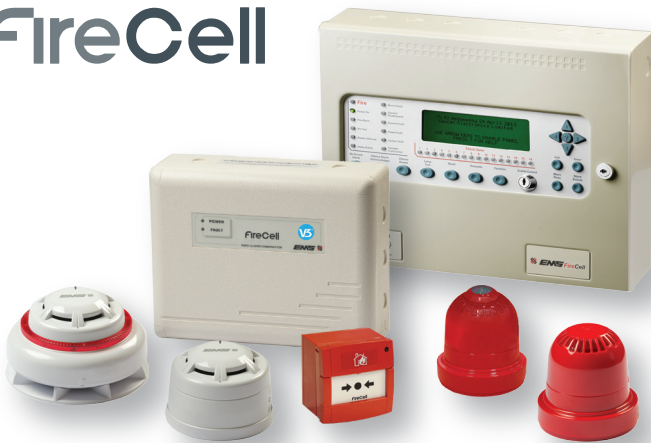# *WIRELESS* FIRE DETECTION

Why Upgrade to FireCell?

FireCell

In 1996 EMS introduced our first wireless fire system, FirePoint System 5000, meeting the requirements of British standard BS5839 and raising a few eyebrows.

At the time wireless technology was not as commonplace as it is today. Mobile phones for example had not long been widely available. They were bulky and were still almost a luxury item. Many people also doubted the reliability of wireless equipment.

To the surprise of sceptics, the System 5000 worked really well and despite a few early teething problems, it had soon become industry renowned for its robustness. Offering quick and straightforward installation, it was an engineers dream and its no wonder that it was installed in over 7000 sites in the UK alone.

Fast forward 20 years and technology has changed dramatically. For example mobile phones now include high definition screens, inbuilt cameras (still and video), music players, web browsers and satellite navigation. You can even video call...

The introduction of the new EN54-25:2008 standard would significantly raise the bar for wireless fire technology.

The new european standard initially proved to be a headache for some wireless fire system manufacturers. However with the aim of making wireless fire systems on par with their wired rivals, wireless systems became at least as reliable if not more so.

EMS FireCell

2011 saw the introduction of FireCell. The first EN54-25 fully certified wireless fire system in the UK. FireCell would retain the robustness and easy maintenance of the System 5000. There were also a whole host of improvements, including:

- Full EU certification

- Faster 868MHz wireless data transmission

- Rapid fault reporting - now under 300 seconds

- Enhanced bi-directional wireless monitoring

- Improved reliability via dual channel signalling, with 32 wireless channels available

- Refined Diversity aerial configuration, combined with 20dB overhead for robust signalling and immunity to site attenuation (path loss)

- Instant on screen fault information

- Maximum Flexibility - Wireless Hybrid, allowing a mix wireless and wired devices

FireCell Wireless Hybrid

FireCell is now widely accepted as the leading wireless and hybrid system available and is deployed and protecting properties across many business sectors and locations.
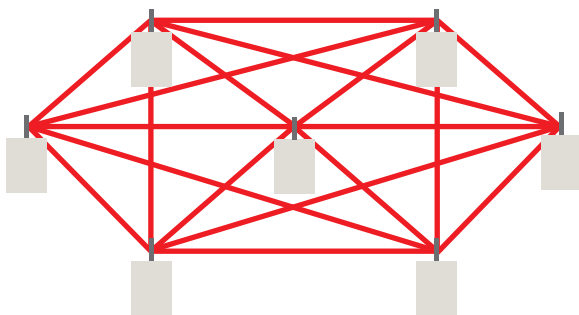
FireCell provides almost unlimited configuration and installation options and allows you to mix wireless and wired devices, 126 per loop, wired or virtual, using trusted EMS technology.

All latest control panels supplied by EMS are "wireless ready" and have software which makes the installation of a wireless, wired or hybrid fire detection system seamless and intuitive. Just choose the wired or wireless option for each device and programme as normal; it's as straightforward as that.

Radio Network Communicator (RNC)

The FireCell Radio Network Communicator (RNC) allows wireless 458MHz networking between FireCell Fire Control Panels and is 24Vdc powered.

FireCell RNCs communicate in a mesh network topology, simply requiring each RNC to be in range of another RNC within the network, delivering maximum flexibility.

Example 8 Fire Control Panel RNC Network

All networkable FireCell Syncro AS and Syncro Control Panels are compatible with the FireCell RNC, with up to 8 RNCs permitted per network.

Radio Loop Module (RLM)

The award winning Fusion Radio Loop Module (RLM) connects to the FireCell Control Panel's XP95 loop and can accomodate up to 31 wireless FireCell devices together with wired devices on the same XP95 loop.

Requiring just 17mA, up to 5 Fusion RLMs can be added per loop, subject to cable specification.

The RLM is fully third party EN certified, combining diversity aerial methodology and 32 channel selection to produce fast and reliable wireless communication.

System 5000 Support

The introduction of CPR 305/2011, meant that EMS were required to put System 5000 into "End of Sale" which effectively meant that it could no longer be used for new systems or to extend existing systems.

System 5000 remains fully supported and will do for the foreseeable future.

Replacement parts are available on a "like for like" basis and a repair service is also available.

Wireless Zone Monitor (WZM)

In the event that additions to a System 5000 are necessary, EMS have developed a Wireless Zone Monitor (WZM) that allows FireCell EN54-25 devices to be added. Each WZM supports up to 30 devices of any mix including detectors, call points, sounders as well as EN54-23 compliant Visual Alarm Devices (VADs).

The WZM is also an ideal route for planned migration to the FireCell platform. Using WZMs to change devices over a period of time can assist in a programmed upgrade over any period.

For more information on your FireCell upgrade, contact EMS today on +44 (0) 1227 369570.