



**EMS**

**Firecell**



Supplied by:  
Southern Alarm Systems Ltd





## Key Features

- The FireCell range has been designed as a wireless fire detection solution for the European market
- EN54 Part 25 compliant
- Third party approved
- Unique EMS Smart Cluster Technology
- Utilising industry standard sensors with proven reliability
- Totally wireless communication
- Automatic selection from 32 radio channels for reliable signalling
- SCT multipath technology ensures a robust radio solution
- Diversity transceivers allow maximum operational range
- Bi-directional radio communication as required by EN54 Part 25
- SCT supports up to 2048 devices
- European harmonised frequency
- Communicates to the CIE utilising standard protocol
- Easy to use and program
- Expansion of the system is easily achieved by adding a Cluster
- RCCs have 72 hour battery backup as standard (to EN54 Part 4)
- Optical sensor option (EN54 Part 7)
- Heat sensor option (EN54 Part 5)
- Multisensor option (EN54 Part 7)
- Sounder and beacon (EN 54 Part 3)
- Voice sounder option
- Call point (EN54 Part 11)
- Multiple input/output unit (EN54 Part 17)
- EN 300-220 compliant
- 5 year battery life under normal conditions
- Powered by low cost alkaline batteries



EMS, the leading wireless fire systems manufacturer, proudly brings you the revolutionary FireCell, the most powerful and versatile wireless fire system.

FireCell is a totally wireless fire detection system and is capable of managing an industry beating 512 devices, an incredible 64 radio clusters.

Incorporating new Smart Cluster Technology (SCT) and utilising the European-wide 868Mhz radio frequency band, FireCell is the first system to be compliant with the new European EN54 Part 25 regulations and boasts a wireless coverage which far exceeds any other 868Mhz based system.

Following consultation with designers, engineers and installers EMS has developed a system which brings considerable application benefits, including;

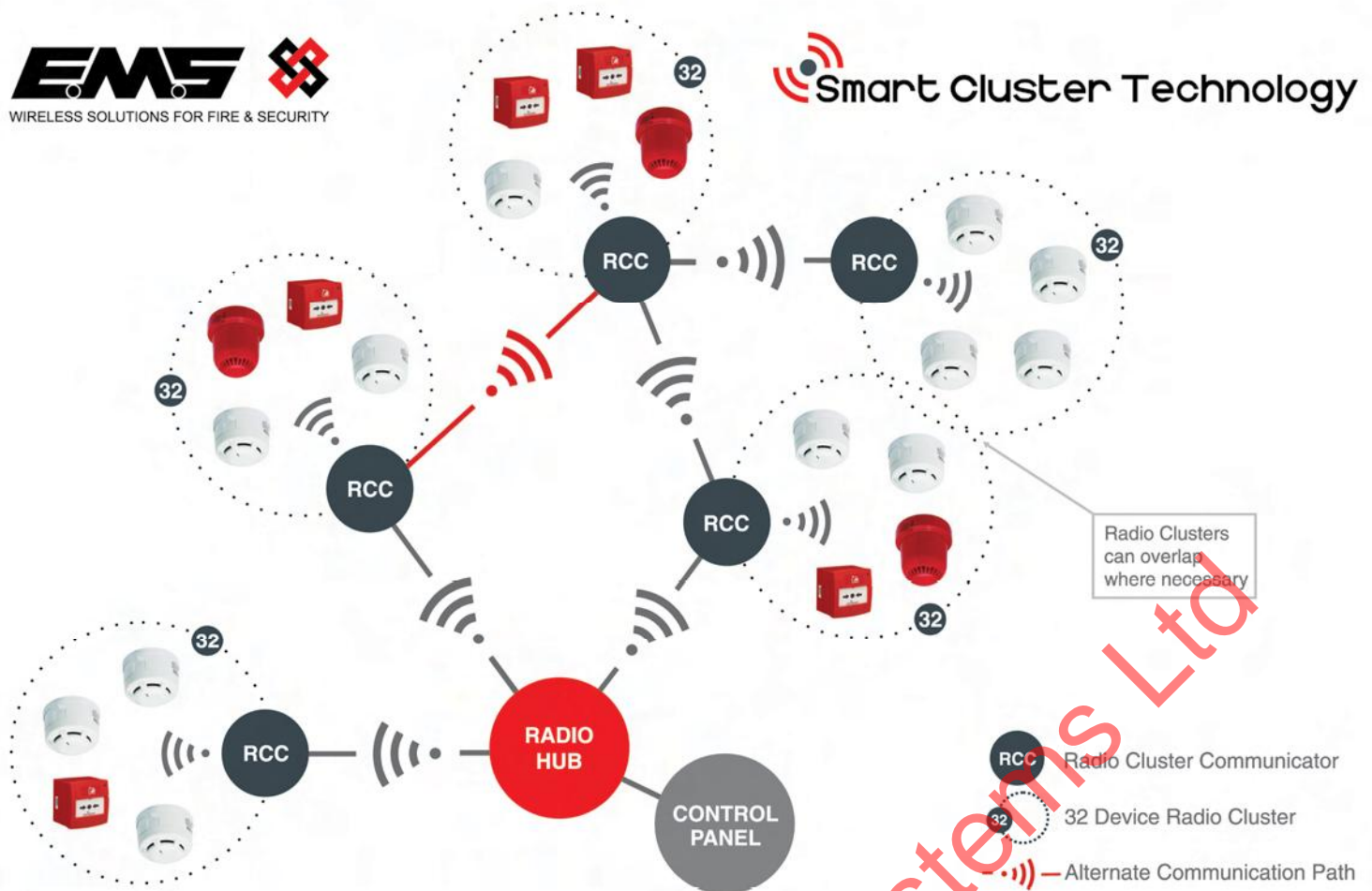
**Highly Adaptable** - FireCell is suitable in virtually any building type, from bed and breakfast accommodation to complex industrial plants and in many cases exceeds the performance of wired systems.

**Cost Effective** - FireCell provides a simple and cost effective solution that can easily be adapted as any building develops. With the elimination of expensive fire rated cable even greater cost savings can be made throughout the install or building process.

**Re-Usable** - FireCell offers ideal temporary fire detection to meet health and safety requirements in and around custom environments such as, building sites and major sporting events. Visit our website to see case studies for Wimbledon and The Ryder Cup.

**Environmentally Friendly** - FireCell is an environmentally friendly system having eliminated the need for fire rated cable, a major cost saving in itself.





Find out more

## Smart Cluster Technology

FireCell's Smart Cluster Technology is a cluster radio network that provides a number of unique advantages over traditional wireless fire systems:

**Performance & Range** - FireCell's wireless coverage far exceeds the range achieved by other 868Mhz based wireless fire systems thanks to the use of diversity reception, multipath techniques and the use of multiple frequencies. FireCell's immunity to radio interference is minimised by the ability to automatically change operating frequencies.

**Scope** - The fire alarm control panel connects to a multiple frequency Radio Hub that co-ordinates the wireless communication with up to 64 radio clusters. Each cluster can contain up to 31 wireless smoke detectors, sounders, call points and I/O devices.

**Range and Coverage** - Whilst the control panel can monitor a maximum of 512 devices, the radio devices in each cluster are monitored by a Radio Cluster Communicator (RCC) that also serves as a bi-directional range extender, passing communications to and from the Radio Hub to more distant areas, enabling complete building coverage.

## System Components

**Control Panel** - With the industry in mind, FireCell's control panel was specifically designed to be familiar to engineers and installers with experience of traditional systems and other EMS products.

**Fire Sensors** - Highly adaptable, FireCell can use compatible analogue addressable fire sensors from either GE/Ziton or Apollo. The fire sensors attach to radio bases that are completely self-contained and internally powered using a dual supply from low-cost alkaline batteries which signal when the end of their useful life is approaching.

**Ancillary Devices** - A full range of wireless ancillary products are available that are based on industry standard devices, such as call points, sounders and beacons. As buildings and requirements change the devices can easily be repositioned moving from cluster to cluster to suit the new requirements.

**Radio Hub & Radio Cluster Communicator** - The Radio Hub and Radio Cluster Communicators (RCC's) are locally mains powered. Each control panel communicates with a single Radio Hub, which in turn manages the communication with up to 64 RCC's. Each RCC can support 31 devices.



## EMS

EMS was formed in 1967 and has over 40 years experience in the development and manufacture of radio-based solutions to complex security and fire problems. Over that time EMS wireless systems have been field proven in a diverse range of applications.

The company has recently celebrated the manufacturing of its one millionth radio device.

## Radio Survey

The radio survey forms the backbone of any radio system design and installation. To achieve this EMS provides a simple to use radio survey tool that ensures the correct location for RCC's and devices.

## Approved Installer Network

All EMS wireless systems are installed via a network of approved installers. These companies have undertaken extensive training which is on-going as new products are developed.

At all times throughout a project EMS will provide technical support if required.

## 5-Year Warranty

EMS provides an industry-leading full 5-year warranty on all of its products. This extended warranty confirms the field-proven reliability of EMS products, and firmly establishes radio-based systems as an ideal solution for long term security applications.



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## Radio Facts

All radio frequencies used by EMS radio systems are licence free and all the equipment is approved by Ofcom.

Ofcom tightly controls the radio frequencies available for use in the UK and only agrees their operation after they have been tested and proved to meet the relevant standards. Radio communications are now part of everyday life and reliable interference free use is the norm. This is also the case with EMS radio technology - radio interference has never caused false alarms on EMS systems.

The following communications do not affect the operation of EMS systems.

- Mobile phones
- Taxi or emergency service radios
- Air Traffic Control
- Military
- Radio microphones
- Car alarm key fobs

This list is an example and not limited to the above.

“Radio interference has never caused false alarms on EMS systems...”



Fire Industry Association

