



FireCell

Fire Control Panels



Syncro

Syncro AS

The FireCell Syncro and Syncro AS are a versatile range of open protocol Fire Control Panels, using leading edge microprocessor based electronics, to provide a flexible control system with high reliability and integrity.

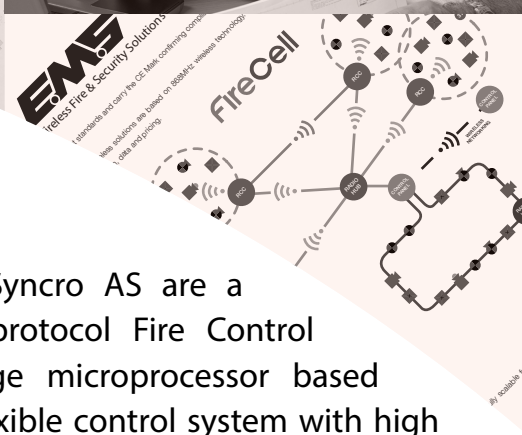
Available with one, two or four detection loops, both Syncro and Syncro AS Fire Control Panels are capable of hosting up to 126 wireless devices per loop. With a potential mix of 504 wireless FireCell and hardwired field devices per panel, FireCell is the perfect wireless and hybrid fire system solution.

Key Features

- **Zonal LED indicators**
- **Stores 500 last events in event log**
- **Powerful and versatile cause & effect programming**
- **Programmable inputs**
- **Programmable relays**
- **Programmable sounder circuits**
- **Up to 126 wireless FireCell devices per loop**
- **Integrated power supply**
- **Third party EN certified**
- **Optional Flush mounting bezel available**

Further expansion can be achieved using wireless or hardwired networking to form larger systems, providing a future proof solution for any installation.

Both models are third party EN certified and compatible with the EMS FireCell system and EMS Fusion Radio Loop Module (RLM).



Technical Data



Steel enclosure, 1.2mm BMT



RAL9001



IP30, indoor use only



Syncro AS; 385mm(W) 310mm(H) 90mm(D)

Syncro; 500mm(W) 355mm(H) 117mm(D)



Syncro AS; 6kg (*standard panel*)
Syncro; 10Kg (*standard panel*)



230Vac mains supply



Mains supply fuse: 1.6A (*Syncro AS*) / 3A (*Syncro*)



PSU dc rating: 24Vdc 3A (*Syncro AS*)/ 24V dc 4A (*Syncro*)



2x 12V lead acid batteries ^{*}
^{*} Refer to the *FireCell Battery Calculations* document for battery requirements.



Remote Silence input (SIL); switched -ve
Remote Fault input (FLT); switched -ve
Remote Reset input (RES); switched -ve
Remote Alert input (INT); switched -ve
Remote Evacuate input (CNT); switched -ve



Detection Circuits (Loops); 400mA each
Aux 24Vdc; fused at 500mA
Fire contact; volt free, 1A @ 30Vdc
Fault contact; volt free, 1A @ 30Vdc
Alarm contact; volt free, 1A @ 30Vdc
2x Programmable Relays; volt free, 1A @ 30Vdc
4x Sounder Circuits; each fused at 1A (*total load 2A*)



XP95 Protocol



Serial RS232, 9-pin D-type



Serial RS232, 9-pin D-type



RS485 networked; up to 64 panels ^{*} via fully fault tolerant optional network card
Radio networked up to 8 panels ^{*} via network card & Radio Network Communicators (RNCs)
^{*} All Syncro and Syncro AS Control Panels can be networked, except the Syncro AS Lite Panel



Download via FC-000-KEN programming lead



Configuration via FireCell CIE Programming Software (free to download from www.emsgroup.co.uk)



PC Graphics; *available upon request*



Optional dial up modem for remote diagnostics; *available upon request*



KM 73505



EN54-2 & EN54-4



FC-LA80161 M2 (Syncro AS Lite, 1 loop 16 zone)
Note: Not expandable

FC-A80161 M2 (Syncro AS, 1 loop 16 zone)

FC-A80162 M2 (Syncro AS, 2 loop 16 zone)

FC-ENSA63482 03 (Syncro, 2 loop 48 zone)

FC-ENSA63484 03 (Syncro, 4 loop 48 zone)

FC-ENSA63964 03 (Syncro, 4 loop 96 zone)

All panels listed above are surface mounted, complete with enable keyswitch and exclude backup batteries.

Other variants available upon request.



FireCell

Radio Network Communicator



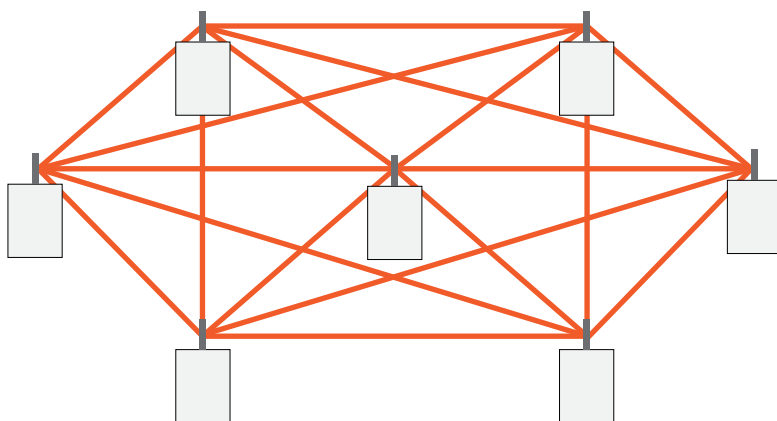
The FireCell Radio Network Communicator (RNC) allows wireless 458MHz networking between FireCell Fire Control Panels and is 24Vdc powered.

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.

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

Key Features

- Flexible mesh network topology
- Low current consumption
- Remote aerial connection
- Up to 8 RNCs per network
- 24Vdc powered, from control panel



Example 8 Fire Control Panel RNC Network

Technical Data



-10°C to 70°C



24Vdc



27mA @ 24Vdc



IP54, indoor use only



458MHz



500mW



156mm(W) 228mm(H) 48mm(D)



0.65kg



Complies with; EN300-220, EN301-489 & EN60950



FCX-438-001



FireCell Radio Hub














The FireCell Radio Hub connects to the FireCell Fire Control Panel's XP95 loop. Operating in conjunction with FireCell Radio Cluster Communicators (RCCs), it is possible to create a wireless infrastructure capable of accommodating up to 504 wireless FireCell devices.

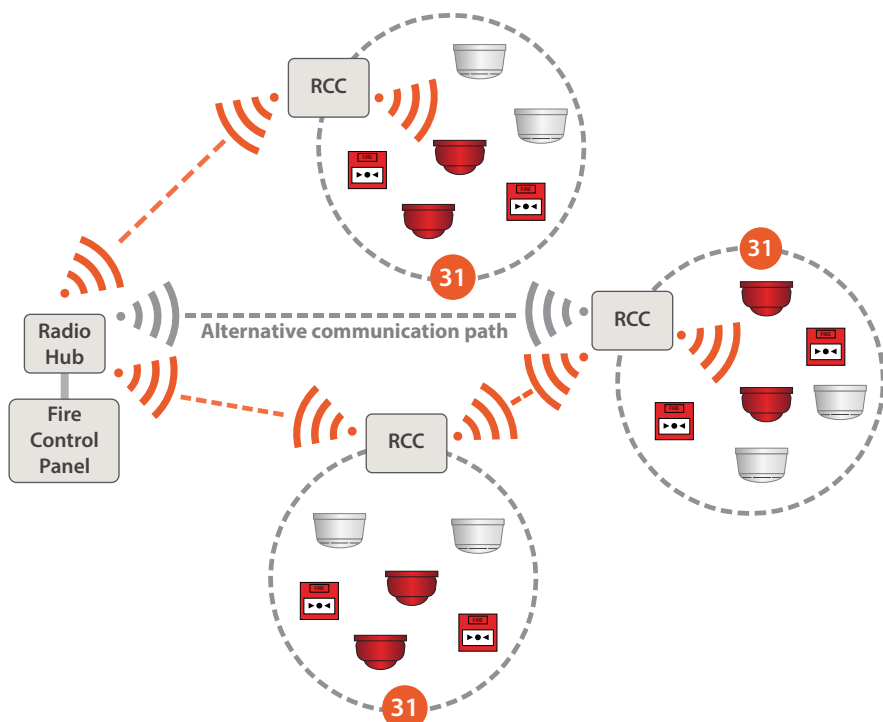
This device is third party EN certified, combining diversity aerial methodology, Smart Cluster Technology and 32 channel selection to produce fast and reliable wireless communication.

Key Features

- Smart Cluster Technology
- Internal diversity aerials
- Dual band 868MHz operation
- 32 radio channel selection
- Up to 31 RCCs
- Up to 504 wireless FireCell devices (when connected to four loops)
- XP95 loop powered
- Third party EN certified
- Optional external aerials available

Technical Data

 -10°C to 50°C	 868MHz	 CE 10 0359-CPR-0028
 17 - 28Vdc	 14 dBm	 EN54-18 & EN54-25
 24mA @ 24Vdc (1st loop) +7mA per each connected loop	 270mm(W) 205mm(H) 75mm(D)	 FCX-500-004 FCX-500-444 (with remote aerial facility)
 IP54, indoor use only	 0.95kg	





FireCell

230Vac Radio Cluster Communicator (RCC)



The 230Vac FireCell RCC is a remote transceiver node that works within the FireCell wireless fire system.













The RCC accommodates up to 31 wireless FireCell devices, and can report directly to the Radio Hub or via other RCCs (up to four hops), for optimum flexibility and maximum wireless coverage.

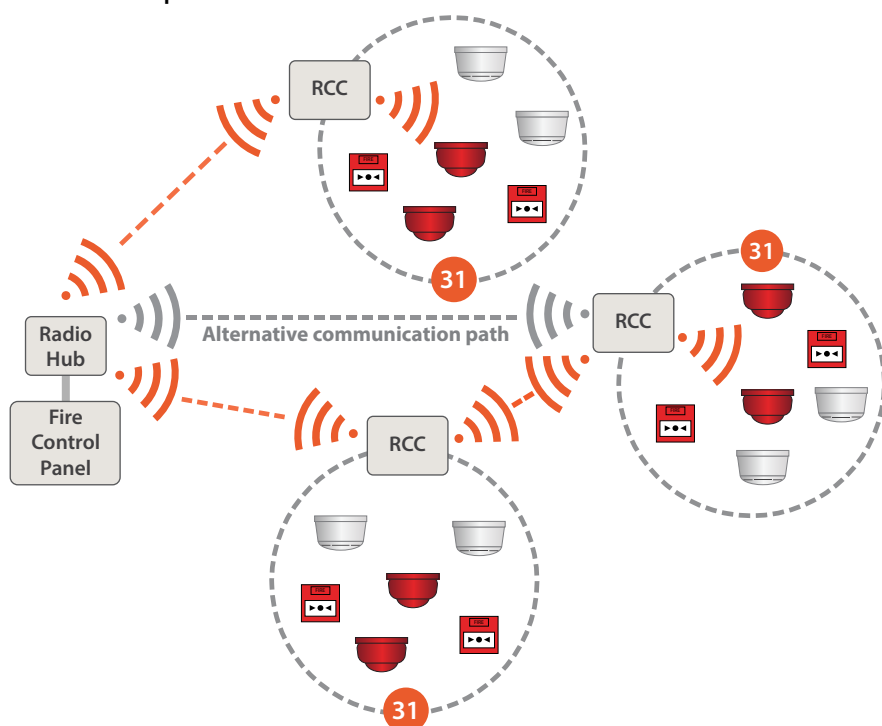
This device is third party EN certified, combining diversity aerial methodology, Smart Cluster Technology and 32 channel selection to produce fast and reliable wireless communication.

Key Features

- Smart Cluster Technology
- Internal diversity aerials
- Dual band 868MHz operation
- 32 radio channel selection
- Up to 31 FireCell devices per RCC
- 230Vac operated
- 72 hour battery backup
- Third party EN certified
- Optional external aerials available

Technical Data

 -10°C to 50°C	 IP54, Indoor use only	 1.9kg (including battery)
 220 - 240Vac	 868MHz	 CE 10 0359-CPR-0046
 6V 4Ah Lead Acid	 0 - 14 dBm (auto adjusting)	 EN EN54-4, EN54-18 & EN54-25
 72 hours	 270mm(W) 205mm(H) 75mm(D)	 FC-555-001 FC-555-331 (with remote aerial facility)





FireCell

24Vdc Radio Cluster Communicator (RCC)



The 24Vdc FireCell RCC is a remote transceiver node that works within the FireCell wireless fire system.

The RCC accommodates up to 31 wireless FireCell devices, and can report directly to the Radio Hub or via other RCCs (up to four hops), for optimum flexibility and maximum wireless coverage.

This device is third party EN certified, combining diversity aerial methodology, Smart Cluster Technology and 32 channel selection to produce fast and reliable wireless communication.

Key Features

- **Smart Cluster Technology**
- **Internal diversity aerials**
- **Dual band 868MHz operation**
- **32 radio channel selection**
- **Up to 31 FireCell devices per RCC**
- **24Vdc powered**
- **Third party EN certified**
- **Optional external aerials available**

Technical Data



-10°C to 70°C



868MHz



17 to 28Vdc



0 - 14 dBm (auto adjusting)



17mA @ 24Vdc



270mm(W) 205mm(H) 75mm(D)



IP54, indoor use only



0.95kg



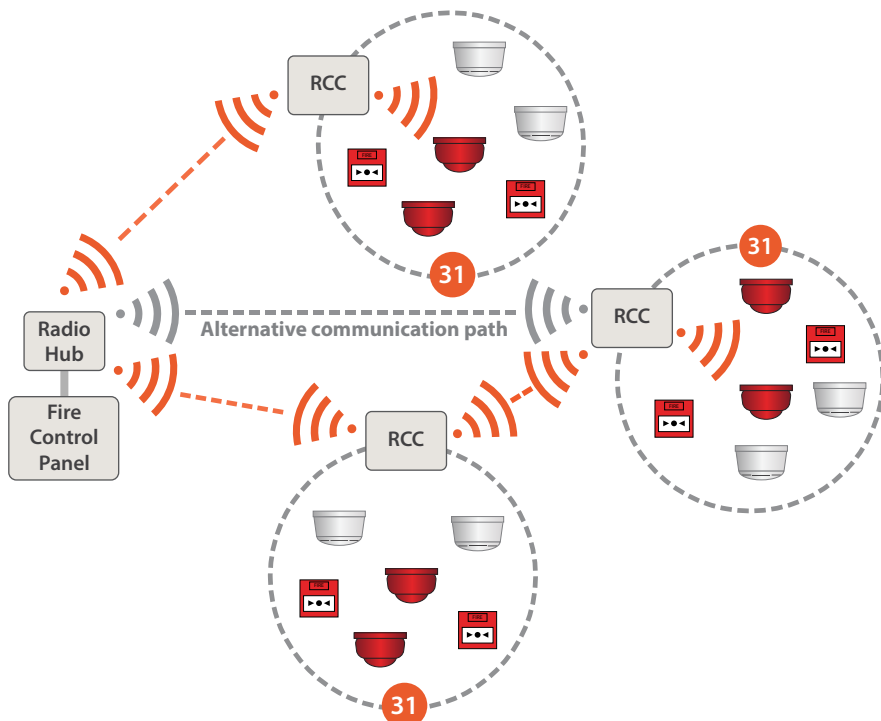
CE 12
0359-CPR-0046



EN54-18 & EN54-25



FC-555-024
FC-555-324 (with remote aerial facility)





Fusion Loop module



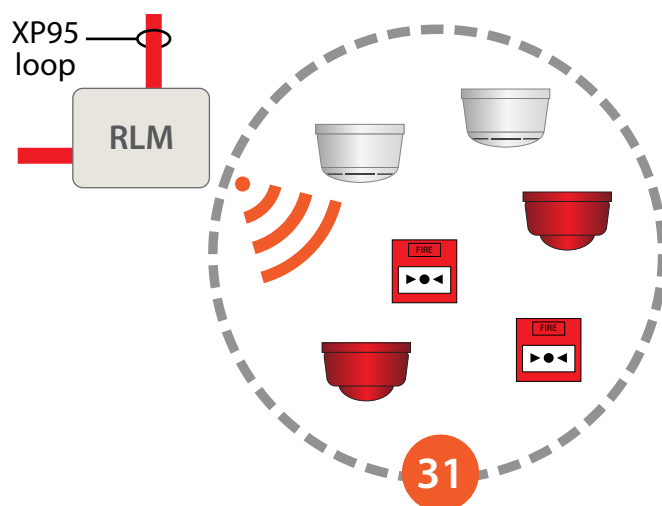
The award winning Fusion Radio Loop Module (RLM) connects to the FireCell Control Panel's XP95 loop and can accommodate up to 31 wireless FireCell devices.

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

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

Key Features

- Internal diversity aerials
- Dual band 868MHz operation
- 32 radio channel selection
- 31 wireless FireCell devices per RLM
- Up to five RLMs per loop, subject to cable specification
- XP95 loop powered
- Third party EN certified



Technical Data



-10°C to 50°C



17 - 28Vdc



17mA @ 24Vdc



IP54, indoor use only



868MHz



Variable 0 - 14 dBm



270 (W) 205(H) 75 (D)



0.95kg



CE 13
0359-CPR-00222



EN54-17, EN54-18 & EN54-25



FCX-532-001



Wireless Zone Monitor

Wireless Zone Monitor (WZM)



Conventional Interface Card (CIC) fits in ZIM

Zone Interface Module (ZIM)

EMS wireless technology can be integrated into any system using the Wireless Zone Monitor (WZM). The WZM supports up to 30 wireless FireCell devices, making it possible to extend into areas where cabling is impractical.

The WZM facilitates the addition of any wireless FireCell device including EN54-23 Visual Alarm Devices (VADS), to existing or new systems. Contact EMS Technical Support today for further guidance on +44 (0) 1227 369570.

Key Features

- Internal diversity aerials
- Dual band 868MHz operation
- 32 radio channel selection
- Connects to addressable or conventional panels
- Add FireCell wireless devices to ANY system (incl. Smoke/heat detectors, sounders, call points and EN54-23 VADS)
- 30 wireless FireCell devices per WZM
- Third party EN certified

Technical Data



-10°C to 50°C



17 - 28Vdc



17mA @ 24Vdc



WZM; IP54. ZIM; IP65.
Indoor use only



868MHz



Variable 0 - 14 dBm



WZM; 270mm(W) 205mm(H) 75mm(D)
ZIM; 270mm(W) 205mm(H) 75mm(D)



WZM; 0.95kg. ZIM; 0.95kg. CIC; 0.05kg



CE 14
0359-CPR-000436

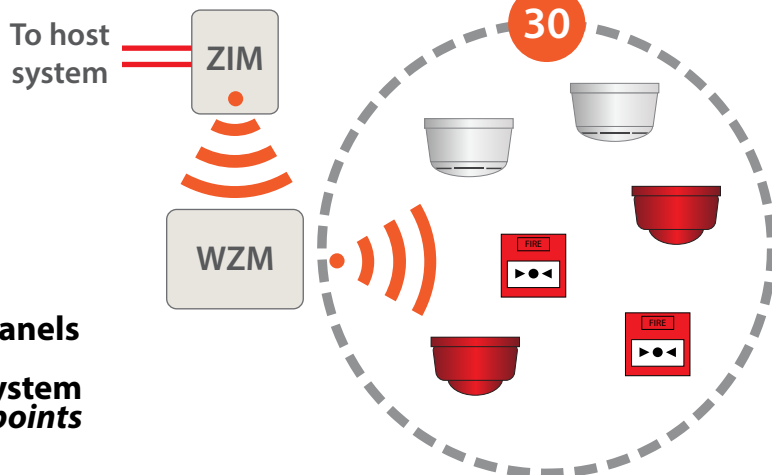


EN54-17, EN54-18 & EN54-25



EK-10-0001 Kit includes WZM, ZIM & CIC.

See WZM Engineers Guide (doc ref TSD143), for connection details.





FireCell Call Point



The FireCell Wireless Call Point is quick and easy to install and offers individual addressing at the Fire Control Panel.

Features include dual band 868MHz operation, auto adjusting power output, fire indication LED, resettable element, anti tamper and a test key.

This device is third party EN certified and compatible with the EMS FireCell system, EMS Fusion Radio Loop Module (RLM) and EMS Wireless Zone Monitor (WZM).

A transparent hinged cover is also available, for protection against accidental operation in busy environments.

Key Features

- Dual band 868MHz operation
- Fire indication LED
- Resettable element
- Anti tamper locking
- Third party EN certified
- Optional protective cover available

Technical Data



-10°C to 55°C



6 x AA alkaline batteries



IP24, indoor use only



868MHz



0 - 14 dBm (auto adjusting)



89mm(W) 92mm(H) 70mm(D)



0.4kg



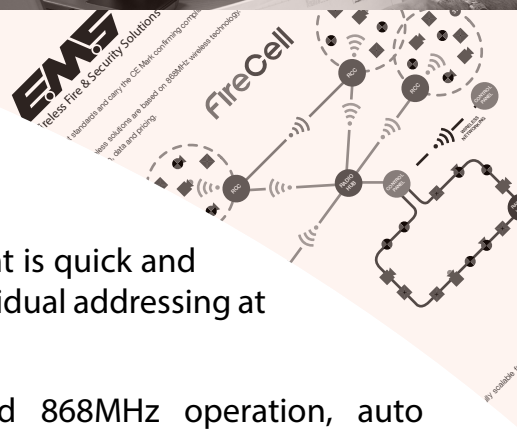
CE 10
0359-CPR-0038



EN54-11 & EN54-25



FC-200-002 (Wireless Call Point)
FC-FGCOVER (Protective Cover)





FireCell

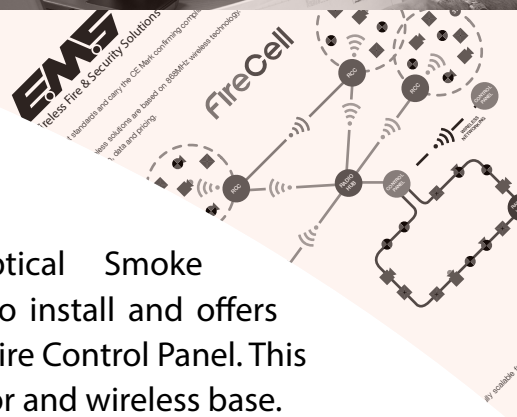
Optical Smoke Detector



The FireCell Wireless Optical Smoke Detector is quick and easy to install and offers individual addressing at the Fire Control Panel. This device comprises of a detector and wireless base.

Features include dual band 868MHz operation, auto adjusting power output, fire indication LED, anti tamper locking mechanism and the FasTest detector maintenance feature.

This device is third party EN certified and compatible with the EMS FireCell system, EMS Fusion Radio Loop Module (RLM) and EMS Wireless Zone Monitor (WZM).



Key Features

- Dual band 868MHz operation
- Fire indication LED
- Anti tamper locking mechanism
- FasTest maintenance feature
- Third party EN certified

Technical Data



-10°C to 55°C



0 - 14 dBm (auto adjusting)



CE 10

0359-CPR-0017/0359-CPR-0041



6 x AA alkaline batteries



113mm(Ø) 81mm(D)



EN54-7 & EN54-25



IP23, indoor use only



0.4kg



FCX-177-001 (Optical Smoke Detector Only)
FCX-170-001 (Wireless Detector Base Only)



868MHz



FireCell Heat Detector



The FireCell Wireless Heat Detector is quick and easy to install and offers individual addressing at the Fire Control Panel. This device comprises of either an A1R rate of rise heat detector, or a CS fixed temp heat detector and a wireless base.

Features include dual band 868MHz operation, auto adjusting power output, fire indication LED, anti tamper locking mechanism and the FasTest detector maintenance feature.

This device is third party EN certified and compatible with the EMS FireCell system, EMS Fusion Radio Loop Module (RLM) and EMS Wireless Zone Monitor (WZM).

Key Features

- Dual band 868MHz operation
- Fire indication LED
- Anti tamper locking mechanism
- FasTest maintenance feature
- Third party EN certified

A1R & CS Heat Detector Application

Class (EN54-5)	Application Temperature (°C)		Static Response Temperature (°C)		
	Typical	Max	Min	Typical	Max
A1R	25	50	54	57	65
CS	55	80	84	90	100

Technical Data



-10°C to 55°C



113mm(Ø) 81mm(D)



CE 10

0359-CPR-0015 (A1R sensor)

0359-CPR-0016 (CS sensor)

0359-CPR-0041 (Wireless base)



6 x AA alkaline batteries



0.4kg



IP23, indoor use only



0 - 14 dBm (auto adjusting)



EN54-5 & EN54-25



868MHz



FCX-175-001 (A1R Heat Detector only)

FCX-176-011 (CS Heat Detector only)

FCX-170-001 (Wireless Detector Base Only)



FireCell

Combined Sounder Detector



Shown
with Optical
Smoke Detector fitted

Key Features

- Dual band 868MHz operation
- Fire indication LED
- Integrated audio monitoring
- Volume control
- Anti tamper locking mechanism
- FasTest maintenance feature
- Third party EN certified

Technical Data



-10°C to 55°C



3x AA & 3x C alkaline batteries



IP23, indoor use only



868MHz



0 - 14 dBm (auto adjusting)



146mm(Ø) 94mm(D)



0.7kg



Up to 87dB(A) @ 1m



CE 12

0359-CPR-0015, 0359-CPR-0016,
0359-CPR-0017 & 0359-CPR-0021

A1R & CS Heat Detector Application

Class (EN54-5)	Application Temperature (°C)		Static Response Temperature (°C)		
	Typical	Max	Min	Typical	Max
A1R	25	50	54	57	65
CS	55	80	84	90	100



EN54-3, EN54-5, EN54-7 &
EN54-25



FCX-175-001 (A1R Heat Detector Only)
FCX-176-011 (CS Heat Detector Only)
FCX-177-001 (Optical Smoke Detector Only)
FCX-191-000 (Wireless Combined Sounder -
Detector Base Only)

Other variants available upon request



FireCell Wall Sounder Beacon



The FireCell Wireless Wall Sounder Beacon is quick and easy to install, offering individual addressing at the Fire Control Panel. This device comprises of a sounder beacon and a wireless sounder base.










Features include dual band 868MHz operation, auto adjusting power output, 32 selectable tones, 0.5Hz/1Hz beacon flash selection, integrated audio monitoring, volume control and anti tamper locking mechanism.

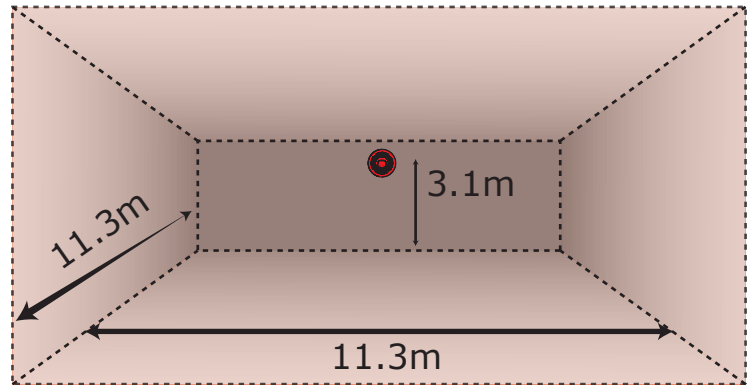
This device is third party EN certified and compatible with the EMS FireCell system, EMS Fusion Radio Loop Module (RLM) and EMS Wireless Zone Monitor (WZM).

Key Features




- Dual band 868MHz operation
- 32 selectable tones
- 0.5Hz/1Hz beacon flash selection
- Integrated audio monitoring
- Sounder volume control
- Anti tamper locking mechanism
- Third party EN certified

Technical Data

- | | |
|--|--|
|  -10°C to 55°C |  120mm(Ø) 145mm(D) |
|  3x AA / 3x C alkaline batteries |  0.65kg |
|  IP54, indoor use only |  Up to 99dB(A) @ 1m |
|  868MHz |  W-3.1-11.3
0.5Hz / 1Hz (selectable) |
|  0 - 14 dBm (auto adjusting) | |



EN54-23 Coverage: W-3.1-11.3

- | |
|--|
|  CE 14
0359-CPR-00292 |
|  EN54-3, EN54-23 & EN54-25 |
|  FC-171-002 (Red Wireless Sounder Base)
FC-315-WA2 (Red Wall Sounder Beacon) |

Other variants available upon request



FireCell

Ceiling Sounder Beacon



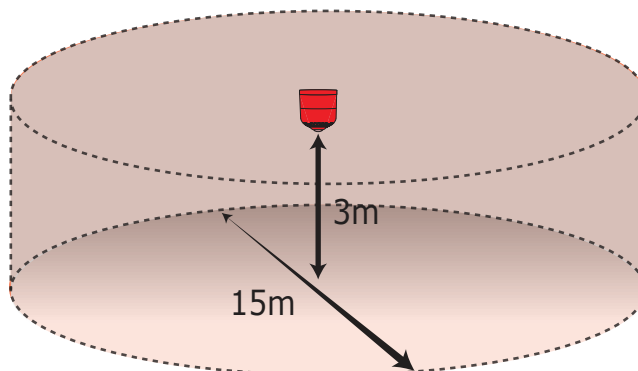
The FireCell Wireless Ceiling Sounder Beacon is quick and easy to install, offering individual addressing at the Fire Control Panel. This device comprises of a sounder beacon and a wireless sounder base.

Features include dual band 868MHz operation, auto adjusting power output, 32 selectable tones, 0.5Hz/1Hz beacon flash selection, integrated audio monitoring, volume control and anti tamper locking mechanism.

This device is third party EN certified and compatible with the EMS FireCell system, EMS Fusion Radio Loop Module (RLM) and EMS Wireless Zone Monitor (WZM).


Key Features


- Dual band 868MHz operation
- 32 selectable tones
- 0.5Hz/1Hz beacon flash selection
- Integrated audio monitoring
- Sounder volume control
- Anti tamper locking mechanism
- Third party EN certified



EN54-23 Coverage: C-3-15

Technical Data


 -10°C to 55°C


 120mm(Ø) 145mm(D)


 **CE 14**
0359-CPR-00292


 3x AA / 3x C alkaline batteries

 0.65kg


 EN54-3, EN54-23 & EN54-25

 IP54, indoor use only


 Up to 99dB(A) @ 1m

 FC-171-002 (Red Wireless Sounder Base)
FC-315-CA2 (Red Ceiling Sounder Beacon)

 868MHz

 C-3-15
0.5Hz / 1Hz (selectable)

Other variants available upon request

 0 - 14 dBm (auto adjusting)



FireCell Sounder



The FireCell Wireless Sounder is quick and easy to install, offering individual addressing at the Fire Control Panel. This device comprises of a sounder and a wireless sounder base.


Features include dual band 868MHz operation, auto adjusting power output, 32 selectable tones, integrated audio monitoring, volume control and anti tamper locking mechanism.

This device is third party EN certified and compatible with the EMS FireCell system, EMS Fusion Radio Loop Module (RLM) and EMS Wireless Zone Monitor (WZM).


Key Features

- Dual band 868MHz operation
- 32 selectable tones
- Integrated audio monitoring
- Sounder volume control
- Anti tamper locking mechanism
- Third party EN approved


Technical Data


 -10°C to 55°C

 3x AA / 3x C alkaline batteries


 IP54, indoor use only

 868MHz


 0 - 14 dBm (auto adjusting)


 120mm(Ø) 125mm(D)

 0.65kg

 Up to 99dB(A) @ 1m

 **CE 10**
0359-CPR-0022, 0359-CPR-0040

 **EN** EN54-3 & EN54-25

 FC-171-002 (Red Wireless Sounder Base Only)
FC-172-002 (Red Sounder Only)

Other variants available upon request.



FireCell Input Output Unit



The FireCell Wireless Input Output unit is quick and easy to install and offers individual addressing at the Fire Control Panel.

Features include; two supervised inputs and two voltage free outputs rated 2A@24V, whilst using only one address on the system.


This device is third party EN certified and compatible with the EMS FireCell system, EMS Fusion Radio Loop Module (RLM) and EMS Wireless Zone Monitor (WZM).

A 230Vac switching Auxiliary Relay Module is also available, for use in conjunction with this device. Refer to doc ref TSD058 for full technical specifications.

Key Features

- Dual band 868MHz operation
- 2x supervised inputs
- 2x voltage free outputs, rated 2A@24V
- Third party EN certified
- Optional 230Vac switching Auxiliary Relay Module available


Technical Data


 -10°C to 55°C


 6x AA alkaline batteries

 IP65, indoor use only

 868MHz


 0 - 14 dBm (auto adjusting)


 2x 2A @ 24Vdc rated outputs

 270mm(W) 205mm(H) 75mm(D)

 0.95kg

 **CE 10**
0359-CPR-0039

 **EN** EN54-18 & EN54-25

 FC-610-001 Dual I/O Unit
FC-620-001* Auxiliary Relay Module
* for use with FC-610-001



FireCell

Wireless Remote Indicator Module



The FireCell Wireless Remote Indicator Module (RIM) is quick and easy to install and can be used to remotely indicate a fire event at a location where access is not easily available. This RIM can also be associated with a single detector or a number of detectors.

Combined with detailed Fire Control Panel information, the RIM aids swift fire location, saving valuable time in an emergency.

This device is third party EN certified and is compatible with the EMS FireCell system and EMS Fusion Radio Loop Module (RLM).

Key Features

- Dual band 868MHz operation
- Fire indication LED
- Anti tamper locking mechanism
- Third party EN certified
- Satisfies the requirements of Irish standard IS3218

Technical Data



-10°C to 55°C



6 x AA alkaline batteries



IP23, indoor use only



868MHz



0 - 14 dBm (auto adjusting)



113mm(Ø) 81mm(D)



0.4kg



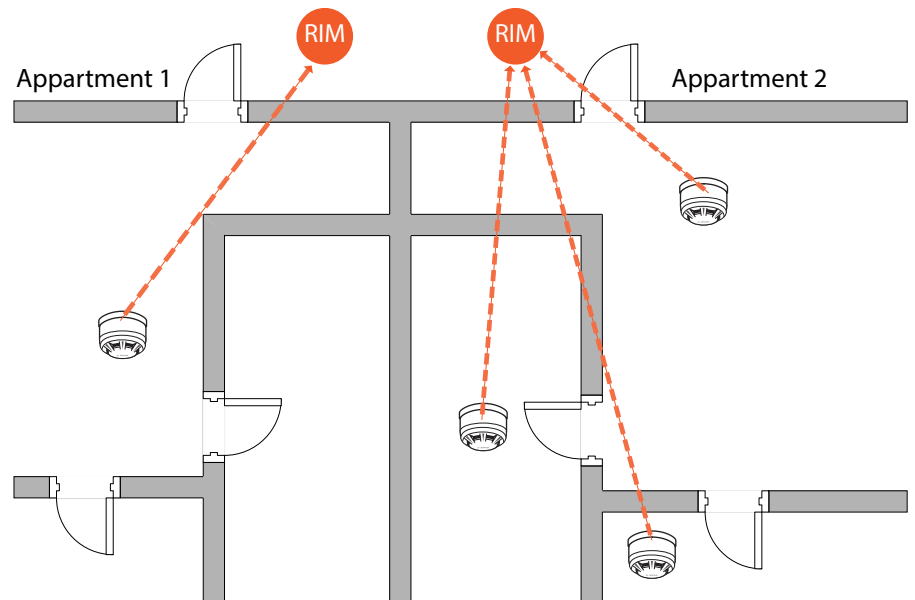
CE 10
0359-CPR-00127



EN54-25



FCX-178-001





FireCell Wireless Survey Kit

Signal Surveyor

Device
Survey
Tool





4x Poles

Key Features







- Dual band 868MHz operation
- Easy operation
- Supplied with step by step instructions
- Third party certified to R&TTE & EN60950-1

Technical Data

Signal Surveyor:

 -10°C to 50°C	 868MHz	 1.9kg
 100- 240Vac (+/- 10%)	 0 - 14 dBm (auto adjusting)	
 6V 4Ah Lead Acid	 270mm(W) 205mm(H)75mm(D)	

Device Survey Tool:

 -10°C to 55°C	 0 - 14 dBm (auto adjusting)	
 6x AA alkaline batteries	 115mm(W) 210mm(H) 60mm(D)	
 868MHz	 0.6kg	

General:

 R&TTE EN60950-1	
 FC-868-SE2	

The FireCell Wireless Survey Kit is powerful yet easy to use, providing valuable information needed for both installers and service providers.

With simple but highly intuitive controls, making it easy to use and complete either a wireless integrity test in minutes or a more detailed survey for installation purposes, the red and green indicators give instant information on the signal strength with an LED screen providing detailed signal levels.

The survey kit comprises of the Signal Surveyor as well as the Device Survey Tool which is placed in each device location to confirm the signal is satisfactory. In addition extension poles are included for ceiling mounted device locations and the entire kit is supplied in a robust case for easy storage and transportation.

