

FireCell Radio Hub

- Fully addressable
- Wireless activation
- Third party approved (EN54)
- 2-way radio communication
- Loop powered
- Diagnostics port
- Range in excess of 150 metres



Overview

The model FCX-500-001 Radio Hub is designed as the loop interface node for up to 64 RCC's. These then give information via the loop to any CIE using the XP95 protocol.

The system is expanded via the RCC network with each RCC capable of passing information to and from up to 31 detection or output devices.

The cluster network is designed to send and receive information via multiple hops to ensure that a single point of failure does not lose more than 32 devices.

Designed and manufactured using the latest techniques and surface-mount technology ensures component count is kept to a minimum, thereby maximising reliability.

One, two and four loop versions of the Radio Hub are available.



Specification	
Dimensions:	270 x 205 x 75mm. Weight 0.95Kg
Operating Temperature:	-10 to 70 °C
Humidity:	Up to 95% non-condensing
Supply:	Loop powered 24v with a maximum current draw of 50mA
IP Rating:	IP54
Operating Frequencies:	868 MHz
Output Transmitter Power:	14dBm
Standards:	Third party approved to; EN54 part 18 EN54 part 25 ENTSI 300:220

Ordering Information

1 loop radio hub: 2 loop radio hub: 4 loop radio hub:

Part Number **FCX- 500-001** Part Number **FCX- 500-002** Part Number **FCX- 500-004**



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Part No: Firecell 1, v1.5

Dealer Information:

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FireCell Optical Smoke Detector

- Wireless activation
- Third party approved (EN54)
- 2-way radio communication
- Protected sensing chamber
- 5 year battery life at normal conditions
- Universal transmitter module
- Detector / transmitter tamper
- Range in excess of 150 metres



Overview

The model FCX-100-001 Optical Smoke Detector is bayonet fitted to a radio address/transmitter module, incorporating alkaline batteries and supplied with a surface-mount base unit. Removal of the detector or address/transmitter module will indicate a fault condition. The detector is manufactured by Apollo and complies with EN54 Part 7 and EN54 part 25.

The detector incorporates a selectable automatic lock, which, if enabled locks it into its base when plugged in, preventing unauthorised removal. Each unit has a unique address configured during manufacture and is individually addressable by the system controller. The radio address module is programmed to report at regular intervals of less than 300 seconds.

Designed and manufactured using the latest techniques and surface-mount technology ensures component count is kept to a minimum, thereby maximising reliability.

The address/transmitter module is powered by a low-voltage dual supply alkaline battery pack. The battery pack condition is continually monitored. The battery pack has been tested to provide a 5 year life at normal conditions (15-35°C). The system indicates remaining battery capacity and a low battery condition is indicated to the controller as a fault, allowing 30 days for the battery pack to be changed before unit failure.



Dimensions:	106x75 mm with transmitter/address module Weight.0.35Kg
Operating Temperature:	-10 to 70 °C
Humidity:	Up to 95% non-condensing
Supply:	6 x AA cell Duracell Alkaline batteries
IP Rating:	IP23
Operating Frequencies:	868 MHz
Output Transmitter Power:	Variable 0-14dBm
Standards:	Third party certified to; EN54 part 7 EN54 part 25 ENTSI 300:220

Ordering Information

Detector/address module complete	Part Number FCX-100-001
Head only	Part Number FCX-177-001
Detector base	Part Number FCX-170-001



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Part No: Firecell 2, v1.4

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Dealer Information:



FireCell Radio Cluster Communicator (RCC)

- Fully addressable
- Wireless activation
- Third party approved (EN54)
- 2-way radio communication
- Loop powered
- Diagnostics port



Overview

The model FC-555-001 RCC is designed as the remote transceiver node for up to 32 detection devices or sounders. These then gives information back to the master node to be indicated via the loop to the CIE.

The RCC can talk directly to the Radio Hub, or via another RCC (up to 4 hops). This enables easy expansion of the system where direct signal paths are not possible.

Designed and manufactured using the latest techniques and surface-mount technology ensures component count is kept to a minimum, thereby maximising reliability.



Dimensions:	270 x 205 x 75mm Weight 1.80Kg
Operating Temperature:	-10 to 70 °C
Humidity:	Up to 95% non-condensing
Supply:	Mains powered 230Vac
	Battery backup 72 hours 6V 4Ahr
IP Rating	IP54
Operating Frequencies:	868 MHz
Output Transmitter Power:	14dBm
IP rating	IP54
Standards:	Third party approved to; EN54 part 4 EN54 part 18 EN54 part 25 ENTSI 300:220

Ordering Information

FireCell Radio Cluster Communicator includes PSU & Standby battery:

Part Number FC-555-001

FireCell Radio Cluster Communicator with remote aerial facility (no aerials supplied) includes PSU & Standby battery:

FireCell Radio Cluster Communicator with remote aerial facility includes PSU, Part Number FC-555-331 Standby battery & 3 x FC-868-D00 aerials:

Part Number FC-555-301



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Part No: Firecell 3, v1.4

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Dealer Information:



FireCell Heat Detector

- Wireless activation
- 2-way radio communication
- Protected sensing chamber
- 5 year battery life at normal conditions
- Universal transmitter module
- Detector/transmitter tamper
- Range in excess of 150 metres



Overview

The model FCX-120-001 radio heat detector is bayonet fitted to a radio address/transmitter module, incorporating alkaline batteries and supplied with a surface-mount base unit. Removal of the detector or address/transmitter module will indicate a fault condition. The detector is manufactured by Apollo and complies with EN54 Part 5 and EN54 Part 25.

The heat detector operates on a highly sensitive thermistor, which measures actual temperature and the rate of temperature rise change. At regular intervals, the detector carries out a self test that checks and verifies every function, including the thermistor and sensitivity to temperature. Any failure is automatically reported to the control panel.

The detector incorporates a selectable automatic lock, which, if enabled locks it into its base when plugged in, preventing unauthorised removal. Each unit has a unique address configured during manufacture and is individually addressable by the system controller. The radio address module is programmed to report at regular intervals-every 300 seconds.

Designed and manufactured using the latest techniques and surface-mount technology ensures component count is kept to a minimum, thereby maximising reliability.

The address/transmitter module is powered by a low-voltage dual supply alkaline battery pack. The battery pack condition is continually monitored. The battery pack has been tested to provide a 5 year battery life at normal conditions (15 - 35° C). The system indicates remaining battery capacity and a low battery condition is indicated to the controller as a fault, leaving approximately 30 days for the battery pack to be changed.



Dimensions:	106 x 75 mm with transmitter/address module
	Weight 0.35Kg
Operating Temperature:	-10 to 70 °C
Humidity:	Up to 95% non-condensing
Supply:	6 x AA cell Duracell Alkaline batteries
IP Rating:	IP23
Operating Frequencies:	868 MHz
Output Transmitter Power:	Variable 0-14dBm
Standards:	EN54 part 5 EN54 part 25 ENTSI 300:220

Ordering Information

Detector/address module complete Heat Head only (Class CS) Heat Head only (Class A1R) Detector base Part Number **FCX-120-001** Part Number **FCX-176-001** Part Number **FCX-175-001** Part Number **FCX-170-001**



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Part No: Firecell 4, v1.4

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FireCell Callpoint

- Fully addressable
- Wireless activation
- Third party approved (EN54)
- 2-way radio communication
- 5 year battery life at normal conditions
- Universal transmitter module
- Transmitter tamper
- Range in excess of 150 metres



Overview

The model FC-200-002 Radio Callpoint is battery operated incorporated in a radio address module, thereby eliminating the need for wiring back to the fire alarm control panel.

The callpoint is designed to meet EN54 part 11 and is designed to comply with EN 54 part 25.

The callpoint is fitted into an industry standard ABS moulding which allows for testing by insertion of a test key. When the glass is broken the micro-switch is released, triggering an alarm transmission by radio, to the alarm panel.

Designed and manufactured using the latest techniques and surface-mount technology ensures component count is kept to a minimum, thereby maximising reliability.

The Callpoint is powered by a low-voltage dual supply alkaline battery pack. The battery pack condition is continually monitored. The battery board has been tested to provide a five year battery life at normal conditions. The system indicates remaining battery capacity and a low battery condition is indicated to the controller as a fault, allowing 30 days for the battery pack to be replaced before unit failure.



Dimensions:	87 x 87 x 67 mm with transmitter/address module Weight 0.40Kg
Operating Temperature:	-10 to 70 °C
Humidity:	Up to 95% non-condensing
Supply:	6 x AA cell Duracell Alkaline batteries
IP Rating:	IP24
Operating Frequencies:	868 MHz
Output Transmitter Power:	Variable 0-14dBm
Standards:	Third party certified to; EN54 part 11 EN54 part 25 ENTSI 300:220

Ordering Information

Red Radio Callpoint

Part Number FC-200-002



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Part No: Firecell 5, v1.4

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FireCell Sounder

- Fully addressable
- Wireless activation
- Third party approved (EN54)
- 2-way radio communication
- 5 year battery life at normal conditions
- 32 selectable tones
- Beacon option
- Acoustic self test
- Universal transmitter module
- Transmitter tamper
- Range in excess of 150 metres



Overview

The model FCX-300-002 Radio Sounder is a battery operated sounder remotely activated and monitored by the controller. Each unit has a unique address configured during manufacture and is individually addressable by the system controller. Each unit is controlled individually or by zone, dependant on the system design.

The radio sounder is housed in an industry standard, impact resistant ABS moulding. The sounder has 2-way radio communication with the fire system controller using 868MHz wavebands to receive command instructions for auto reporting.

Designed and manufactured using the latest techniques and surface-mount technology ensures component count is kept to a minimum, thereby maximising reliability.

The sounder is powered by a low-voltage dual supply alkaline battery pack. The battery pack condition is continually monitored. The battery board has been tested to provide a 5 year battery life at normal conditions. The system indicates remaining battery capacity and a low battery condition is indicated to the controller as a fault, leaving approximately 30 days for the battery pack to be changed.

Dimensions:	120 x 125 mm with transmitter/address module Weight 0.65Kg
Operating Temperature:	-10 to 70 °C
Humidity:	Up to 95% non-condensing
Supply:	3 x AA & 3 x C cell Duracell Alkaline batteries
IP Rating	IP54
Operating Frequencies:	868 MHz
Output Transmitter Power:	Variable 0-14dBm
Standards:	Third party certified to; EN54 part 3 EN54 part 25 ENTSI 300:220

Ordering Information

radio sounder includes base and
batteries:
radio sounder radio base only:
red sounder head:
red sounder beacon

Part Number FC-300-002

Part Number **FC-171-002** Part Number **FC-172-002** Part Number **FC-173-002**



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Part No: Firecell 6, v1.4

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Dealer Information:



FireCell Input / Output Unit

- Fully addressable
- Wireless activation
- Third party approved (EN54)
- 2-way radio communication
- IP65 casing
- 5 year battery life at normal conditions
- Dual input option
- Dual output option
- Universal transmitter module
- Transmitter tamper
- Range in excess of 150 metres

Overview



The model FC-600-001 Input/Output unit is a battery operated device remotely activated and monitored by the node network.

Model FC-610-001 has dual inputs and outputs that can be individually operated whilst using only one address on the system.

The device is housed in an industry standard, impact resistant ABS moulding and has 2-way radio communication with the fire system controller using 868MHz wavebands to receive command instructions for auto reporting.

Designed and manufactured using the latest techniques and surface-mount technology ensures component count is kept to a minimum, thereby maximising reliability.

The I/O unit is powered by a low-voltage dual supply alkaline battery pack. The battery pack condition is continually monitored. The battery board has been tested to provide a 5 year battery life at normal conditions. The system indicates remaining battery capacity and a low battery condition is indicated to the controller as a fault, leaving approximately 30 days for the battery pack to be changed.



Dimensions:	240 x 120 x 50mm Weight 0.60Kg
Operating Temperature:	-10 to +55 °C
Humidity:	Up to 95% non-condensing
Supply:	6 x AA cell Duracell Alkaline batteries
IP Rating:	IP65
Output Rating:	2A @30V DC.
Operating Frequencies:	868 MHz
Output Transmitter Power:	Variable 0-14dBm
Standards:	Third party certified to; EN54 part 18 EN54 part 25 ENTSI 300:220

Ordering Information

Single I/O Unit Dual I/O Unit Aux. relay module 2 x 230V 2amp relays Part Number **FC-600-001** Part Number **FC-610-001** Part Number **FC-620-001**



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Part No: Firecell 7, v1.4



FireCell Control Panels

- 16 zonal LED indicators
- 2 programmable sounder circuits
- 5 programmable inputs
- 3 programmable relays
- 3A power supply
- Powerful and versatile cause & effect programming
- Fully EN54-2 and EN54-4 compliant
- Compact, stylish enclosure
- Stores 1000 last events in event log

Overview

FireCell Syncro and Syncro AS are a versatile range of open protocol fire alarm control panels, compatible with existing Syncro fire alarm panel technology.

Available with one, two or four detection loops capable of hosting up to 126 radio devices per loop.

FireCell Syncro and Syncro AS use leading edge microprocessor based electronics to provide a flexible control system with high reliability and integrity.

FireCell Syncro and Syncro AS control panels can be expanded and networked to become part of much larger systems if the need arises, therefore providing a future proof solution for any installation.

With its large graphical display and ergonomic button and indicator layout, the FireCell Syncro and Syncro AS control panels are simple and straight forward to understand for installers, commissioning engineers and end users alike.

The control panel is available as a flush mountable version and also has the option for a thermal printer. The enclosure is available in different sizes dependant on loop and option capability but typical dimensions are for one and two loop versions 385 x 310 x 90mm (*Surface*), 415 x 315 x86mm (*Flush*), typical four loop panels are 500 x 355 x 117mm (*Surface*) and 506 x 360 x 130mm (*Flush*).





Construction: Enclosure finish: Mains voltage supply: Mains supply fuse: Power supply DC rating: Aux 24V supply: Battery (24 hour standby): Fault contact rating: Fire contact rating: Alarm contact rating: Sounder output rating: Detection loop: Detector protocols: Printer port: Serial expansion port: PC port: Network connection: Remote Silence input (SIL): Remote fault input (FLT): Remote reset input (RES): Remote alert input (INT):

Remote evacuate input (CNT): Download lead: Configuration: PC graphics: Modem:

Ordering Information

1.2mm sheet steel RAL9002 110 or 230V AC 50 or 60 Hz (specify when ordering, default is 230V) 1.6A 250V 24V 3 Amps Fused at 500 milliamps 9Ah 12V (2 per panel) (non-networked) 30V DC 1 Amp 30V DC 1 Amp 30V DC 1 Amp Fused at 1 Amp each 400 milliamp output XP95 Serial RS232 Serial RS485 (Compatible with all Syncro I/O modules) Serial RS232 RS485 - Up to 64 panels via fully fault tolerant optional network card Switched -ve Switched -ve Switched -ve Switched -ve Switched -ve Standard FC-000-Ken Programming Lead Via FireCell CIE Programming Software Via Guide or Guide Net systems Optional dial up modem for remote diagnostics

(Can be fitted to M3 size enclosure only)

For ordering information please contact EMS with your requirements.



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An ISO9001:2008 approved company



Part No: Firecell 9, v1.5

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Combined Detector Sounder

- Fully Addressable
- Wire-free activation
- Third party approved (EN54)
- 2-way radio communication
- Upto 5 Year battery life
- Beacon option
- Acoustic Self Test
- Universal transmitter module
- Transmitter tamper
- Range in excess of 150 metres

Overview



Group

An EMS

The model FCX-191-101 combined radio detector sounder is a battery operated device that is remotely activated and monitored by the controller. Each unit has a unique address configured during manufacture and is individually addressable by the system controller. Each unit is controlled individually or by zone, dependant on the system design.

The device is housed in an, impact-resistant ABS moulding. The sounder has 2way radio communication with the fire system controller using 868MHz wavebands to receive command instructions for auto reporting.

The device has a removable head allowing for options for Optical. Heat and multi-sensors.

Designed and manufactured using the latest techniques and surface mount technology ensures component count is kept to a minimum, thereby maximising reliability.

The Detector sounder is powered by a low-voltage dual supply Alkaline battery pack. The battery pack condition is continually monitored. The battery board has been tested to provide up to 5 years of normal site operations. The system indicates remaining battery capacity and a low battery condition is indicated to the controller as a fault leaving approximately 30 days for the battery pack to be changed.

Dimensions:	146 x 94mm with multi-sensor fitted
	146 x 86mm with heat sensor fitted
	146 x 84mm with optical sensor fitted
Weight.	0.70kg
Operating Temperature:	-10 to 70 degrees C
Humidity:	Up to 95% non-condensing
Supply:	Up to 5 year integral energy source
Operating Frequencies:	868 MHz
Output Transmitter Power:	Variable 0-14dBm
Standards:	Third party certified to; EN54 part 3 EN54 part 7 EN54 part 5 ENTSI 300:220
Ordering Information FCX-191-001 FCX-190-001 FCX-192-011 FCX-192-001	FireCell Combined Sounder and Optical Smoke Detector. FireCell Combined Sounder and Multisensor Detector. FireCell Combined Sounder and Heat Detector (Class CS). FireCell Combined Sounder and Heat Detector (Class A1R).
FCX-191-201	FireCell Combined Sounder -Beacon (Red) and Optical Smoke Detector.
FCX-190-201	FireCell Combined Sounder -Beacon (Red) and Multisensor Detector.
FCX-192-211	FireCell Combined Sounder -Beacon (Red) and Heat Detector (Class CS).
FCX-192-201	FireCell Combined Sounder -Beacon (Red) and Heat Detector (Class A1R).
	Note: Other entions are susible in our full arise list



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Note: Other options are available in our full price List.



Dealer Information:

Part No: Firecell 10, v1.3

with its head office prior to any formal specifications being written.



FireCell Voice Sounder

- Fully addressable
- Wireless activation
- Third party approved (EN54)
- 2-way radio communication
- 5 year battery life at normal conditions
- Extensive Message Library
- Beacon option
- Acoustic self test
- Synchronised operation
- Transmitter tamper
- Range in excess of 150 metres



Overview

The model FireCell Wireless Voice Sounders are battery operated sounder devices remotely activated and monitored by the controller. Each unit has a unique address configured during manufacture and is individually addressable by the system controller. Each unit is controlled individually or by zone, dependant on the system design.

The Voice sounders are available with pre-programmed messages selected from an extensive message library covering almost any conceivable application. All voice messages are clear and fully synchronised to help reduce confusion and distress during an active alarm.

The voice sounders are housed in an industry standard, impact resistant ABS moulding. The sounder has 2-way radio communication with the fire system controller using 868MHz wavebands to receive command instructions for auto reporting.

Designed and manufactured using the latest techniques and surface-mount technology ensures component count is kept to a minimum, thereby maximising reliability.

The units are powered by a low-voltage dual supply alkaline battery pack. The battery pack condition is continually monitored. The battery board has been tested to provide a 5 year battery life at normal conditions. The system indicates remaining battery capacity and a low battery condition is indicated to the controller as a fault, leaving approximately 30 days for the battery pack to be changed.



Dimensions:	120 x 125 mm with transmitter/address module Weight 0.65Kg
Operating Temperature:	-10 to 70 °C
Humidity:	Up to 95% non-condensing
Supply:	3 x AA & 3 x C cell Duracell Alkaline batteries
IP Rating	IP54
Operating Frequencies:	868 MHz
Output Transmitter Power:	Variable 0-14dBm
Standards:	Third party certified to; EN54 part 25 ENTSI 300:220

Ordering Information

Part Number FC-345-001
Part Number FC-354-002
Part Number FC-386-011
Part Number FC-386-012
Part Number FC-386-021
Part Number FC-386-022



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Part No: Firecell 11, v1.1

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