

# Fire detection equipment



Product Catalog 2011/2012

[www.apollo-fire.com](http://www.apollo-fire.com)

SIGNALING



Apollo Fire Detectors Ltd is one of the world's largest manufacturers of fire detectors, modules and notification devices. Established in 1980, Apollo has been supplying fire detection products to system providers in the USA since 1992. Apollo detectors are installed in landmark buildings such as the Statue of Liberty and the Staples Center in Los Angeles.

Apollo has established a research and development facility in Louisville, Kentucky in order to support the development of products for the US market that comply with the requirements of Underwriters Laboratories and the National Fire Protection Association.

Apollo detectors and modules are available through fire detection system providers. For more information please call us at 1 (502) 964-6565 or visit [www.apollo-fire.com](http://www.apollo-fire.com)

SIGNALING



Apollo has developed several lines of detectors for the UL/ULC/FM markets and those markets which require these classifications. Apollo has carefully researched and developed its products to ensure that they meet not only the UL and other standards but also the demands of today's high technology environments.

Information in this catalog is given in good faith, but Apollo Fire Detectors cannot be held responsible for any omissions or errors. The company reserves the right to change specifications of products at any time without prior notice.



# Discovery

## Analog Addressable Fire Detection

Key features of Discovery include:

- XPERT Card addressing
- Resists steam and cigarette smoke
- Flashing LED option
- Five response modes for adaptability to changing environments
- Drift compensation to ensure constant sensitivity
- Capable of recording site specific data in the detector
- Alarm flags for fast alarm reporting
- Conventional alarm facility during control panel processor fault
- 360° visibility alarm indication
- Compatible with XP95A systems

Advanced features for notification devices:

- Global and group addressing
- 15 tone pairs
- Volume selection
- Synchronization of all loop powered notification devices

Discovery is a line of high-specification, intelligent fire detectors developed to meet the requirements of sophisticated systems while providing engineers with an additional dimension in fire protection capability.

Discovery has a 'distributed intelligence system' where decisions are made in the detector head as well as at the control panel. Drift compensation is also incorporated into the detector, allowing it to adapt to dirty or dusty environments, which reduces false alarms.

Each detector in the Discovery product line can operate in one of five response modes, which can be selected from the control panel. The response characteristics have been carefully established so that the detectors comply with the requirements of UL in all response modes. Mode One will give a higher sensitivity to fire than Mode Five.

Discovery gives you total reassurance in installations where adaptability to changing conditions and protection against unwanted alarms are vital.



DISCOVERY®



### Discovery UL Photo-Electric Smoke Detector



The Discovery UL Photo-Electric Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smoldering fires are likely.

- Responds well to slow-burning, smoldering fires
- Well suited for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure
- Remote test feature

58000-650 Discovery UL Photo-Electric Smoke Detector

### Discovery UL Multisensor Detector



The Discovery UL Multisensor Detector consists of optical smoke and thermistor temperature sensors whose outputs are combined to give the final analog value. As a result, the Multisensor is useful over a wide range of applications and is highly immune to false alarms.

- Ideal for wide range of applications
- Highly immune to false alarms
- Well suited for sensitive environments
- Unaffected by wind or atmospheric pressure
- Remote test feature

58000-750 Discovery UL Multisensor Detector

### Discovery UL Ionization Smoke Detector



The Discovery UL Ionization Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Remote test feature

58000-550 Discovery UL Ionization Smoke Detector  
58000-555 Discovery ULC Ionization Smoke Detector

### Discovery UL Heat Detector



The Discovery UL Heat Detector is distinguishable by the low airflow resistant case and uses a single thermistor to sense the air temperature around the detector.

- Ideal for environments that are dirty or smoky under normal conditions
- Well suited for warehouses, loading docks and parking garages
- Unaffected by wind or atmospheric pressure
- Remote test feature

58000-450 Discovery UL Heat Detector

For compatible bases please see page 11



## Photo-heat Multisensor Detector

	Alarm @ 55 counts (%/ft)	Heat Classification @ 55 counts	30s alarm delay
Mode 1	1.3	140F ROR	Yes
Mode 2	1.9	N/A	Yes
Mode 3	2.6	140F ROR	Yes
Mode 4	3.3	140F ROR	Yes
Mode 5	N/A	135F FT (& ROR)	N/A

## Photo Detector

	Alarm @ 55 counts (%/ft)	30s alarm delay
Mode 1	1.7	No
Mode 2	1.7	Yes
Mode 3	2.3	No
Mode 4	2.3	Yes
Mode 5	3.0	No

## Ion Detector

	Alarm @ 55 counts (y-value)	30s alarm delay
Mode 1	0.7	No
Mode 2	0.7	Yes
Mode 3	1.0	No
Mode 4	1.0	Yes
Mode 5	1.5	No

## Heat Detector

	UL Heat Classification @ 55 counts alarm
Mode 1	135F fixed temperature with rate of rise
Mode 2	150F fixed temperature and rate of rise
Mode 3	150F fixed temperature
Mode 4	200F fixed temperature and rate of rise
Mode 5	200F fixed temperature



# XP95A

## Analog Addressable Fire Detection

The XP95A range of analog addressable fire detectors is advanced in design and performance and offers unique features that benefit both the installer and the end user.

XP95A uses a 'central intelligence' system where all the decisions are made by the control panel. Each detector is addressed using Apollo's patented XPERT Card and supplied with the mounting bases. The XP95A product line includes an ionization detector, a photo-electric detector, a heat detector, a multisensor, an isolator and a series of modules.

Key features of XP95A include:

- XPERT Card addressing
- Analog value report
- Alarm flags for fast alarm response
- Synchronization of all loop powered notification devices
- Advanced error check

The logo for XP95A features a series of five grey dots of varying sizes on the left, followed by the text 'XP95A' in a bold, sans-serif font. The 'XP' is in pink, and '95A' is in grey. A small 'TM' trademark symbol is positioned to the upper right of the 'A'.



## XP95A Photo-Electric Smoke Detector

The XP95A Photo-Electric Smoke Detector works on the light-scatter principle and is ideal for applications where slow-burning or smoldering fires are likely.

- Responds well to slow-burning, smoldering fires
- Well suited for bedrooms and escape routes
- Unaffected by atmospheric pressure

55000-650 XP95A Photo-Electric Smoke Detector



## XP95A Multisensor

The XP95A Multisensor contains a photo-electric smoke sensor and a thermistor (temperature sensor) whose outputs are combined to give the final analog value.

- Sensitive to a wide range of fires
- Well suited for environments such as hotel bedrooms, warehouses and loading docks
- Unaffected by wind or atmospheric pressure

55000-886 XP95A Multisensor



## XP95A Ionization Smoke Detector

The XP95A Ionization Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Minimal effects from temperature, humidity, atmospheric pressure

55000-550 XP95A Ionization Smoke Detector †  
55000-555 XP95A Ionization Smoke Detector (ULC)



## XP95A Heat Detector

The XP95A Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature. It is classified as an ordinary detector by UL.

- Ideal for environments that are dirty or smoky under normal conditions
- Well suited for warehouses, loading docks and parking garages
- Unaffected by wind or atmospheric pressure

55000-450 XP95A Heat Detector



For compatible bases please see page 11



† Does not have ULC approval

# Series 65A

## Conventional Fire Detection

The Series 65A range of conventional detectors incorporates well-proven sensing technologies, together with advances in materials and electronics technology. A wide operating voltage of 9 to 33V DC means that Series 65A detectors can be integrated into security systems when used with a relay base.

Series 65A is a range of conventional fire detectors available in three versions:

- Standard
- Flashing LED
- Flashing LED and magnet operated test switch

**series 65A**<sup>TM</sup>  
9-33V



## Series 65A Photo-Electric Smoke Detector

The Series 65A Photo-Electric Smoke Detector incorporates a pulsing LED located within the housing of the detector. The detector housing is identical to that of the Ionization Detector but has an indicator LED which is clear in quiescent state but produces red light in alarm.

- Responds well to slow-burning, smoldering fires
- Well suited for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure
- Wide operating voltage
- Flashing LED option
- Flashing LED and magnet operated test switch option

55000-327	Series 65A Photo-Electric Smoke Detector - Standard
55000-326	Series 65A Photo-Electric Smoke Detector With Flashing LED
55000-325	Series 65A Photo-Electric Smoke Detector With Flashing LED and Magnetic Test Switch
55000-328	Series 65A Photo-Electric Smoke Detector - High Sensitivity



## Series 65A Ionization Smoke Detector

The Series 65A Ionization Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chamber and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast burning, flaming fires
- Designed to operate in a variety of environments
- Wide operating voltage
- Flashing LED option
- Flashing LED and magnet operated test switch option

55000-227	Series 65A Ionization Smoke Detector - Standard
55000-226	Series 65A Ionization Smoke Detector With Flashing LED
55000-225	Series 65A Ionization Smoke Detector With Flashing LED and Magnetic Test Switch



## Series 65A Heat Detector

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

- Can be used for applications where smoke detectors are unsuitable
- Ideal environments that are dirty or smoky under normal conditions
- Wide operating voltage
- Flashing LED option
- Flashing LED and magnet operated test switch option

55000-140	135°F - Standard
55000-139	135°F - With Flashing LED
55000-138	135°F - With Flashing LED and Magnetic Test Switch
55000-143	170°F - Standard
55000-142	170°F - With Flashing LED
55000-141	170°F - With Flashing LED and Magnetic Test Switch
55000-146	200°F - Standard
55000-145	200°F - With Flashing LED
55000-144	200°F - With Flashing LED and Magnetic Test Switch



Please check the Apollo website on a regular basis for up-to-date approvals information.

# Bases



**DISCOVERY**®

XP 95A™

series 65A™  
9-33V

**ADDRESSABLE**

XP95A bases are compatible with both XP95A and Discovery detectors

**XP95A Low Power Relay Base**

The XP95A Low Power Relay Base incorporates a low power relay to control field equipment such as automatic door closers.

- Gives a set of voltage free contacts controlled by the remote output of a detector
- Draws negligible current

45681-242UL XP95A Low Power Relay Base 4"



**XP95A Mounting Base**

All detectors in the XP95A product line fit the XP95A Mounting Base which is a low insertion force base with stainless steel contacts for the detector terminals. XPERT Cards are supplied with all bases.

- XPERT addressing
- One way fit
- Locking feature to prevent unauthorized removal

45681-210USA XP95A Mounting Base 4"  
45681-225USA XP95A Mounting Base 6"



**E-Z Fit Base**

The E-Z Fit Base is a low profile 6" mounting base for XP95A detectors.

- High degree of protection against unauthorized removal

45681-250 E-Z Fit Base



**XP95A Isolating Base**

The XP95A Isolating Base senses and detects short circuit faults on XP95A loops and spurs.

- Up to 20 devices may be installed between isolating bases
- XPERT addressing

45681-321USA XP95A Isolating Base



Please check the Apollo website on a regular basis for up-to-date approvals information.

## CONVENTIONAL

### Series 65A Standard Base



The Series 65A Standard Base has been designed to enable detectors to be fitted without the need of force – particularly useful when fitting to suspended ceilings. All Series 65A bases have a ‘one way only’ fit.

- 2 wire base
- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal
- Contains no electrical parts

45681-200USA Series 65A Standard Base 4"  
48681-220USA Series 65A Standard Base 6"

### Series 65A Standard Relay Base 4"



The Series 65A Standard Relay Base provides one set of volt-free, changeover (form C) contacts that change state when the detector signals an alarm.

- 4 wire base
- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal

45681-255 Series 65A Standard Relay Base 4"

### Series 65A Auxiliary Relay Base 4"



The Series 65A Auxiliary Relay Base provides two sets of volt-free changeover contacts to facilitate the switching of a remote LED or other auxiliary device.

- 4 wire with extra relay
- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal

45681-256 Series 65A Auxiliary Relay Base 4"

### Series 65A End-of-Line Relay Base



The Series 65A End-of-Line (EOL) Relay Base is intended for use with 4-wire circuits and feature two sets of changeover contacts and a power supervision relay.

- Adaptor bar to fit different back boxes
- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal

45681-257 Series 65A 12V End-of-Line Relay Base 4"  
45681-258 Series 65A 24V End-of-Line Relay Base 4"



Please check the Apollo website on a regular basis for up-to-date approvals information.



# Modules



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XP95A<sup>™</sup>

### XP95A Isolator



The XP95A Isolator is placed at intervals on the loop and ensures that, in the case of a short circuit, only the section between the isolators will be affected. When the short circuit is removed, the isolators automatically restore power and data to the isolated section.

- Detects wiring short-circuits using patented technology
- Minimizes disruption from short-circuits
- Automatic de-isolation on short-circuit removal
- Up to 20 devices may be installed between isolators

55000-750 XP95A Isolator

### Mini Monitor Module



The Mini Monitor Module is an interface within an entirely new housing. This allows the unit to be fitted onto a standard 35mm DIN-Rail (using a twist-click motion) or mounted within an enclosure, such as a Pull Station. It is designed to monitor the state of one or more single pole, voltage free contacts connected on a single pair of cables and to report the status to Apollo compatible analog control equipment.

- DIN-Rail mountable
- Designed for use where space is limited
- Interrupt/non-interrupt in one unit
- 'Pre-alarm' status available
- Three, colored LEDs, giving clearer status indication

55000-765 Mini Monitor Module

### XP95A Mini Switch Monitor Module



The XP95A Mini Switch Monitor Module is designed to monitor the state of one or more single pole, voltage free contacts and to report the status to Apollo compatible analog control equipment.

- Three input states - 'normal', 'trouble', and 'alarm'
- Visible LED with remote LED connection option
- Loop-powered
- Designed to fit into equipment with limited space
- Easy to install

55000-831 XP95A Mini Switch Monitor Module



Please check the Apollo website on a regular basis for up-to-date approvals information.

### XP95A Mini Priority Switch Monitor Module



The XP95A Mini Priority Switch Monitor is designed to monitor the state of one or more single pole, voltage free contacts and to report the status to Apollo compatible analog control equipment. It can also place a signal on the loop to provide early warning if a device such as a pull station is operated.

- Three input states - 'normal', 'trouble' and 'alarm'
- Visible LED with remote LED connection option
- Loop-powered
- Designed to fit into equipment with limited space
- Easy to install
- Monitors equipment where a fast response is required
- Interrupt facility

55000-830 XP95A Mini Priority Switch Monitor Module

### XP95A Switch Monitor Module



The XP95A Switch Monitor Module is designed to monitor the state of one or more single pole, voltage free contacts connected and to report the status to Apollo compatible analog control equipment.

- Three input states - 'normal', 'trouble', and 'alarm'
- Visible LED
- Loop-powered

55000-805 XP95A Switch Monitor Module

### XP95A Priority Switch Monitor Module



The XP95A Priority Switch Monitor Module is designed to monitor the state of one or more single pole, voltage free contacts and to report the status to Apollo compatible analog control equipment. It can also place a signal on the loop to provide early warning if a device such as a Pull Station is operated.

- Three input states - 'normal', 'trouble', and 'alarm'
- Visible LED
- Loop-powered
- Fast response time
- Interrupt facility

55000-806 XP95A Priority Switch Monitor Module

### XP95A Dual Priority Switch Monitor Module



The XP95A Dual Priority Switch Monitor Module contains two Priority Switch Monitor Modules (55000-806) on a single plate.

- Loop-powered
- Fast response time
- Interrupt facility

55000-790 XP95A Dual Priority Switch Monitor Module



Please check the Apollo website on a regular basis for up-to-date approvals information.

### XP95A Switch Monitor Input/Output Module

The XP95A Switch Monitor Input/Output Module provides a voltage free, single pole, change-over relay output, a single, monitored switch input and unmonitored, non-polarized opto-coupled input.

- Reports 'trouble', 'switch open' and 'switch closed' levels.
- Visible LED
- Loop-powered

55000-820 XP95A Switch Monitor Input/Output Module



### XP95A Sounder Control Module

The XP95A Sounder Control Module monitors and controls the operation of a zone of conventional sounders and reports their status to the control panel.

- Allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off
- May be synchronized when in pulsed operation
- Can also be used for public address speakers

55000-825 XP95A Sounder Control Module



### XP95A Relay Output Module

The XP95A Relay Output Module provides a single 2-pole changeover relay.

- Loop-powered
- Can be placed anywhere on loop

55000-863 XP95A Relay Output Module



### XP95A 120V AC Input/Output Module

The XP95A 120V AC Input/Output Module is a loop-powered device which incorporates a monitored input circuit for connection to dry contacts, as well as a 120V 4A rated dry contact relay output. It is mounted in a plastic fascia plate for use with a 4" square or 2 gang electrical back box.

- Loop-powered
- Visible LEDs
- 4A rated dry contact

55000-589 XP95A 120V AC Input/Output Module



Please check the Apollo website on a regular basis for up-to-date approvals information.

# Notification Devices



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 XP95A<sup>™</sup>

### XP95A Open-Area Sounder

The XP95A Open-Area Sounder has been designed for use in open areas and can be connected to any Discovery UL or XP95A system.

- For use with XP95A and Discovery UL systems
- Self-test trouble monitoring
- Two volume settings 92dB(A) and 100dB(A)
- Synchronization of tones
- Individual and group addressing
- Available in red or white
- Loop-powered
- IP65 rated



- 55000-041 XP95A Open-Area Sounder (Red Lens)
- 55000-042 XP95A Open-Area Sounder (White Lens)

### XP95A Sounder Beacon Base

The XP95A Sounder Beacon Base is a loop-powered sounder and beacon combined with a standard Intelligent Mounting Base. It is used to signal a fire alarm in enclosed areas. The Sounder Beacon Base can be used either with a detector fitted or with a cap for operation as a stand-alone alarm device.

- Two volume ranges 55-75dB(A) and 75-91 dB(A)
- Beacon flash rate of once per second
- Synchronization of 'alert' and 'evacuate' tones
- Synchronization of beacon flash
- Individual and group addressing
- Unique acoustic and beacon self test



- 45681-525 XP95A Sounder Beacon Base (Yellow LEDs)
- 45681-526 XP95A Sounder Beacon Base (Red LEDs)

### Discovery UL Open-Area Sounder Beacon

The Discovery UL Open-Area Sounder Beacon makes full use of the Discovery protocol and has been designed for use in indoor, outdoor and open-areas. When the fire system is being commissioned a Magnetic Wand can be used to adjust and test each sounder locally.

- 15 tone pairs
- Sounder and beacon are independently configurable
- Volume and tone settings are independently selectable from the control panel
- Tones can be used for other purposes in addition to warning of fire, making the device ideal for use in schools etc.
- Soft start option, ideal for hospitals and nursing homes
- Group and global control for increased response time



- 58000-011 Discovery UL Open-Area Sounder Beacon (Red Lens)
- 58000-012 Discovery UL Open-Area Sounder Beacon (White Lens)
- 29650-001 Magnetic Wand



Please check the Apollo website on a regular basis for up-to-date approvals information.

## Discovery UL Sounder Beacon Base



The Discovery UL Sounder Beacon Base makes full use of the Discovery protocol. For ease of commissioning a Magnetic Wand can be used to test and adjust each sounder locally.

- Sounder and beacon are independently configurable
- Volume and tone settings are independently selectable from the control panel
- Tones can be used for other purposes in addition to warning of fire, ideal for schools etc.
- Enables soft start option, ideal for hospitals and nursing homes
- Electronic bell tone

45681-524	Discovery UL Sounder Beacon Base (Red LEDs)
45681-527	Discovery UL Sounder Beacon Base (Yellow LEDs)
29650-001	Magnetic Wand

### Notes

A large area with horizontal dotted lines for taking notes.



Please check the Apollo website on a regular basis for up-to-date approvals information.

# Beams & Pull Stations



**DISCOVERY**<sup>®</sup>  
**XP95A**<sup>™</sup>

### XP95A Loop-Powered Beam Detector



The XP95A Beam Detector is made up of three main parts: the transmitter, which projects a beam of infrared light; the receiver, which registers the light and produces an electric signal; and the interface, which processes the data and generates alarm or trouble signals.

- Loop-powered
- Four selectable alarm levels
- Drift Compensation
- Remote interface
- Simple wiring and alignment
- Designed to protect large open spaces such as museums, churches and warehouses

55000-266 XP95A Loop-Powered Beam Detector

### Addressable Polycarbonate Pull Station



The Addressable Polycarbonate Pull Station is dual-action and features translucent plastic at the center, allowing visibility of an internal LED that indicates alarm condition and polling status. The unit is addressable using a DIP switch protected within the pull station. The Polycarbonate Pull Station may be flush mounted on a single gang work box or use an optional back cover (56000-006).

- Control Panel Compatibility
- Key lock
- Easily resettable
- LED visible even when Pull Station is closed

56000-005 Addressable Polycarbonate Pull Station

56000-006 Polycarbonate Backbox

### Mini Monitor Module (Converts standard pull station to addressable)



The Mini Monitor Module is an interface within an entirely new housing. This allows the unit to be fitted onto a standard 35mm DIN-Rail (using a twist-click motion) or mounted within an enclosure, such as a pull station. It is designed to monitor the state of one or more single pole, voltage free contacts connected on a single pair of cables and to report the status to Apollo compatible analog control equipment.

- DIN-Rail mountable
- Designed for use where space is limited
- Interrupt/non-interrupt in one unit
- 'Pre-alarm' status available
- Three, colored LEDs, giving clearer status indication

55000-765 Mini Monitor Module

**Also listed:**

56000-001 Single Action Pull Station integrated with Mini Monitor

56000-002 Dual Action Pull Station integrated with Mini Monitor



Please check the Apollo website on a regular basis for up-to-date approvals information.



[www.apollo-fire.com](http://www.apollo-fire.com)

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### **International websites**

**Apollo China**  
[www.apollo-fire.cn](http://www.apollo-fire.cn)

**Apollo Germany**  
[www.apollo-feuer.de](http://www.apollo-feuer.de)

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