Rapid installation  Minimum disturbance
“Due to the diversity of the projects we undertake, which range from Heritage to ultra modern the provision of cables is not always easy. Hyfire's hybrid system provided a really adaptable answer to our design challenges.”

Paul Hardy -- Electrical Engineer, Haleys Ltd
The Hyfire system raises wireless fire detection and alarm systems to new levels of reliability and flexibility. The system utilises the latest wireless technologies to provide rapid, yet economic wireless fire system installations with the minimum of disturbance to the surroundings.

With over 1,000,000 devices installed worldwide, an established wireless protocol and an impressive list of international third party approvals and accreditations, designers and installers can feel confident that they are choosing a system with a proven pedigree.

With its fully wireless or hybrid capability and an impressive range of field devices the system lends itself easily to a wide variety of applications. The Hyfire system is equally at home protecting a sensitive heritage building, extending an existing wired system in a busy hotel environment or providing temporary protection for a building site.
Wired to wireless solutions

When combined with the extensive range of compatible industry leading control equipment, Hyfire offers the most flexible wireless fire solution available today. Translator Modules are connected onto the control panel loop wiring, either on their own to form a fully wireless system, or mixed with wired field devices to form a Hybrid system. Each of these Translator Modules communicates with up to 100 field devices via a proven wireless protocol, processing the messages received from the field devices and transmitting information about themselves and the devices they support to the system’s control equipment.

All field devices have a notional wireless range of 150m in free air, but where greater distances are required the system is supported by a range of Expander and Router Modules which help to propagate the radio signals over greater distances or into areas with difficult structural architecture. Multiple Translator Modules can be used on each control panel loop and each Translator Module can support multiple Expander Modules making it possible to configure systems of virtually any size and complexity.

Where a non-addressable system or a system with an unsupported protocol is present, wireless detection and alarm devices can still be achieved in specific areas with the deployment of one of the Hyfire specialist Expander Modules.
Detection devices

Hyfire wireless intelligent point detectors come in three variants; Optical, Thermal and Multi Criteria, making them suitable for use in a wide range of applications.

The Optical and Multi Criteria detectors have a patented chamber design, with a double dust trap and adaptive signal processing to help prevent unwanted alarms.

The Thermal Detector can be programmed to operate as either a fixed temperature detector, a rate of rise detector or as a fixed high temperature device.

“When faced with the task of providing a life safety system for over 3000 people in a fully operational 1960’s tower block, radio fire detection was the only real solution”

Nicola lee – Design Engineer, SVM Associates
To achieve the highest levels of reliability and performance from wireless field devices which have comparable looks and capabilities of leading wired products, Hyfire relies on some advanced and patented technologies. To comply with the latest European Standard (EN54: 25 2008) communication between the Translator Modules and devices is bi-directional and utilises the approved 868MHz frequency range.

The system maintains the security and stability of communications by using a selection of automated system adjustments including channel hopping, amplitude adjustment and drift compensation.

The advanced wireless communication protocol allows the system to deliver fully intelligent field device integration and allows analogue values, fire and fault information, device addresses and type codes to be transmitted to the system control panel.

Technology powered solutions

Optional wireless low current LED beacon

Primary battery - standard low cost lithium battery gives up to 5 years battery life

Third party approved detection chamber with dual dust trap false alarm reduction

Secondary battery - supports system for 2 months following failure of primary battery

EN 54 Part 25 Third party approved wireless transceiver operating on the European approved 868 MHz frequency

Universal mounting base fits all Hyfire wireless sensors

Optional wireless sounder base with 32 tones and adjustable volume up to 92db (A)

Highly reliable surface mount technology circuitry

Technology powered solutions
Whether involved in the design, installation or maintenance of a fire detection and alarm system, or the person with everyday responsibility for the system in a workplace or public building, we all have a duty to ensure that the life safety systems we provide are the best available. The Hyfire system is designed and manufactured to the latest British and European standards, ensuring it provides the highest levels of reliability and safety. Our system has then been independently tested and awarded the prestigious LPCB mark of approval.

All devices in the Hyfire range are powered by standard lithium batteries which are low cost and environmentally friendly. Battery life of up to 5 years can be expected from the primary cell followed by a further 2 months from the secondary cell. All batteries are continually monitored for a low battery condition which is then indicated at the control equipment.
“With the thickness of the walls and ceilings and distances involved, not to mention the detailed cornice work we didn’t want to disturb, the Hyfire wireless system was the dream solution.”

Sarah Beeney – Property Developer & TV presenter

Difficult sites

Nearly every installation has its difficult elements, these may vary from a sensitive and ornate ballroom ceiling, asbestos contaminated construction or a remote gatehouse with no cable access. The Hyfire wireless system provides a simple solution to all of these and many more installation challenges. The hybrid approach allows the system designer to choose how much and which parts of the system should be wired and which parts wireless, making the finished solution the most cost effective and practical available. Where a site’s architecture or building use makes any cabling difficult this can be overcome with a Hyfire fully wireless solution.
Translator and Expander Modules

The Hyfire range of intelligent Translator and Expander Modules are at the heart of the system’s wireless connectivity. Utilising well proven wireless technology and frequencies combined with a patented orthogonal antenna design the Translator Module ensures a reliable and secure connection between the field devices and control equipment. Translator Modules are powered from the detection loop and are available in several industry leading protocols.

Expander Modules are available to boost the transmitted signal when covering areas out of range of the Translator Module, allowing the configuration of systems of virtually any size.

When connecting to a system with an unsupported protocol or to conventional control equipment a special interface is available which supports both detection and alarm devices.
Ease of installation

When undertaken properly, any wired installation requires a high level of skill from the installer. The provision of cable containment, the use of power tools and normally a degree of making good following the work is required even before the commissioning engineer gets to site.

In comparison all that is required when installing a Hyfire wireless device is the ability to fix two screws before the arrival of a Hyfire trained commissioning engineer.

“A modern military base has a diverse set of buildings and facilities ranging from sleeping accommodation and aircraft refuelling facilities to a bowling alley. A hybrid wireless fire system helps us accommodate all these requirements.”

Peter Heath – Turner FM- RAF Brize Norton
Hyfire’s industry leading range of wireless Audio Visual devices provides a visually attractive and cost effective solution for a wide variety of installation types and sizes.

Both the wall and base mounted variants have adjustable volume levels, multiple tone settings and are available as stand-alone Sounders and Beacons or as combined units.

All wall mounted units are available in red or white colour options and can be supplied as weatherproof variants for use outside or in hostile environments.

Peter Heath – Turner FM- RAF Brize Norton

"A modern military base has a diverse set of buildings and facilities, everything from sleeping accommodation and aircraft refuelling facilities to a bowling alley. We needed a solution that meets all these requirements. A hybrid wireless fire system helps us accommodate all these requirements."
“A superb project that was well managed and executed with minimal disruption to day to day working, the council are very pleased with what has been undertaken and completed in the short timescale set”

Minimal disturbance

Time is money in all walks of life, whether you are operating a luxury hotel, busy office or high street bank, disruption to your working day is expensive. Traditionally, building closure or out of hours working were the only solutions to installing in these environments. Wireless fire systems now offer you a simple alternative, as their quiet and fast deployment often allows work to take place around the normal day to day site activities. Installation is non intrusive therefore damage to room decor or the building structure are avoided along with the associated mess and making good required after most wired installations.
To take full advantage of the hybrid capabilities of the Hyfire system, an extensive range of compatible wired detection and alarm devices is available. These devices have a similar look and feel to the wireless products making the implementation of a Hybrid system simple and seamless.

All field devices communicate via an advanced digital protocol and can be automatically configured by the control equipment or configured manually by the commissioning engineer.

Hyfire wireless Modules make the control and monitoring of remote third party equipment simple, regardless of its location or its suitability to be connected by cable.

The Output Modules are suitable for controlling equipment such as smoke dampers, door closers and gas shut off valves. The operation of the third party equipment is achieved by either “Change Over” relay contacts or by a switched 24v dc output derived from the Module’s internal batteries.

The Input Module is fully monitored and designed for taking signals from other systems, making it particularly useful when linking multiple systems in remote locations.
Cost effective solutions

The Hyfire wireless system is not only an innovative solution to difficult installation problems, but also offers real commercial advantages to the installer and end user. Fast installation reduces project duration and as a result many other associated project costs. Project management time, site infrastructure and access equipment hire can all be reduced. These reductions in project duration do not only lower costs but also leave the installer free to move on to other work whilst invoicing the initial works sooner.

By using the latest in manufacturing technology the Hyfire wireless components are economically priced and this combined with the reduction of installation costs and reduced project duration make them a commercially viable consideration for any project.

“We have installed the Hyfire wireless fire system in 19 properties over a 5 year period and have found it to be both a flexible and reliable solution”

John Sweeney – Services Engineer, Nuneaton and Bedworth Borough Council
Training & Support

Quality training and support guarantees the successful delivery of any quality life safety solution. This is even more important as systems get ever more technologically advanced. Good quality training will improve commissioning times, reduce return site visits and leave the client with a feeling of confidence in both the system and technicians involved.

However, no matter how well trained a technician is, there always comes a time when they require some additional help and support and therefore, throughout all stages of your project, Hyfire will be on hand for guidance and support, ensuring you benefit fully from our unique and innovative products.