Anatec Pro analogue addressable fire panels

The Anatec Pro family comprises a 1-2 loop base panel (Anatec Pro Explorer – FADYXP prefix) and a 1, 2 or 4-loop high specification panel (Anatec Pro Discovery – FADY prefix).

Anatec Pro Explorer is compatible with Anatec FA95 protocol devices and Anatec Discovery Pro with both Anatec FA95 and Discovery devices.

With Anatec Pro Discovery, devices from both Anatec FA95 and Discovery protocols can be mixed on the same loop if necessary, enabling the maximum benefit of cost versus functionality. In addition to the features of Anatec Pro Explorer, it offers enhanced capabilities for installations where extra intelligence and flexibility are needed and setup requirements are more complex and involved.

Both Pro Explorer and Pro Discovery panels are fully compliant with EN54 Parts 2 & 4 and are suitable for BS 5839 Part 1 installations.

Benefits and features

Open protocol:
Enables another panel or other devices to be added to an installation to help future maintenance planning and cost control (note: it is not possible to mix with products which have a unique or closed protocol).

Digital transmission:
Anatec Pro protocol translates device information digitally, so is less susceptible to corruption than an analogue transmission system.

Loop drive capacity:
Rated at 500mA (highly stable) to accommodate a high number of loop-powered sounders/devices.

Strength of processing power:
Up to 126 addresses per loop may be configured through cause and effect programming. Each loop is driven by a separate processor to prevent complete failure in the unlikely event of a processing device breakdown.

Device recognition:
Panel 'Loop learn' facility automatically identifies newly installed devices.

Device sensitivity modes, 'Pro Discovery':
A change to building use may require a change in the operational function of the detection devices. Five different operating modes can be set according to the demands of the premises. For example, it is possible to programme a timed changeover between heat and smoke detection at selected times.

Liquid Crystal Display (LCD) & 32 zone indicators:
A 4 line 20 character back lit LCD gives device details; address, zone and type status through to location text. Fire and fault LEDs localize to the zone.

Input – output flexibility:
Up to 255 user definable inputs. Relay and two stage alarm outputs options available via expansion boards.

Sounder control programming:
Complex patterns can be programmed to suit modified escape routing or use of the building. Changes can be set from the panel including the isolation or disabling of a zone or an alarm etc.

Panel construction & installation:
'Pro Discovery' panels have trim options in stainless steel or brass. Cabling to the panel is convenient through top and bottom access or rear knockouts.

Panel programming:
Software tools including 'cause and effect' setup can be applied from a laptop PC. User or Engineers menu is accessible via coded access panel controls.

Anatec Pro System – loop load calculator:
Our sales engineers use software to check loading calculations, including battery standby capabilities, when preparing a scheme.

Installed system test:
One person is able to test system devices including silent alarm test. Please refer to the operating manual or contact 'Fire technical sales' for further information.

LCD & Zonal display

The Anatec Pro series of fire panels all include an easy to reference, back-lit LCD display, allowing a maximum of 80 characters, over four lines.

Fully configurable, the display shows details from device address, zone and type status through to location text. User functionality is set over two levels – level 1 enables viewing of panel status only whereas level 2 offers secure coded access for panel and device programming. The panels are further enhanced by fire and fault LEDs which localize to the zone.

Further features include:

- One man walk test facility (device or sounder selectable)
- Event history log with time and date stamp

Each panel includes a membrane keypad which is enabled either automatically via lockable front door (FADY panels) or via panel mounted key-switch (FADYXP panels.)

Anatec Pro Discovery with stainless steel trim

To Order

Anatec Pro Explorer Panels

STANDARD ORDER CODE	DESCRIPTION
FADYXP1/G	Anatec Pro Explorer 1 loop fire panel, grey finish
FADYXP2/G	Anatec Pro Explorer 2 loop fire panel, grey finish
OPTIONS	
FADYRA	Anatec Pro Explorer repeater panel
Suffix P	Integral printer
Suffix N	Network driver card

Anatec Pro Discovery with brass trim

Anatec Pro Discovery Panels

STANDARD ORDER CODE	DESCRIPTION
FADY1/G	Anatec Pro Discovery 1 loop fire panel, grey finish
FADY2/G	Anatec Pro Discovery 2 loop fire panel, grey finish
FADY3/G	Anatec Pro Discovery 3 loop fire panel, grey finish
FADY4/G	Anatec Pro Discovery 4 loop fire panel, grey finish
OPTIONS	
FADYRB	Anatec Pro Discovery repeater panel
Suffix P	Integral printer
Suffix N	Network driver card
Suffix A	8 Way programmable alarm
Suffix R	8 Way programmable alarm relay
ANATEC PRO DISCOVERY TRIM OPTIONS	
Suffix BR	Brass polished finish
Suffix PS	Stainless steel finish
Suffix BS	Brushed stainless steel finish
Suffix BZ	Recessing bezel in trim finish

All trim options are available to special order. To order, replace suffix G (/G) with the preferred trim option. For example:

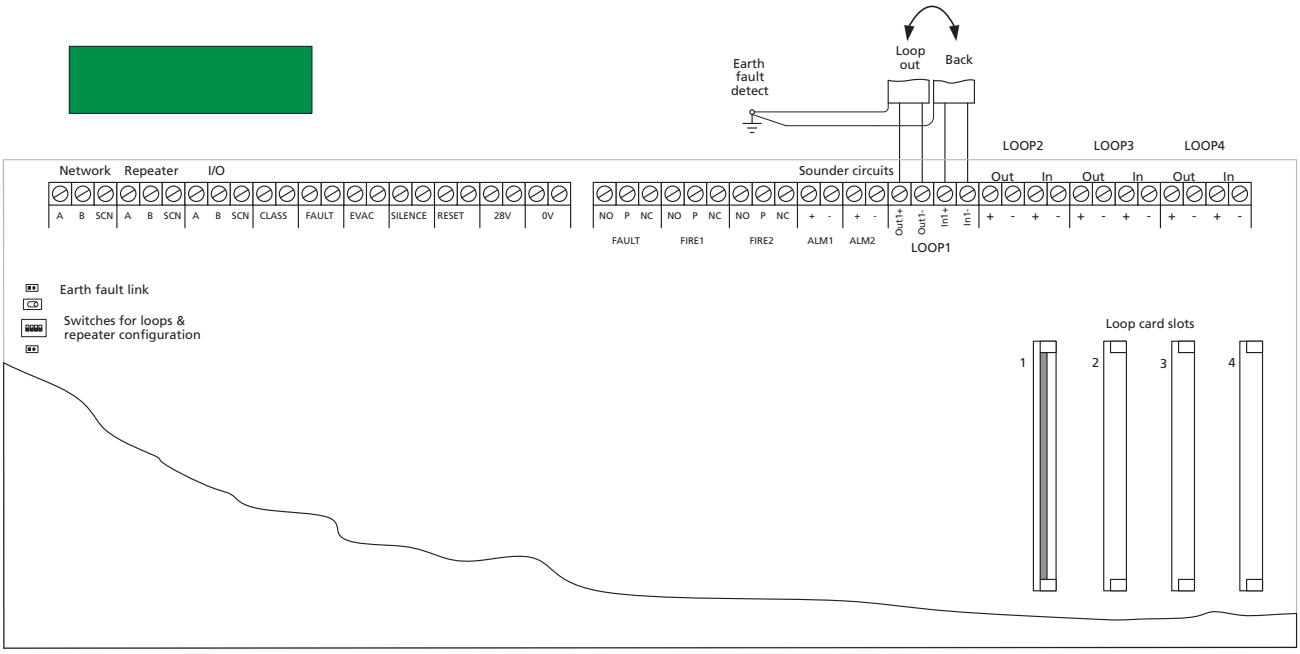
Standard panel: FADY1/G	(Anatec Pro Discovery 1 loop fire panel, grey finish)
Special order panel : FADY1PN/BSBZ	(Anatec Pro Discovery 1 loop fire panel including integral printer and network driver card, recessed with brushed stainless steel finish

Anatec Pro Discovery with brushed stainless steel trim

Anatec Pro Explorer panel

Connection diagram

The diagram below indicates how the devices should be connected to a FADY panel (1 loop connected).



Typical wiring

Below is a diagram of a typical analogue addressable loop fitted with a selection of detectors, loop powered sounders, modules and isolators, all connected to a 2 loop panel. The diagram also illustrates how a series of fire panels can be networked together using the range's powerful RS485 network.

The diagram is provided for illustration purposes only and you should always refer to the relevant panel/device instructions as appropriate before installation. All devices illustrated are compatible with the Anatec range.

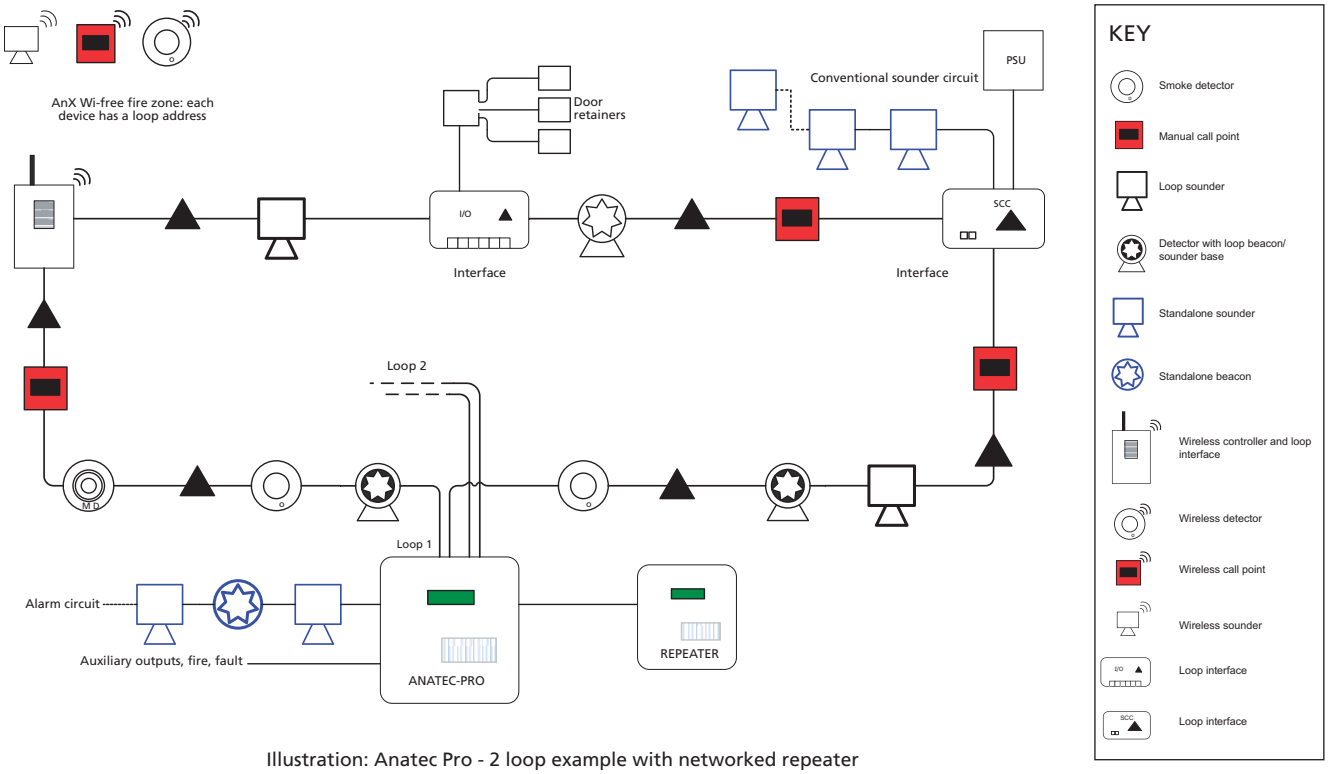


Illustration: Anatec Pro - 2 loop example with networked repeater

Networking capability

With the addition of a network card, the panels can be used as part of a global system with the facility to control and monitor a large networked site. Network cause/effect may be programmed between Anatec Pro 1-2 loop panels, 1-4 loop panels and active repeater panels. The system operates as a global communication system and does not require a master panel or computer. This approach reduces the cost and avoids the problem of a total network failure associated with master panel configuration. Up to 15 panels or 60 loops may be used to create a network. Each panel can act independently and be programmed to respond selectively to other panels on the network.

The network card uses RS485 data communications, which will transmit up to 2km. Compact network repeater panels providing all essential control, and display facilities are available for manned control points.

Technical specification

Analogue panel

	ANATEC PRO EXPLORER	ANATEC PRO DISCOVERY
SPECIFICATION	**FADYXP 1 or 2 loop**	**FADY 1 to 4 loop**
Loops/device capacity per loop:		
No. of loops	1 or 2	1 to 4
Total addresses per loop	126	126
Total addresses per panel	252	504
Panel alarm circuits	2 by 1A per circuit, 2A total	2 by 1A per circuit, 2A total
Loop driver specification:		
Loop loading (loop calculator available)	500mA maximum per loop	500mA maximum per loop
Detector & call point compatibility:		
Protocols	Anatec FA95 protocols	Anatec FA95 and Discovery protocols
Power supply:		
Mains input voltage	230Vac +10% –6%	230Vac +10% –6%
Internal power supply	24Vdc	24Vdc
Auxiliary output supply	20-28Vdc @ 500mA (max)	20-28Vdc @ 500mA (max)
Battery Standard	2 x 12V 7AH	2 x 12V 12AH
Optional: standby using loop calc	Optional 2 x 12V 12AH	–
Battery charger output	1.5A(max)	1.5A(max)
Auxiliary outputs	2 independent relays for fire and fault (rated at 1A at 30Vdc)	
Auxiliary inputs	4 x fault, evacuate, silence and reset	
Panel control & indicators:		
Zone indicators	32 fire and fault LEDs	32 fire and fault LEDs
Panel display	4 line 20 character back-lit LCD	4 line 20 character back-lit LCD
Panel construction & wiring:		
Construction	Steel enclosure with key access to controls	Steel enclosure with hinged front door
Colour	Cool grey epoxy	Cool grey epoxy as standard
Trim options	–	Brass, brushed or polished stainless steel
Dimensions HWD (mm)	410 x 330 x 130	410 x 555 x 130
Installation	Detachable electronics allowing first fix installation	Detachable electronics allowing first fix installation
Cable entry	Via top and back entry knockouts	Via top & back grommets, or bottom entry knockouts
Cabling requirements	Complies with BS 5839-1:2002, section 26 for cables, wiring and other interconnections	
Networking:		
Serial network data	Full networking using RS485 link	Full networking using RS485 link
Interfaces (Printer/ PC):		
Integral printer (parallel)	Yes	Yes
Options:		
Alarm extender	Housed in separate enclosure	Integral option, 4 or 8 way
Relay extender	Housed in separate enclosure	Integral option, 4 or 8 way

Analogue repeater panel

SPECIFICATION	FADYRA without power supply	FADYRB with power supply
Connections	DC power supply and network connections from control panel	Network connections from control panel and 230Vac mains input voltage
Display	4 line 20 character back-lit LCD	4 line 20 character back-lit LCD
Battery size	N/A	2 x 12V 7AH
Construction	Cool grey epoxy steel enclosure	Cool grey epoxy steel enclosure
Dimensions hwd (mm)	370 x 325 x 106	370 x 325 x 106

Anatec-Lite EN54 fire panels

The Anatec-Lite panel range is fully compliant with EN54 parts 2 & 4 and offers the basis to build a powerful analogue addressable fire system.

The range comprises a robust 1 or 2-loop 32-zone version in a metal enclosure complemented by a single loop 16-zone version in a plastic enclosure. Together they offer an array of user and installer-friendly features, including panel networking.

Anatec-Lite panels are compatible with Anatec FA95 and Discovery devices, offering enhanced capabilities for installations where extra intelligence and flexibility are required.

Benefits and features

Device compatibility:
Anatec-Lite is fully compatible with both Anatec FA95 and Discovery protocol devices.

Digital transmission:
The Anatec Pro protocol translates device information digitally. This type of signaling is less susceptible to corruption than an analogue transmission system.

Loop drive capacity:
Powerful short circuit protected loop drivers, capable of supporting up to 40-loop powered 10mA sounders per loop.

Input – output flexibility:

- Two programmable inputs
- A fault output relay and three programmable relay outputs with voltage free changeover contacts
- Two independently programmable conventional sounder circuits

Security control:
secure push-button or keyswitch entry:
Push button access code or keyswitch entry to Access Levels 2 and 3 (depending on model purchased.)

Sounder control functions:
Complex sounder control functions can be set from the panel including:

- Individual sensitivity settings for each device
- A phased evacuation facility
- Adjustable contamination levels
- Investigation delay period function
- Zone dependency/coincidence functions
- Day/night (building occupied/unoccupied) function

Panel programming:
Particular site requirements can be uploaded/ downloaded via an intuitive Windows based PC program that allows the system to be programmed quickly and easily. Sophisticated sounder group mapping and complex cause and effect scenarios can be easily implemented using the intuitive upload-download programming software.

Networking capability
The ability to interconnect up to eight main panels plus an additional four repeaters per main panel onto two-wire RS485 networks.

To Order

STANDARD ORDER CODE	DESCRIPTION
FANP116	Single loop 16 zone panel (FA95/Discovery), plastic enclosure
FANP132	Single loop 32 zone panel (FA95/Discovery), metal enclosure
FANP232	Two loop 32 zone panel (FA95/Discovery), metal enclosure

OPTIONS	
FANP/RP16	16 zone repeater panel
FANP/RP32	32 zone repeater panel
Suffix N	Network card
FANP1BAT1	Battery for FANP116 panel
FANP2BAT2	Battery for FANP132 & 232 panels

LCD & Zonal display

An easy to read, 80-character back-lit display is fitted to show details from device address, zone and type status through to location text. The panel is enhanced with features including:

- 40 characters of custom text programmable per device
- 999 event monitoring
- Comprehensive test, maintenance & commissioning functions (including auto-learn loops, monitor a point, test outputs, one man walk test and loop continuity test)
- Earth fault monitoring
- An alarm counter that records the number of times the panel has been in an alarm state (to meet clause 7.13 of EN 54-2)

Functions

Anatec-Lite panels have extensive programmable functions including:

Zone programming – to confirm a true state of fire
Zones can be programmed for three sets of circumstances to control sounding of fire alarms.

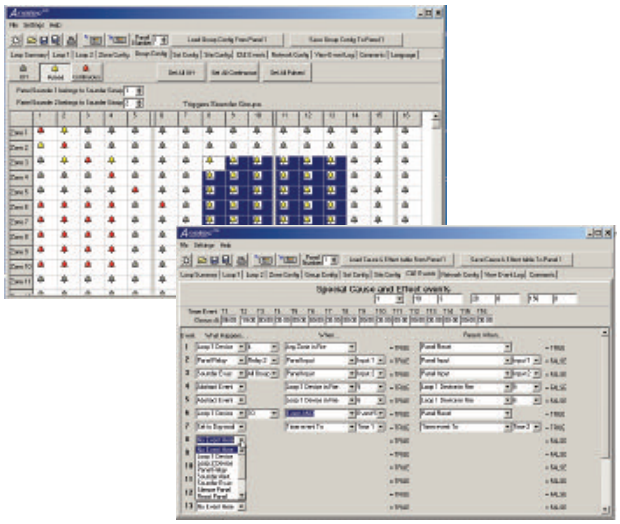
- A zone: No action on the first detected alarm, unless there is a signal from another zone confirming a fire
- B zone: The first detected alarm will be indicated, but a full fire condition will be flagged only when a detector signal from the same zone gives confirmation
- C zone: The panel enters a fire condition on the first detected alarm, but certain outputs are inhibited until the fire is confirmed from a second source

Day/night (building occupied/unoccupied) function
Allows the panel's operational characteristics to be changed at a pre-determined time. For example, from the engineers menu changes can be made to detector sensitivity (high/low) & zone dependency settings.

Delay period function – to allow system investigation
Programable for time period, the zone(s) it applies to and whether or not it operates in day or night mode.

Software

Sophisticated sounder group mapping and complex cause and effect scenarios can be easily implemented using the intuitive upload-download programming software.



Networking capability

The system can support eight interconnected panels over a two-wire RS485 network. Single loop 16 zone panels and 1 & 2 loop 32 zone panels may be networked together. Any main panel can connect up to four repeaters. Up to 1 km of cable may be fitted to a network system.

Each networked panel can be programmed to:

- Accept Faults from other panels
- Accept Fires from other panels
- Accept Control actions such as silence control sounder, silence alarm sounders and reset from other panels
- Accept Disablement commands for zones, sounders and output sets from other panels

(Each of these four functions may be individually selected.)

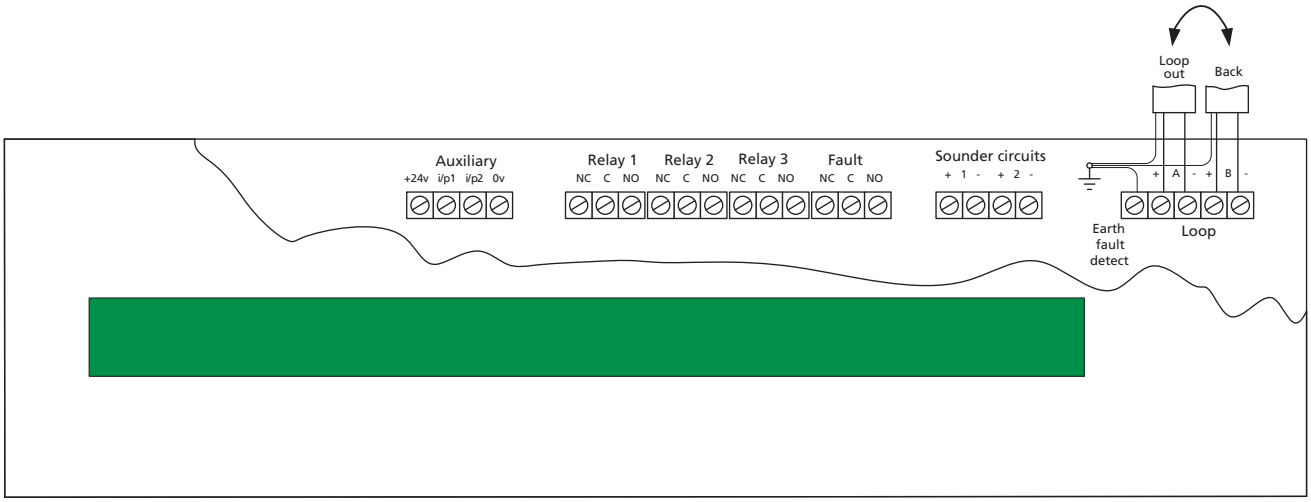
All panels monitor all other panels for network wiring faults. Fires on remote panels are displayed in detail on a local panel including the point description of the origin of the alarm. Faults on remote panels are displayed in detail on a local panel including the point description in the case of a detector.

Cause and effect can be programmed into a local panel dependent on which remote panel is in alarm. The network supports programming of site information into remote panels from a PC connected at a local panel. Time and date is common to all panels throughout the network.

All panels connected to the network need a network driver card.

Connection diagram

The diagram below indicates how the devices should be connected to the panel.



Typical wiring

Below is a diagram of a typical analogue addressable loop fitted with a selection of detectors, loop powered sounders, modules and isolators, all connected to a single loop panel. The diagram also illustrates how a series of fire panels can be networked together using the range's powerful RS485 network.

The diagram is provided for illustration purposes only and you should always refer to the relevant panel/device instructions as appropriate before installation. All devices illustrated are compatible with the Anatec range.

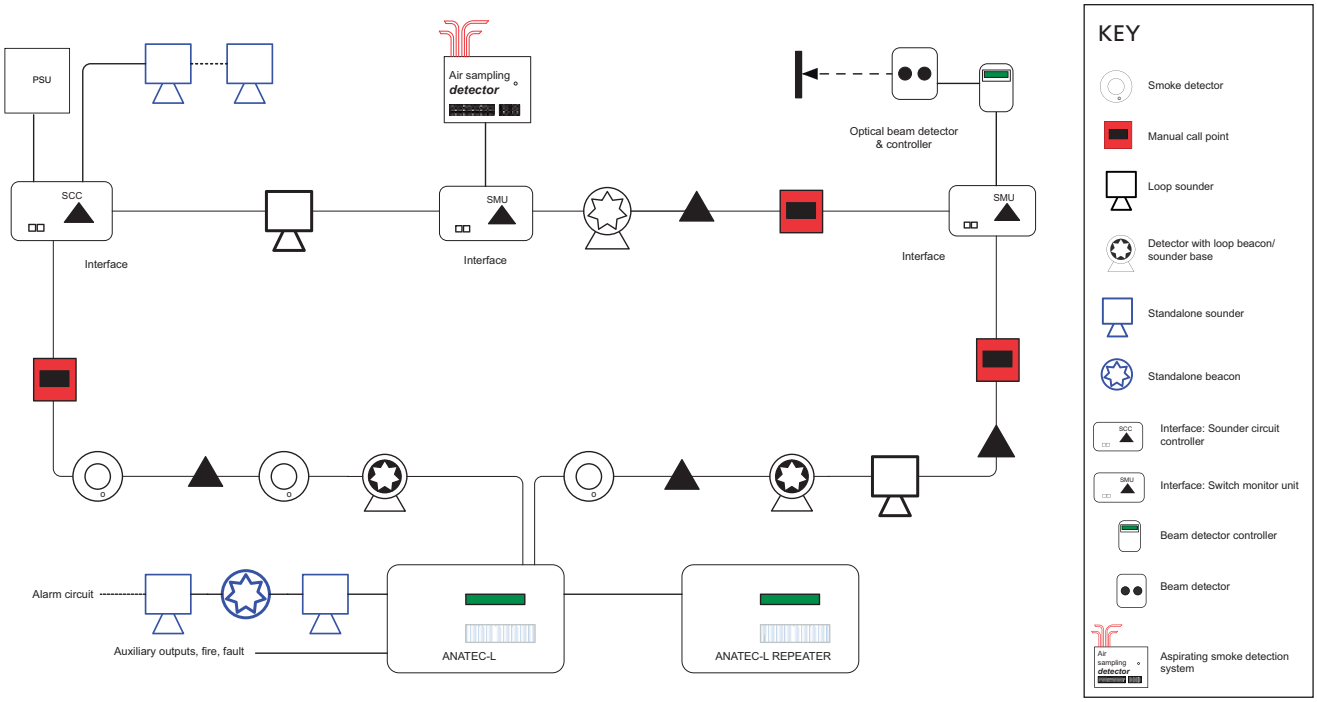


Illustration: Anatec-Lite, 1 loop example with networked repeater

Technical specification

Anatec-Lite analogue addressable panel

	1 loop, 16 zone	1/2 loop, 32 zone
Product order code	**FANP116**	**FANP132/FANP232**
Loops/device capacity per loop:		
No. of loops	1	1 or 2
Total addresses per panel	126	126/ 252
Panel alarm circuits	2	2
Loop driver specification:		
Number of loop drivers	1	FANP132: 1 / FANP232: 2
Line monitored for open and short circuit faults	Yes	Yes
Onboard loop isolators with LED indication when active	Yes	Yes
Auto-polling from each loop end	Yes	Yes
Loop output current (max)	500mA	500mA
Loop powered sounders per loop, max @ 10mA	40	40
No. of programmable sounder groups	15	15
No. of programmable output sets	16	16
Conventional sounder circuits:		
Number of programmable circuits	2	2
End of line resistor value	6,800Ω 5% tolerance, 0.25 W	6,800Ω 5% tolerance, 0.25 W
Open & short circuit line monitoring	Yes	Yes
Outputs fused at	400mA	500mA
Maximum number of sounders @ 20mA	40	50
Detector & call point compatibility:		
Protocols	Anatec FA95 and Discovery protocols	
Power supply:		
Mains input voltage	230Vac ± 10% 50/60Hz	230Vac ± 10% 50/60Hz
Internal power supply	27Vdc Nominal	27Vdc Nominal
Total output current limited to	1.4A @ 230Vac	3A @ 230Vac
Supply and battery charger monitored for failure	Yes	Yes
Batteries monitored for disconnection and failure	Yes	Yes
Batteries protected against deep discharge	Yes	Yes
Battery [separate product code]	3.2AH VRLA	7.0AH VRLA
Quiescent current drain (1 loop unloaded)	<50mA	<80mA
Quiescent current drain (2 loop unloaded)	-	<100mA
Fuses (to IEC EN 60127 pt 2):		
Mains fuse	1A HRC Ceramic 20mm	1A HRC Ceramic 20mm
Battery fuse	3A F 20mm	3A F 20mm
Earth fault monitoring	Yes (any conductor)	Yes (any conductor)
Temperature compensated charging	Yes	Yes
Auxiliary outputs:		
Type	Relay voltage free single pole changeover	
Maximum switching current	1A	1A
Maximum switching voltage	30Vdc	30Vdc
Relay 1	Programmed from cause and effect	
Fault	Active when no faults are present	
24V Aux power output	100mA. Protected by resettable overload circuit	
Auxiliary inputs:		
Input 1 and 2	Connect to 0V to trigger. Maximum input voltage 27Vdc (non-latching)	
Panel control & indicators:		
Control buttons	Silence, Reset, Resound, Investigate; More information; Menu	
Event scrolling and menu access buttons	Up (1); Down (2); Accept (3); Abort (4)	
Zone indicators	16	32
Panel display	Two lines x 40 characters, back-lit	Two lines x 40 characters, back-lit
Other LED indicators	General Fire, System Energized; Pre-Alarm; Remote Output Activated; Menus Accessed; Disablement; Test; Remote Output Disabled; Silenced; General Fault; System Fault	
Panel construction & wiring:		
Construction	Plastic body and lid	Metal body and lid
Colour	Grey	Grey
Dimensions, body hwd (mm)	380 x 235 x 77mm (plastic), includes 'lip'	410 x 250 x 80mm (metal)
Dimensions, lid hwd (mm)	380 x 235 x 16mm (plastic)	439 x 274 x 7mm (metal)
Weight kg (without batteries)	1.9	4.5
Type of cable	Fire resistant screened cable, minimum size 1mm^2	
Maximum cable length per loop	1km	1km
Connector blocks	Plug-on type, maximum conductor size 1.5mm^2	
Networking:		
Connection	Via CFP761 network driver card fitted at main panel	
Maximum number of main panels per network	8	8
Maximum number of repeaters per main panel	4	4
Maximum cable length per network	1km (daisy chain configuration)	1km (daisy chain configuration)
Interfaces: Printer/ PC		
Integral printer	–	Via main panel RS232 connector block
PC connection	Via main panel RS232 Molex connector (lead supplied in XFP507 upload/download software kit)	

Product selector – Analogue addressable devices

Anatec FA95 & Discovery devices

The following pages highlight the range of detectors, call points, ancillary devices and alarms for both Anatec FA95 and Discovery protocols. The table below offers an overview of device features and capabilities to assist with planning and selection.

PRODUCT CODE	DESCRIPTION	Features:	Body Colour: R = Red; W = White; B = Black	IP rating: Weatherproof	Self-test fault monitoring	Red alarm LED	Sounder	Beacon	Lens colour: A = Amber; C = Clear; R = Red	Built in isolator	HTM82 low volume setting	Apollo Alert / Evac tone	Constant tone	DIN tone	100 dB(A)	1 Hz flash rate	Integrated base	Loop addressable	Group addressing	Master / slave function	Can be synchronised	Discovery	Page reference
FA95 DETECTORS																							
FA95-ACB	Detector mounting base		W															✔					13
FA95-ABB	Detector mounting base		B															✔					13
FA95-OPT	Optical smoke detector		W			✔												✔					14
FA95-OPTB	Optical smoke detector		B			✔												✔					14
FA95-MUS	Multi-sensor detector		W			✔												✔					14
FA95-HDS	Heat detector, grade A2S		W	53		✔												✔					15
FA95-HTT	Heat detector, grade CS		W	53		✔												✔					15
FA95-300RS-ISO	Manual call point		R			✔				✔								✔					16
DISCOVERY DETECTORS																							
FA95-ACB	Detector mounting base		W															✔				✔	17
FA95-ABB	Detector mounting base		B															✔				✔	17
FADY-OPT	Optical smoke detector		W	43		✔												✔				✔	18
FADY-TEM	Heat detector		W	53		✔												✔				✔	18
FADY-MUS	Multi-sensor detector		W	43		✔												✔				✔	19
FADY-CO	Carbon monoxide detector		W	43		✔												✔				✔	19
FADY-300-RS-ISO	Manual call point		R	53		✔				✔								✔				✔	20
FA95 LOOP ALARMS																							
FA95-LPS-ISO	Sounder base		W				✔			✔		✔						✔		✔	✔		21
FA95-BSNDR	Local area sounder base		W																				22
FA95-IBS-ISO	Sounder base, integrated		W		✔		✔			✔	✔	✔					✔	✔	✔		✔		22
FA95-LBB-ISO	Beacon base		W		✔			✔	C	✔						✔	✔	✔	✔		✔		23
FA95-LPSB-ISO	Sounder beacon base		W		✔		✔	✔	C	✔	✔	✔				✔	✔	✔	✔		✔		23
FA95-LS100R	Horn sounder		R				✔					✔			✔			✔	✔		✔		24
FA95-LS100R-WP	Horn sounder		R	65			✔					✔			✔			✔	✔		✔		24
FA95-LS100W	Horn sounder		W				✔					✔			✔			✔	✔		✔		24
FA95-LS100W-WP	Horn sounder		W	65			✔					✔			✔			✔	✔		✔		24
FA95-LSBOR-ISO	Horn sounder-beacon		R		✔		✔	✔		✔		✔	✔	✔	✔	✔		✔	✔		✔		24
FA95-LSBOW-ISO	Horn sounder-beacon		W		✔		✔	✔		✔		✔	✔	✔	✔	✔		✔	✔		✔		24
FA95-LSBR65-ISO	Horn sounder-beacon		R	65	✔		✔	✔		✔		✔	✔	✔	✔	✔		✔	✔		✔		24
FA95-LSBW65-ISO	Horn sounder-beacon		W	65	✔		✔	✔		✔		✔	✔	✔	✔	✔		✔	✔		✔		24
FA95-KLSR	Dome sounder		R	65*	✔		✔			✔		✔	✔	✔	✔			✔	✔		✔		25
FA95-KLSW	Dome sounder		W	65*	✔		✔			✔		✔	✔	✔	✔			✔	✔		✔		25
FA95-KLBR	Dome beacon		R	65*	✔			✔	R	✔						✔		✔	✔		✔		25
FA95-KLBW	Dome beacon		W	65*	✔			✔	C	✔						✔		✔	✔		✔		25
FA95-KLSBR	Dome sounder-beacon		R	65*	✔		✔	✔	R	✔		✔	✔	✔	✔	✔		✔	✔		✔		26
FA95-KLSBW	Dome sounder-beacon		W	65*	✔		✔	✔	C	✔		✔	✔	✔	✔	✔		✔	✔		✔		26
FA95-LPBEA	Beacon for base mount		W					✔	R							✔		✔			✔		26
FA95-LPBEA-A	Beacon for base mount		W					✔	A							✔		✔			✔		26
FAC95 ALTERNATIVE LOOP ALARM DEVICES (VISUAL & AUDIBLE)																							
An alternate suite of analogue addressable sounders, suitable for where tone compatibility with other types of sounder is not an issue.																							
FAC95-LS-5	Sounder base		W				✔											✔					27
FAC95-LBRDB	Beacon		R	65				✔	C							✔		✔					27
FAC95-LSR	Sounder		R				✔								✔			✔					27
FAC95-LSRDB	Sounder		R	65			✔								✔			✔					27
FAC95-LSW	Sounder		W				✔								✔			✔					27
FAC95-LSWDB	Sounder		W	65			✔								✔			✔					27
FAC95-LSBR	Sounder-beacon		R				✔	✔	R						✔	✔		✔					27
FAC95-LSBRDB	Sounder-beacon		R	65			✔	✔	R						✔	✔		✔					27
FAC95-LSBW	Sounder-beacon		W				✔	✔	R						✔	✔		✔					27
FAC95-LSBWDB	Sounder-beacon		W	65			✔	✔	R						✔	✔		✔					27

* These devices are IP65 rated when used with deep base and gasket provided.

Analogue addressable detectors

With cutting edge design and improved performance, Anatec FA95 analogue addressable fire detectors offer many benefits to installers and users alike. The low profile device package employs a zero insertion force base, a user-friendly addressing methodology and extended data and alarm features.

Key features of Anatec FA95:

- Address Confirmation
- Automatic Type Identification
- Interrupt warning – for call-point speed of response
- Analogue value reporting
- Input bits reporting
- Address card for simple user friendly and accurate identification of detector location
- Anatec FA95 Device Flag

Detector options

The detector range includes optical smoke and temperature sensors, and a multi-sensor device combining elements of both.

Optical sensor operation:

Smoke particles entering the chamber will scatter light from an internal LED onto a photo diode. Internal electronics measures the voltage level from the photo diode and translates this into a digital signal which is sent to the CIE at the next interrogation. The detector is calibrated using a digital count (equivalent to an analogue voltage) for clean air and will flag an alarm when the count value exceeds 55 (the equivalent level at which smoke particles are present above a given threshold).

Heat sensor operation:

A thermistor is used to measure temperature. The electronic network in the device generates a voltage level proportional to the air temperature adjacent.

A standard manual call point is available. Other essential loop devices comprise isolators (including isolator base), loop powered sounders & sounder beacons and beam detectors. For connecting external devices a range of compatible interface units are available: input/output, zone monitors, sounder circuit controllers etc. Many devices and interfaces are available with in-built isolators providing excellent loop integrity.

Detector mounting base FA95-ACB (white)

A common mounting base for Anatec FA95 and Discovery detectors.
Features:

- Stainless steel terminals
- Fitted with a universal address card (FA95-XPC)
- Grub screw for locking the detector

SPECIFICATION	
Termination	Terminals can take up to 2.5mm² diameter wire
Construction	White moulded polycarbonate
OPTION	
FA95-ABB	Detector mounting base (black body)

FA95-ACB

FA95-ABB

Analogue addressable detectors

FA95-OPT

FA95-OPTB

Optical smoke detector (white) FA95-OPT

Smoke particles entering the chamber will scatter light from an internal LED onto a photo diode. Internal electronics measure the voltage level and translate this into an analogue value which will be sent to the panel, when it next interrogates the device.

Recommended for general purpose use to give early warning of fire.

SPECIFICATION	
Voltage range	17 – 28Vdc
Average quiescent current at 24V	340µA
Alarm level analogue value	55
Alarm indicator	Clear LED, red light on alarm
Operating temperature	–20 to +60°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	Moulded polycarbonate
Ingress rating	IP23D
Dimensions ø d (mm)	100 x 42 (50 with base)
Weight g	105 (157 with base)
Standards	EN54-7: 2000
OPTION	
FA95-OPTB	Optical smoke detector (black body)

FA95-MUS

Multi-sensor detector FA95-MUS

The unit combines both optical and temperature sensor processes to give indication of a fire. It is sensitive to both smouldering and flaming fires (i.e. can be used where an ionisation type might have been used previously.)

SPECIFICATION	
Voltage range	17 – 28Vdc
Average quiescent current at 24V	500µA
Alarm level analogue value	55
Alarm indicator	2 clear LEDs, red light on alarm
Operating temperature	–20 to +60°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	White moulded polycarbonate
Ingress rating	IP23D
Dimensions ø d (mm)	100 x 50 (58 with base)
Weight g	105 (160 with base)

Heat detector Fixed temperature FA95-HDS (A2S)

The standard HDS heat detector responds to increasing air temperature and triggers an alarm at 55°C. This device is suitable for areas where the ambient temperature is considered to be higher than normal room temperature, such as kitchens and factory hot work areas.

FA95-HDS

SPECIFICATION

Voltage range	17 – 28Vdc
Average quiescent current at 24V	250µA
Alarm level analogue value	55
Alarm indicator	Red light LED on alarm
Operating temperature	–20 to + 70°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	White moulded polycarbonate
Ingress rating	IP53
Dimensions ø d (mm)	100 x 42 (50 with base)
Weight g	105 (157 with base)
Standards	EN54-5: 2000

Heat detector High temperature FA95-HTT (CS)

The high temperature HTT model will register a fire at 90°C, making it suitable for boiler rooms, as well as other areas where the ambient temperature is considered to be higher than normal room temperature (kitchens and factory hot work areas etc.)

FA95-HTT

SPECIFICATION

Voltage range	17 – 28Vdc
Average quiescent current at 24V	250µA
Alarm level analogue value	55
Alarm indicator	Red light LED on alarm
Operating temperature	–20 to + 70°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	White moulded polycarbonate
Ingress rating	IP53
Dimensions ø d (mm)	100 x 42 (50 with base)
Weight g	105 (157 with base)
Standards	EN54-5: 2000

Analogue addressable call points/ancillary devices

FA95-300-RS-ISO

RSL800

Manual call point with isolator FA95-300RS-ISO

Fitted with frangible element. A key test facility is situated underside, which is fully reset when the key is removed.

SPECIFICATION

Voltage range	17 – 28Vdc
Average quiescent current at 24V	100µA
Alarm level analogue value	64
Alarm indicator	Red LED on alarm
Operating temperature	–20 to +60°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	Moulded polycarbonate
Ingress rating	IP24
Dimensions hwd (mm)	89 x 93 x 26.5
Standards	EN54-17: 2005

ACCESSORIES

FA95-3RS-COV	Clear polycarbonate hinged call point cover
FA95-3RS-KEY10	Spare call point key (pack of 10)
RSL800	Fire call point notice sticker

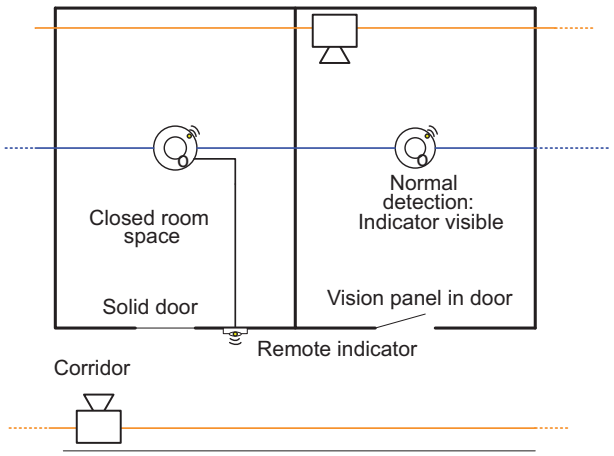
FAP6-P10

Remote indicator unit FAP6-P10

A remote indicator is used to help an investigator quickly identify the location where a device has registered a fire, without having to gain entry to every room or inaccessible space.

SPECIFICATION

LED indicator	Red
Termination	Terminal block
Dimensions ø d (mm)	85 x 85 x 5
Weight g	38.2



Discovery analogue addressable detectors

Discovery is a powerful, intelligent, digital communication protocol, developed specifically to cater for modern day application requirements. Three different modes of operation are available: Normal, Read and Write. This enables an extensive exchange of information between the loop devices and the panel.

NORMAL MODE: is identical to Anatec FA95 but with some powerful extensions for mode selection and detector sensitivity drift warning.

READ MODE: allows loop device information, such as installation and servicing data, to be read by the control panel.

WRITE MODE: enables the control panel to write information to the loop device, such as detector response mode.

Detector options

The detector range includes optical smoke and temperature sensors, a multi-sensor device with a programmable combination of optical and heat detection, and a carbon monoxide detector.

A standard surface mounted call point is available. Other essential loop devices comprise isolators (including isolator base), loop powered sounders & sounder beacons. For connecting external devices a range of compatible interface units are available: input/output, zone monitors, sounder circuit controllers etc. Many devices and interfaces are available with in-built isolators providing excellent loop integrity.

Detector features and benefits

Drift compensation – smoke detector

As the sensor output changes in time owing to contamination such as dust, the signal processor will compensate for this to retain sensitivity.

Heat detection

Full rate of rise (R-o-R) processing for heat detector.

Transient rejection

Low sensitivity to very rapid changes in sensor output minimizing false alarms.

Response modes

One of five settings can be programmed from the panel. A smoke detector can be set for a particular smoke threshold while a heat detector the fixed level and rate of rise sensitivity can adjusted.

Non volatile memory

This can store site and date (last service) information.

Detector mounting base FA95-ACB (white)

A common mounting base for Anatec FA95 and Discovery detectors.
Features:

- Stainless steel terminals
- Fitted with a universal address card (FA95-XPC)
- Grub screw for locking the detector

SPECIFICATION	
Termination	Terminals can take up to 2.5mm² diameter wire
Construction	White moulded polycarbonate
OPTION	
FA95-ABB	Detector mounting base (black body)

FA95-ACB

FA95-ABB

Discovery analogue addressable detectors

FADY-OPT

Optical smoke detector FADY-OPT

Smoke particles entering the chamber will scatter light from an internal LED onto a photo diode. Internal electronics measure the voltage level and translate this into an analogue value which will be sent to the panel, when it next interrogates the device.

Recommended for general purpose use to give early warning of fire.

SPECIFICATION

Voltage range	17 – 28Vdc
Average quiescent current at 24V	400µA
Alarm level analogue value	55
Alarm indicator	2 Clear cover LEDs, red light on alarm
Operating temperature	–20 to +60°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	Moulded polycarbonate
Ingress rating	IP43
Dimensions ø d (mm)	100 x 42 (50 with base)
Weight g	105 (160 with base)
Standards	EN54-7: 2000

FADY-TEM

Heat detector FADY-TEM

The Discovery device can be used in different areas through adjustment of its sensitivity from the panel. One device for 5 classes of response as defined by EN54-5:2000. Linear response from 10 to 80 degrees C.

Heat detector response mode:

MODE	CLASS	APPLICATION TEMPERATURE		RESPONSE TEMPERATURE
		MIN	MAX	
1	A1R	25	50	57
2	A2	25	50	61
3	A2S	25	50	61
4	CR	55	80	90
5	CS	55	80	90

SPECIFICATION

Voltage range	17 – 28Vdc
Average quiescent current at 24V	500µA
Alarm level analogue value	55
Alarm indicator	2 clear LEDs, red light on alarm
Operating temperature	Minimum –20°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	White moulded polycarbonate
Ingress rating	IP53
Dimensions ø d (mm)	100 x 42 (50 with base)
Weight g	105 (160 with base)
Standards	EN54-5: 2000

Multi-sensor detector FADY-MUS

The unit combines both optical and temperature sensor processes to give indication of a fire. It is sensitive to both smouldering and flaming fires (i.e. can be used where an ionisation type might have been used previously). Features:

- Optical and heat thermistor sensors
- Five response modes, for smoke and heat sensitivity
- Response mode selectable from the panel
- Drift compensation

FADY-MUS

SPECIFICATION

Voltage range	17 – 28Vdc
Average quiescent current at 24V	500µA
Alarm level analogue value	55
Alarm indicator	2 clear LEDs, red light on alarm
Operating temperature	–20 to +60°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	White moulded polycarbonate
Ingress rating	IP43
Dimensions ø d (mm)	100 x 50 (58 with base)
Weight g	105 (160 with base)
Standards	EN54-7: 2000 & EN54-5: 2000

Carbon monoxide detector FADY-CO

A supplementary detector for use in areas where there might be smoke stratification or smouldering fire risk. For spaces less than 50m² in area. Can be used where optical detectors are likely to give false alarms – for example, where aerosol contaminents, such as steam, cooking fumes, plumbing solder fumes, are present.

FADY-CO

SPECIFICATION

Voltage range	17 – 28Vdc
Average quiescent current at 24V	500µA
Alarm level analogue value	55
Alarm indicator	2 clear LEDs, red light on alarm
Operating temperature	0 to +50°C
Wiring & polarity	2 wire supply, polarity sensitive
Construction	White moulded polycarbonate
Ingress rating	IP43
Dimensions ø d (mm)	100 x 42 (50 with base)
Weight g	105 (160 with base)
Standards	EN54-7: 2000

Caution: Should not be used on an escape route or other specific cases. Susceptible to false alarms from fumes containing CO, such as from open hearth fires and gas appliances

Discovery analogue addressable call points/ancillary devices

FADY-300-RS-ISO

RSL800

Manual call point with isolator FADY-300-RS-ISO

Fitted with frangible element. A key test facility is situated underside, which is fully reset when the key is removed.

SPECIFICATION	
Voltage range	17 – 28Vdc
Average quiescent current at 24V	350µA
Alarm level analogue value	64
Operating temperature	–20 to +60°C
Wiring & polarity	2 wire supply, polarity insensitive
Construction	Moulded polycarbonate
Ingress rating	IP53
Dimensions hwd (mm)	87 x 87 x 52
Standards	EN54-11
ACCESSORY	
RSL800	Fire call point notice sticker

FMC-ST30

Protective covers for manual call points

A tough protective cover is available to help prevent accidental operation of call points, or prevent unauthorised use by those with malicious intent. The cover is suitable for use in educational buildings, hospitals, nursing homes or places where the threat of false alarm is prevalent.

STANDARD ORDER CODE	DESCRIPTION
FMC-ST30	Surface mount protective cover, with 30mm spacer
FMC-ST50WP	Surface mount weatherproof cover, with 50mm spacer

For further options, please contact technical sales.

FAP-MBCT-FD

Ceiling tile mounting box FAP-MBCT

The fixture is used to fit a detector or sounder into a false ceiling matrix. The devices can be pre-wired and tested before the ceiling is fitted. With the ceiling tiles in place, the MBCT assemblies can be slotted into place.

STANDARD ORDER CODE	DESCRIPTION
FAP-MBCT-FD	Ceiling tile mounting box for detectors
FAP-MBCT-SO	Ceiling tile mounting box for sounders

Analogue addressable loop powered alarms

Emergi-Lite offers a high quality range of addressable loop powered sounders, beacons and bases suitable for both Anatec FA95 and Discovery protocols. These devices complement our Anatec series of analogue addressable fire panels, featured on pages 4 to 11.

All devices in this range are fitted with a bi-directional short circuit isolator which is unaffected by a short circuit on either loop input or output.

Tone compatibility chart

The chart below highlights the tone compatibility between sounder bases, sounders and beacons within the range, to assist installers and scheme designers with appropriate selection of devices.

PRODUCT CODE	DESCRIPTION	FA95-LPS-ISO	FA95-BSNDR	FA95-IBS-ISO	FA95-LPSB-ISO	FA95-LS100R	FA95-LS100W	FA95-LS100R-WP	FA95-LS100W-WP	FA95-LPBEA
FA95-LPS-ISO	Sounder base	□	◆	□	□◆	□	□	□	□	·
FA95-BSNDR	Sounder base	■	■	■	■	■	■	■	■	
FA95-IBS-ISO	Sounder base, integrated	□	◆	□	□◆	□	□	□	□	·
FA95-LPSB-ISO	Sounder beacon base	□◆	◆	□◆	□◆	□◆	□◆	□◆	□◆	☒
FA95-LS100R	Horn sounder	□	◆	□	□◆	□	□	□	□	·
FA95-LS100W	Horn sounder	□	◆	□	□◆	□	□	□	□	·
FA95-LS100R-WP	Horn sounder	□	◆	□	□◆	□	□	□	□	·
FA95-LS100W-WP	Horn sounder	□	◆	□	□◆	□	□	□	□	·
FA95-LPBEA	Beacon	·	·	·	☒	·	·	·	·	◆

Key:

□ Full compatibility with synchronised evacuation and alert tones
■ Similar evacuate tone but not synchronised. Cannot be used together for staged evacuation
◆ Beacons are synchronised
☒ Beacons are synchronised but can drift (after 10 mins)

Sounder base with isolator FA95-LPS-ISO

A loop powered sounder above an integral mounting base for either a Discovery or FA95 sensor head, to sound a warning on fire detection.
Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Two volume ranges, a lower one for sensitive areas (warning hospital staff)
- Sounder tones are synchronised
- Group addressing alerting specific sections of a building

Snap fit cover available in white or red to be ordered separately.

FA95-LPS-ISO

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Maximum sound output, normal to the face	91dBA
Maximum sound output to EN54	83dBA
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	8.25mA
Quiescent current	300µA
Addressing	set by DIL switch
Construction	Polycarbonate
Wiring	Connectors accept up to 2.5mm² cables
IP rating	21C, indoor use only
Dimensions hwd (mm)	115 x 38
Weight g	160
OPTIONS	
FA95-LWC	White snap fit cover
FA95-LRC	Red snap fit cover

FA95-LWC

Loop powered alarms

FA95-BSNDR

Local area sounder base FA95-BSNDR

A loop powered sounder with an integral mounting base for either a Discovery or FA95 sensor head. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Adjustable volume control, from 70 to 85dBA
- Low current consumption

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Sound output dBA	85dBA
Current consumption at 24V (max)	3mA
Quiescent current	<100µA
Addressing	Not addressable – reacts to signal from mounted detector
Construction	Polycarbonate
Wiring	Connectors accept up to 2.5mm² cables
IP rating	23D
Dimensions hwd (mm)	115 x 38
Weight g	140
Standards	EN54-3

FA95-IBS-ISO

FA95-LWC-IBS

Integrated sounder base with isolator FA95-IBS-ISO

The IBS-ISO is a loop powered sounder with an integral mounting base for either a Discovery or FA95 sensor head, to sound the alarm on fire detection. An integral isolator is fitted. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Selectable volume ranges: high range for normal use and low range for sensitive areas (to alert hospital staff)
- Tone synchronisation
- Group addressing to alert particular areas or rooms
- Acoustic self-test. This produces a fault signal if there is no sound at the unit when it is switched on

Sounder caps must be ordered separately.

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Maximum sound output, normal to the face	91dBA
Maximum sound output to EN54	83dBA
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	5mA
Quiescent current	200µA
Addressing	set by DIL switch
Construction	Polycarbonate
Wiring	Connectors accept up to 2.5mm² cables
IP rating	21D, indoor use only
Dimensions hwd (mm)	115 x 38
Weight g	140
Standards	EN54-3 when used in the high range
OPTIONS	
FA95-LWC-IBS	White cap
FA95-LRC-IBS	Red cap

Beacon base with isolator FA95-LBB-ISO

A loop powered flashing beacon with integral mounting base for either a Discovery or FA95 sensor head, to flash a warning on fire detection. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- LEDs are synchronised to flash once a second
- Single or group addressing
- Beacon self-test through LED monitoring
- Built-in isolator helps reduce cost an installation time

Snap fit cover available in white or red to be ordered separately.

FA95-LBB-ISO

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	3.1mA
Quiescent current	300µA
Addressing	set by DIL switch
Construction	Polycarbonate
Wiring	Connectors accept up to 2.5mm² cables
IP rating	21D, indoor use only
Dimensions hwd (mm)	115 x 31
Weight g	109
Standards	EN54-17 (isolating circuit)
OPTIONS	
FA95-LWC-IBS	White snap fit cover
FA95-LRC-IBS	Red snap fit cover

FA95-LWC-IBS

Sounder beacon base with isolator FA95-LPSB-ISO

A loop powered sounder together with a flashing beacon above an integral mounting base for either a Discovery or FA95 sensor head, to sound and flash a warning on fire detection. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Two volume ranges, a lower one for sensitive areas (warning hospital staff)
- Sounder tones are synchronised
- Group addressing alerting specific sections of a building
- Acoustic and beacon self test with fault notification at the panel

Snap fit cover available in white or red to be ordered separately.

FA95-LPSB-ISO

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Maximum sound output, normal to the face	91dBA
Maximum sound output to EN54	83dBA
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	8mA
Quiescent current	300µA
Addressing	set by DIL switch
Construction	Polycarbonate
Wiring	Connectors accept up to 2.5mm² cables
IP rating	21D, indoor use only
Dimensions hwd (mm)	115 x 38
Weight g	160
Standards	EN54-3: higher sound range only, isolating circuit to EN54-17
OPTIONS	
FA95-LWC-IBS	White snap fit cover
FA95-LRC-IBS	Red snap fit cover

FA95-LWC-IBS

Loop powered alarms

FA95-LS100R

FA95-LS100R-WP

100dB Loop powered horn sounder

FA95-LS100R
FA95-LS100R-WP (weatherproof IP66)

Loop powered horn sounder designed for open area use, where a higher level of warning sound is needed. The 100dBA sound level is produced with only a 5mA current consumption. The level can be adjusted to 92dBA (+/- 3dBA) as required. The sounder has onboard electronics which enables it to be addressed and synchronised from the panel through the loop. Features:

- Group addressing to alert particular areas or rooms
- Acoustic self-test – produces a fault signal if there is no sound at the unit when switched on
- Suitable for both Anatec FA95 and Discovery protocols

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Sound output dBA	100
Current consumption at 24V (max)	5mA
Quiescent current	<1.2mA
Addressing	Set by DIL switch or by pulsed mode synchronization addressing
Construction	Moulded ABS in red, with removable back box
Wiring	Connectors accept up to 2.5mm² cables
IP rating	IP21C indoor use only, IP66 weatherproof version
Dimensions hwd (mm)	105 x 105 x 50 110 x 110 x 113 (weatherproof version)
Weight g	215, 340 (weatherproof version)
Standards	EN54-34: 2001, EN54 pt 3:2001 (weatherproof version)
OPTIONS	
FA95-LS100W	Loop powered horn sounder, white
FA95-LS100W-WP	Weatherproof loop powered horn sounder, white

FA95-LSBOR-ISO

100dB Loop powered horn sounder beacon

FA95-LSBOR-ISO
FA95-LSBR65-ISO
(Weatherproof IP66)

The LSB sounder-beacon series is designed for open area use, providing a higher level of sound with a visual flash. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Can be addressed and synchronised from the panel through the loop
- Group addressing to alert particular areas or rooms
- Acoustic self-test – produces a fault signal if there is no sound at the unit when switched on
- Enables DDA compliance

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Sound output dBA	100
Beacon	LED red flash
Current consumption at 24V (max)	8-9mA
Quiescent current	333µA
Addressing	Set by DIL switch or by pulsed mode synchronisation addressing
Construction	Moulded ABS in red (white – weatherproof version), with removable back box
Wiring	Connectors accept up to 2.5mm² cables
IP rating	IP21C indoor use only, IP66 weatherproof version
Dimensions hwd (mm)	105 x 105 x 50 (standard version), 110 x 110 x 113 (weatherproof version)
Weight g	209, 294 (weatherproof version)
Standards	EN54-34: 2001, EN54 pt 3:2001 (weatherproof version)
OPTIONS	
FA95-LSBOW-ISO	Loop powered horn sounder beacon, white
FA95-LSBW65-ISO	Weatherproof loop powered horn sounder beacon, white

Open area sounder FA95-KLSR

A sounder for general use, with a fitted isolator as standard. The sound tone is selectable from a set of 32 options. Features:

- Can be addressed and synchronised from the panel
- Self-test
- Suitable for both Anatec FA95 and Discovery protocols

FA95-KLSR

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Sound output dBA	100
Current consumption at 24V (max)	5mA
Construction	Flame retardant polycarbonate in red
Wiring	Connectors accept up to 2.5mm² cables
IP rating	IP65, with deep base
Dimensions ø h (mm)	97.5 x 104
Weight g	250
Standards	EN54-3
OPTIONS	
FA95-KLSW	Open area sounder, white

Open area beacon FA95-KLBR

An LED beacon device with a red flash, suitable for general fire use in conjunction with sounder devices. An IP65 rating is achieved with the deep base version. Features:

- Can be addressed and synchronised from the panel
- Self-test
- Isolator fitted
- Choice of 32 tones of sound
- Suitable for both Anatec FA95 and Discovery protocols

FA95-KLBR

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Current consumption at 24V (max)	5mA
Construction	Flame retardant polycarbonate in red, translucent cover
Wiring	Connectors accept up to 2.5mm² cables
IP rating	IP65, with deep base
Dimensions ø h (mm)	97.5 x 104
Weight g	250
OPTION	
FA95-KLBW	Open area beacon, white

FA95-KLSBR

Open area sounder beacon FA95-KLSBR

A combined sounder-beacon for general open space use. The beacon flash function is useful for compliance with projects needing to comply with DDA requirements.

- Can be addressed and synchronised from the panel
- Self-test
- Isolator fitted
- Choice of 32 tones of sound
- Suitable for both Anatec FA95 and Discovery protocols

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Sound output dBA	100
Current consumption at 24V (max)	8 – 9mA
Construction	Flame retardant polycarbonate in red
Wiring	Connectors accept up to 2.5mm² cables
IP rating	IP65, with deep base
Dimensions ø h (mm)	97.5 x 104
Weight g	250
Standards	EN54-3
OPTION	
FA95-KLSBW	Open area sounder beacon, white

FA95-LPBEA

Beacon FA95-LPBEA

A local area indoor beacon, to be used in conjunction with sounders in existing or new installations where the sound output may not be loud enough over the ambient noise level, for example a machine shop. The device is also relevant for DDA applications, where the hard of hearing need an alternate means of warning. The beacon also provides a suitable staff alarm in hospitals or care homes. Features:

- High intensity LED source flashing once a second. Lens colour options
- Low current consumption from the loop
- Beacon self-test through LED monitoring
- Lockable once fitted
- Suitable for both Anatec FA95 and Discovery protocols

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Loop loading	Up to 20 beacons between standard isolators
Current consumption at 24V (max)	3mA
Quiescent current	150µA
Construction	Polycarbonate, white base with red translucent diffuser
IP rating	21D, indoor use only
Dimensions hwd (mm)	115 x 38
Weight g	140
OPTION	
FA95-LPBEA-A	Amber lens model

Alternate loop powered alarms

A range of alarm devices compatible with Anatec analogue addressable fire panels. Loop addressing is set on a DIL switch and any sounder can be set as a master with others as slaves. These devices need a separate isolator.

Loop powered base sounder FAC95-LS-5

With integral mounting base suitable for an FA95 sensor head, to sound the alarm on fire detection.

FAC95-LS-5

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Sound output at 1m	91dBA
Current consumption at 24V (max)	7mA
Quiescent current	800µA
Construction	Polycarbonate
Wiring	Connectors accept up to 2.5mm² cables
IP rating	IP42
Dimensions hwd (mm)	106 x 25 (35 with cover)
OPTIONS	
FA95-LWC-IBS	White cap
FA95-LRC-IBS	Red cap

Open area sounder FAC95-LSR

Multi tone, for open area use, operating across a range of frequencies.

FAC95-LSR

Open area sounder-beacon FAC95-LSBR

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Sound output at 1m	94/100dBA
Current consumption at 24V (max)	7.5mA
Quiescent current	800µA
Construction	Flame retardant polycarbonate
Wiring	Connectors accept up to 2.5mm² cables
IP rating	IP43(IP65, with deep base)
Sounder dimensions ø h (mm)	93.6 (DB-93) x 84.3 (DB-101.6)
Sounder beacon dimensions ø h (mm)	93.6 (DB-93) x 89.6 (DB-106.9)
OPTIONS	
FAC95-LSRDB	Open area sounder, red, deep base
FAC95-LSW	Open area sounder, white, shallow base
FAC95-LSWDB	Open area sounder, white, deep base
FAC95-LSBRDB	Open area sounder beacon, red, deep base
FAC95-LSBW	Open area sounder beacon, white, shallow base
FAC95-LSBWDB	Open area sounder beacon, white, deep base

Loop powered LED beacon FAC95-LSBRDB

Addressable bright flash LED beacon with red flash rate of 1Hz and red body.

FAC95-LSBRDB

SPECIFICATION	
Min/max loop operating voltage	17Vdc, 28Vdc
Current consumption at 24V (max)	7mA
Quiescent current	800µA
Construction	Flame retardant polycarbonate
IP rating	IP65, with deep base
Dimensions ø h (mm)	93.6 x 77 (deep base)

Interface modules for intelligent fire detection and alarm systems

An analogue fire system is usually designed with a number of loops, each beginning and ending at the fire panel. The integrity of loop wiring is vital for data transmission, where a short circuit between loop wires would be very serious. Hence it is necessary to have isolating circuits positioned in the loop in order to isolate any section containing a short circuit, until the fault is rectified.

The isolator detailed here is polarity sensitive and will normally switch out the negative arm of the loop, when a short circuit is sensed.

Normally the isolator allows current flow in both directions. If the loop voltage falls beneath a preset threshold the isolator will switch open to isolate the incoming and outgoing lines. The device will test the isolated section regularly and will reconnect when the fault is cleared.

Isolating devices are provided either as standalone products or integral within many interfaces, detection or sounder units. Interfaces with integral isolators and detectors fitted to isolating bases will stay operational when the adjacent section of loop is isolated. The isolating unit, when isolating, will display a yellow fault indication LED.

It is good practice for devices wired between two isolators to be located in the same zone.

FA95-ZMU

Zone monitor with isolator FA95-ZMU

Powers a zone of up to 20 conventional detectors (Orbis or FAP6) from the loop. The device sends a high analogue value to the panel, only when a detector on the monitored circuit changes to an alarm state. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Surface mounting with entry points for cut out on sides and rear
- Connections for loop in & out wiring and detector zone + & – inputs

SPECIFICATION

Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	Red LED for alarm, yellow LEDs for a short circuit loop-wiring fault
Output to panel	Signal on detector alarm
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	11mA in alarm
Quiescent current	4mA
Construction	Polycarbonate box, indoor use
Dimensions hwd (mm)	150 x 90 x 48
Weight g	230

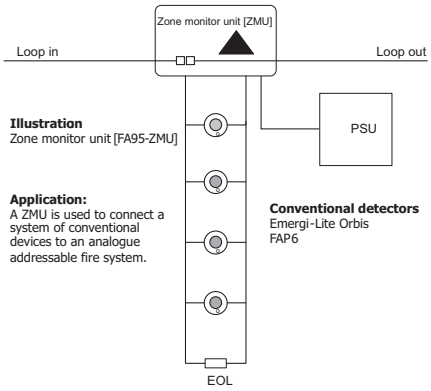
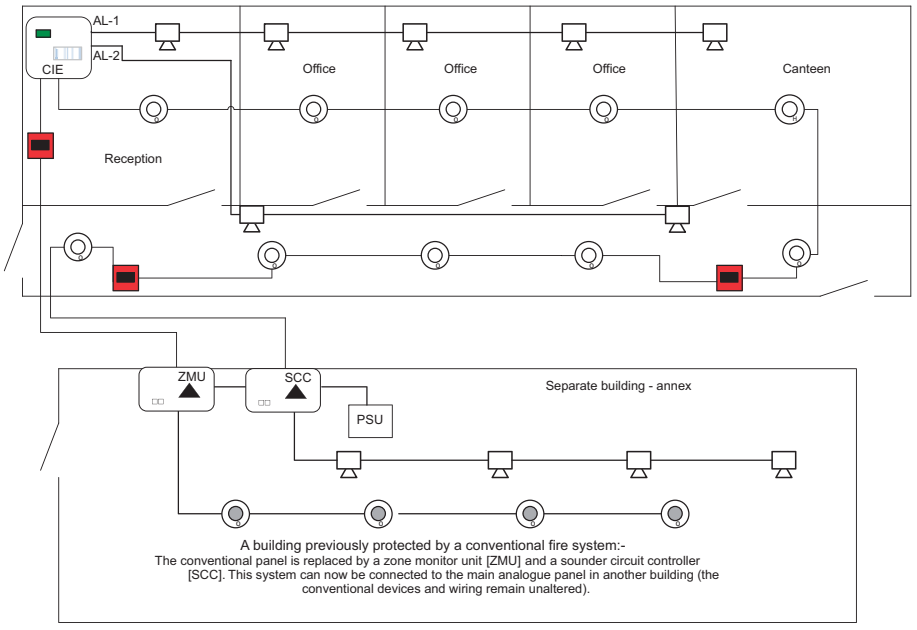


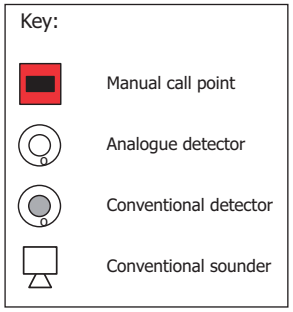
Illustration
Zone monitor unit [FA95-ZMU]

Application:
A ZMU is used to connect a system of conventional devices to an analogue addressable fire system.

Conventional detectors
Emergi-Lite Orbis
FAP6



A building previously protected by a conventional fire system:-
The conventional panel is replaced by a zone monitor unit [ZMU] and a sounder circuit controller [SCC]. This system can now be connected to the main analogue panel in another building (the conventional devices and wiring remain unaltered).



Switch monitor with isolator FA95-SMU

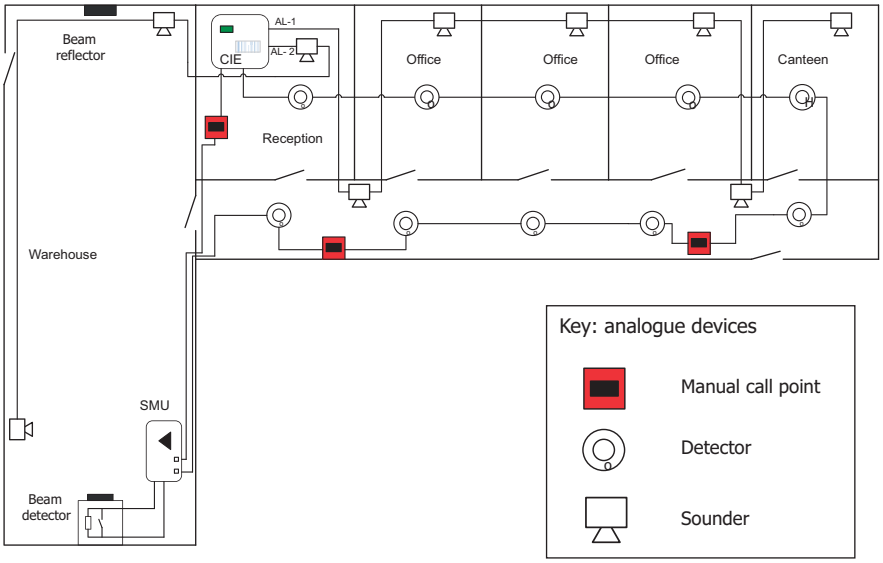
Monitors one or more volt-free contacts connected on a single pair of wires. Open or short circuit faults are reported. Features:

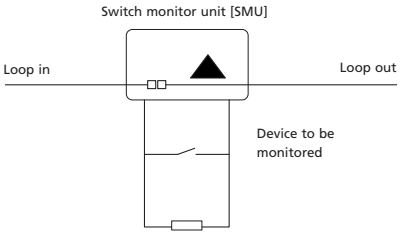
- Suitable for both Anatec FA95 and Discovery protocols
- Surface mounting with entry points for cut out on sides and rear
- Connections for loop in & out wiring and external monitor

FA95-SMU

SPECIFICATION

Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	Red LED for alarm, 2 yellow LEDs for wiring faults
Output to panel	Normal, fault, pre-alarm, alarm
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	3.6mA
Quiescent current	1.25mA
Max. switching current	3A
Construction	ABS plastic box, indoor use
IP rating	IP54
Dimensions hwd (mm)	150 x 90 x 48
Weight g	240





A switch monitor unit [FA95-SMU] is used to input a 'fire' signal down the loop within 10 seconds from the activation of devices such as:
- Sprinkler switch activated
- Beam detector activated
- Plant alarm

Mini switch monitor FA95-SMUM

Monitors one or more volt-free contacts connected on a single pair of wires. Small unit, ideal for fitting into equipment with limited space. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Locate with double sided tape in seat area
- Connect flying leads to user provided connector block. Red & black for loop, yellow & green to remote LED, violet & white to monitored circuit

FA95-SMUM

SPECIFICATION

Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	Red LED for alarm with connection for a remote LED (triggered simultaneously)
Output to panel	Normal, fault, pre-alarm, alarm
Current consumption at 24V (max)	3.5mA on alarm
Quiescent current	1mA
Construction	Polycarbonate moulding with six flying leads
Dimensions hwd (mm)	76 x 47 x 14
Weight g	46

FA95-SMUPLUS

Switch monitor PLUS with isolator FA95-SMUPLUS

Monitors one or more volt-free contacts connected on a single pair of wires. An opto coupled output is fitted for resetting a remote detector and a selectable delay. Applicable for flow switch monitoring. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Surface mounting with entry points for cut out on sides and rear
- Connections for loop in & out wiring and external monitor

SPECIFICATION

Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	Red LED for alarm, 2 yellow LEDs for wiring faults
Output to panel	Normal, fault, pre-alarm, alarm
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	3.6mA
Quiescent current	1.25mA
Max. switching current	3A
Construction	ABS plastic box, indoor use
IP rating	IP54
Dimensions hwd (mm)	150 x 90 x 48
Weight g	240

FA95-SMUM-INT

Mini switch monitor with interrupt FA95-SMUM-INT

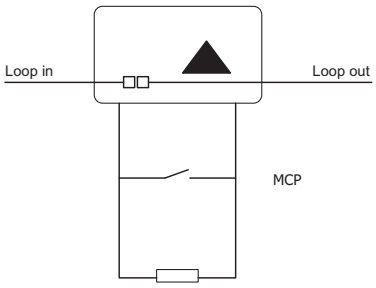
Monitors one or more open switches connected on a single pair of wires and gives a priority response in the event of a fire. For example: to signal when a conventional manual call point (singly or in a zone) is activated. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Locate with double sided tape in seat area
- Connect flying leads to user provided connector block. Red & black for loop, yellow & green to remote LED, violet & white to monitored circuit

SPECIFICATION

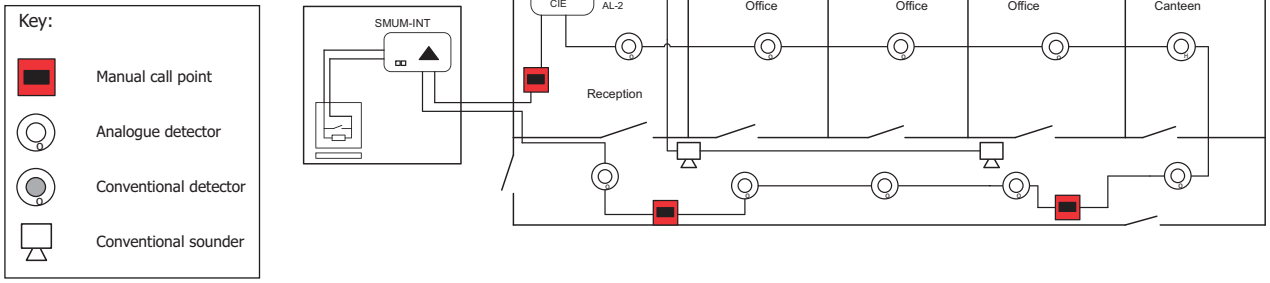
Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	Red LED for alarm with connection for a remote LED (triggered simultaneously)
Output to panel	Normal, fault, alarm
Current consumption at 24V (max)	4mA
Quiescent current	870µA
Construction	Polycarbonate moulding with six flying leads
Dimensions hwd (mm)	76 x 47 x 14
Weight g	46

Switch monitor interrupt unit [SMUM-INT]



A switch monitor interrupt unit [FA95-SMUM-INT] signals back to the CIE within 3 seconds of activation, so that it can be used for priority devices such as:-

- Supervisory call points
- Secure area key operated call points



Sounder circuit controller FA95-SCC

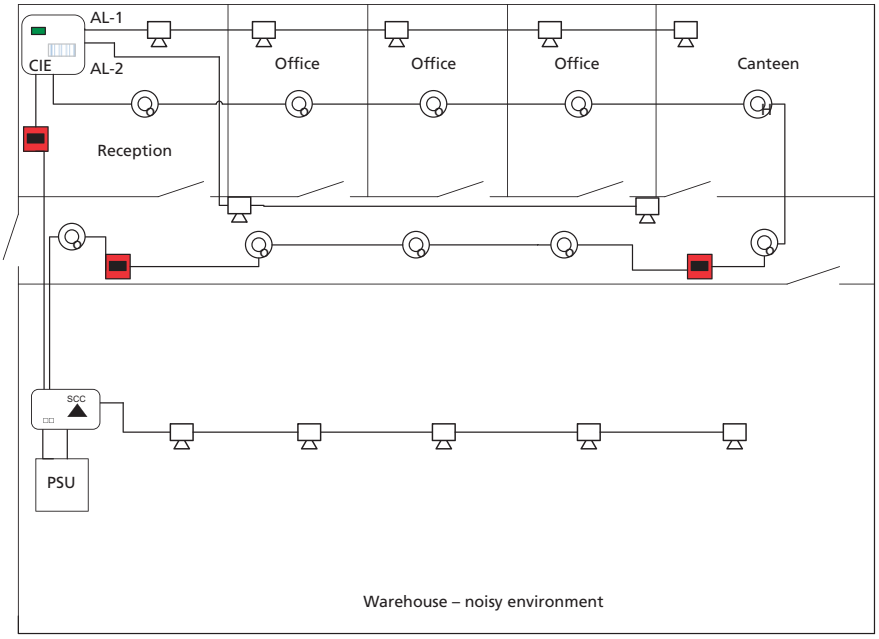
Operates and controls a zone of externally powered sounders. Status report signals are sent to the panel. Sounders are able to work continuously or pulsed, individually or in groups (sounders can be synchronised in pulsed operation.) External power supply is monitored. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Surface mount unit with entry points for cut out on sides and rear
- Connections for loop in & out wiring, sounder circuit, fault inputs & local power supply

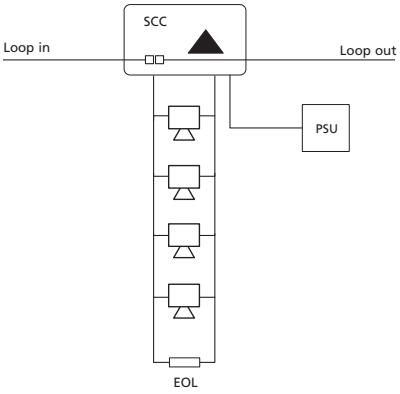
FA95-SCC

SPECIFICATION

Min/max loop operating voltage	SCC is loop powered:17Vdc, 28Vdc. An external supply is required for the alarm load
Indicators	Red LED for alarm, yellow LED for a short circuit loop wiring fault & another yellow LED for fault detection
Output to panel	Signal on short or open circuit fault, or external power supply fault
Isolation	Short circuit isolator fitted
Current consumption, loop, at 24V (max)	3.6mA
Quiescent current	1.95mA
Current consumption, external supply (max)	47mA at 32Vdc plus sounder load
Maximum sounder circuit current	1A at 30Vdc
Construction	ABS plastic box, indoor use
Dimensions hwd (mm)	150 x 90 x 48
Weight g	240

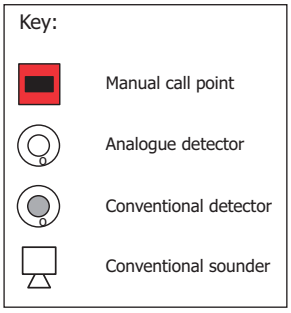


Warehouse – noisy environment



Sounder circuit controller, FA95-SCC controlling conventional 24 volt sounders, when a signal is received from the loop.

Application examples:
- When loop sounders do not provide a high enough sound output required for the premises
- When more than 2 conventional alarm outputs are required on the system

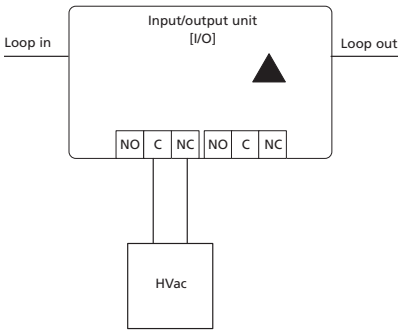


FA95-1CI/O

Input/Output unit with isolator FA95-1CI/O

A two channel I/O interface device for interfacing external equipment and the fire detection system together. Two outputs, with volt-free contacts, are provided from a loop powered relay which is activated by a control signal from the panel. Two inputs (one monitored and one opto-coupled unmonitored) enable open or closed switch positions to be reported along with fault. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Surface mount unit with entry points for cut out on sides and rear
- Connections for loop in & out wiring, relay contacts and external monitoring

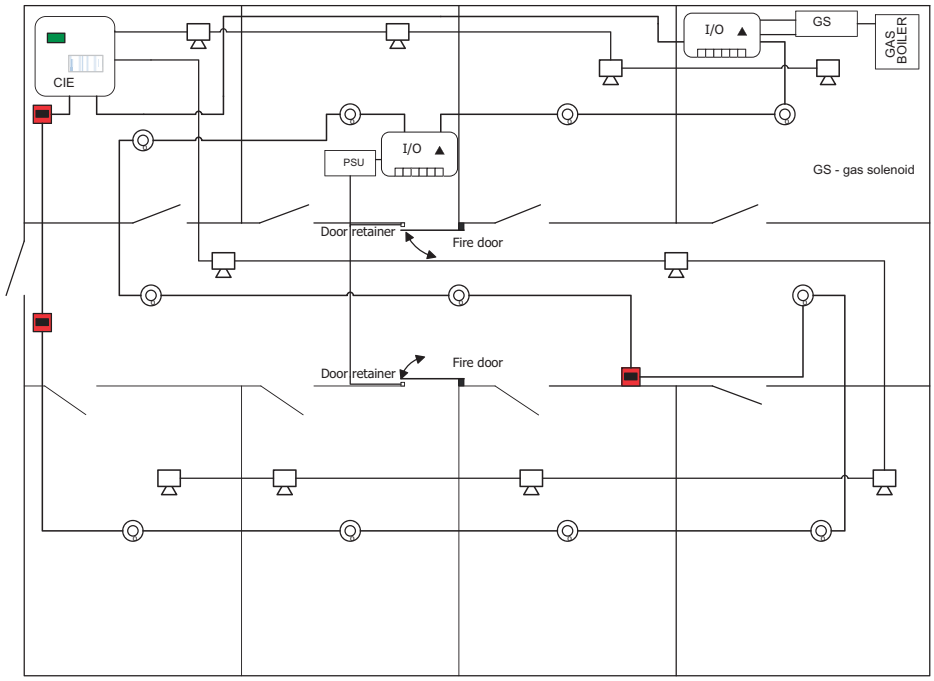


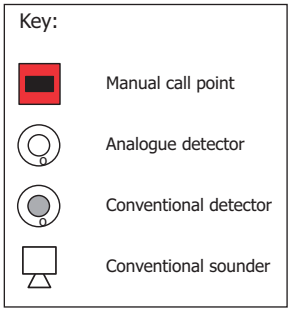
FA95-ICI/O Input/output interface unit
Two single pole volt free relay outputs for controlling various pieces of equipment in the event of a fire, for example:
- Plant shutdown
- Fire dampers
- Door magnets
- Security doors
- Moving a lift to ground floor

An HVac (heating, ventilation or air-conditioning) control is illustrated

SPECIFICATION

Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	2 red LEDs for relay and switch position, 2 yellow LEDs for wiring faults
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	3.5mA
Quiescent current	1.25mA
Max switching current	3A
Construction	ABS plastic box, indoor use
IP rating	IP54
Dimensions hwd (mm)	150 x 90 x 48
Weight g	240





Output unit with isolator FA95-1CO

A two channel output device for interfacing external equipment and the fire detection system together. Two outputs, with volt-free contacts, are provided from a loop powered relay which is activated by a control signal from the panel. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Surface mount unit with entry points for cut out on sides and rear
- Connections for loop in & out wiring and relay contacts

FA95-1CO

SPECIFICATION

Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	1 red LED for relay and switch position, 1 yellow LED for wiring faults
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	3mA
Quiescent current	400µA
Max switching current	3A
Construction	ABS plastic box, indoor use
IP rating	IP54
Dimensions hwd (mm)	150 x 90 x 48
Weight g	240

Mains switching input/output unit FA95-1CO-240

Designed to switch equipment operating at 230V/50Hz, such as mains powered magnetic door holders or other mains powered machinery. Features:

- Suitable for both Anatec FA95 and Discovery protocols
- Volt-free single pole changeover relay output
- Monitored switch input
- Surface mount unit with entry points for cut out on sides and rear
- Connections for loop in & out wiring, mains and relay

FA95-1CO-240

SPECIFICATION

Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	1 red LED for relay set, 1 red LED for switch input closed, 1 yellow LED for wiring faults
Isolation	Short circuit isolator fitted
Current consumption at 24V (max)	3.5mA
Quiescent current	1.25mA
Max switching capacity	1.25kVA
Construction	ABS plastic box, indoor use
IP rating	IP54
Dimensions hwd (mm)	150 x 90 x 48
Weight g	240

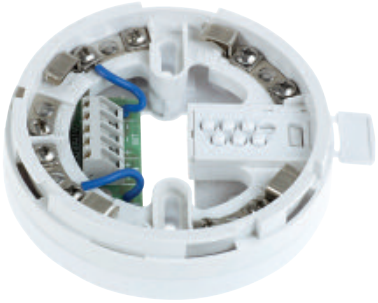
Loop isolators

FA95-LIU

Standard loop isolator FA95-LIU (unit) FA95-LLB (base)

A standalone isolating unit with separate base, to be fitted in the loop between detectors and other loop devices.

- Suitable for Anatec FA95 protocol
- Unit and base are to be ordered separately



FA95-LIU-B20D

Isolating base FA95-LIU-B20D

An isolating unit with integral base seat for a detector, which will isolate a short circuit fault in the loop section, while allowing the mounted detector to operate.

For applications where it is not necessary to fit an isolator with each detection device, up to 20 devices can be fitted in between the isolating base and the next on the loop, provided the switch on surge current is below 20mA. Features:

- Addressing card fitted
- Suitable for Anatec FA95 protocol

SPECIFICATION

Min/max loop operating voltage	17Vdc, 28Vdc
Indicators	Yellow LED illuminated when in the 'isolated condition'
Current consumption at 18V, 28V	23µA (4mA with adjacent loop section isolated), 43µA
Operating temperature	–20 to + 70°C
Dimensions ø d (mm)	100 x 24
Weight g	100