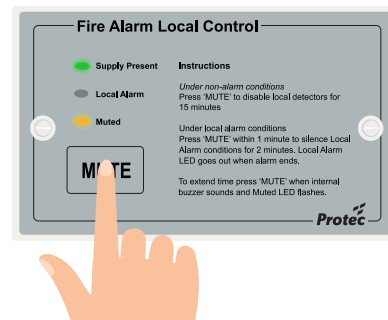
LCM timer starts.

4



False alarm identified.

5



Mute button pressed.

6



Fire alarm system back to normal.



# 6000 Sounder Range

Loop-powered sounders that demand  
attention



# Addressable Sounder

A sounder is a crucial component that ensures your fire alarm system raises the alarm in an emergency. Our range of addressable sounders are loop-powered devices that deliver a powerful sound with minimal current consumption.

The addressable sounder range are low-current loop-powered devices that deliver an impressive sound output of 100dB(A) at one metre. The sounder offers three distinctive tones: warble, continuous, and pulse. Control is at your fingertips, allowing you to adjust the volume across three levels—100dB(A), 95dB(A), and 75dB(A), all configured at the main fire alarm control panel.

Talking sounder variants are equipped with integrated voice-enhanced sounders, pushing the number of audible sounds to fourteen. These units can deliver synchronised alert and evacuation messages around a building, removing any ambiguity, particularly for anyone unfamiliar with the building alert and evacuation strategy, enabling a more safe and prompt building evacuation.



# Sounder Variations

Like other Protec products, design is vital, and our sounder range is no different. By combining products, we strive to reduce installation and commission time. That's why all our sounders come complete with our FAST™ addressing and incorporate loop isolators into the device.

We take this design philosophy further by incorporating our sounder technology into other Protec products, such as our VAD and sensor range, negating the need for multiple devices and streamlining the design and installation experience for designers, engineers, and end-users.



## Wall Mounted

The 6000/SSR2 is available in red and white body colours. With versatility through two base options, the standard 'shallow' for a less intrusive appearance or an optional 'deep' base, which offers an IP65 rating, makes it suitable for indoor and outdoor installations. The deep base welcomes surface-mounted cables to converge directly into the sounder, further streamlining the setup.



## Sensor

Our 6000PLUS sensor range combines alarm and detection into one unit. The synergy technology creates an all-in-one solution without requiring additional bases, devices or system addresses.



## Discreet

Specifically designed to go unnoticed and blend into a contemporary space, our discreet sounder is a sounder disguised as a sensor. These prove great for rooms where aesthetics are essential when red wall-mounted sounders are deemed unsightly, and detection isn't needed or done by other methods.



# Vocalising an Evacuation

The beauty of the Protec talking sounders isn't limited to fire alarms. With seven voice messages and a 'bell' sound, harmonising with the three traditional fire alarm tones from our sounder range. You can select voice messages from the predefined options, allowing you to repurpose the fire alarm as a class change or school lockdown system.

## Did you know?

A Protec talking sounder has 14 predefined tones/messages plus the ability to add your own

*"May I have your attention, please? An incident has been reported in the building. Please listen for further instructions."*

*"Attention, attention. This is an emergency. Please leave the building by the nearest available exit."*

*"Attention please, attention please. Fire has been reported in the building. Please leave the building immediately by the nearest exit."*

*"This is a test message. No action is required."*





# Visual Alarm Devices

Bright lights to instigate an evacuation

# Visually Address the Emergency

Visual Alarm Devices (VADs) are high-output LED beacons that alert deaf or hard-of-hearing people of a fire in a building. They work by emitting flashing pulses of bright white when the fire alarm is activated. The Protec VADs offer intense, attention-grabbing light making them unavoidable in a fire.

Our range of visual alarm devices meet industry regulations and are purposely designed to fit all types of scenarios to ensure the correct coverage in an emergency. Our VADs redefine efficiency by embracing low-consumption loop-powered technology, removing the need for additional power supplies and cables.

Like all other Protec addressable devices, they utilise our 6000PLUS protocol, meaning our VADs are easy to install and commission due to our FAST™ addressing method.



# Ceiling Mounted VADs

Protec provides several ceiling mount options for VADs, which are manufactured to offer the regulatory high-output light within low-ceiling areas. This could be where a detector isn't required or when other forms of detection are in place. These provide a great solution to adding devices into low-ceiling areas such as toilet cubicles and changing rooms, etc.

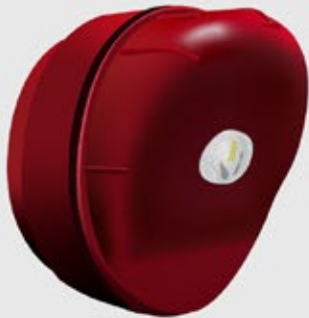


# Wall Mounted VADs

Wall-mounted VADs project light over a larger area. These VADs are beneficial in high ceiling areas, such as warehouses, shopping malls, etc., where a ceiling mount alternative isn't suitable.

The design of our wall-mounted VAD range is such that it offers the optimum spread of light. By angling the high-output LED, it directs the light downwards and outwards, optimising its path and making an excellent visual notification in an emergency.

**Wall Mount**



The wall mount VAD is available in red or white and is created to offer sufficient light to high-ceiling areas where a ceiling VAD isn't possible. The wall-mounted VAD range also includes a weatherproof option, which is ideal for chilled warehouses or hygienic washdown areas.

**Combined Wall Mount**



Our combined unit integrates a VAD into a traditional wall-mounted sounder. Created to offer both audible and visual alarms in noisy environments. Like our single wall-mounted VADs, the units still provide the same angled LED design to ensure optimum light performance.









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