Context Plus

XFP 1-2 LOOP NETWORKABLE ADDRESSABLE FIRE PANELS

Certified to EN54 parts 2 & 4 by the LPCB, the XFP Range of addressable fire panels offers high performance at a competitive price. Available in two different versions (a cost-effective single loop 16 zone panel in a plastic enclosure and a robust 1 or 2 loop 32 zone metal panel), the range offers an array of user and installer-friendly features.

Single Loop 16 Zone Fire Panel
Part Number XFP501E/X/CON

One Loop 32 Zone Fire Panel
Part Number XFP501/X/CON

Two Loop 32 Zone Fire Panel
Part Number XFP502/X/CON

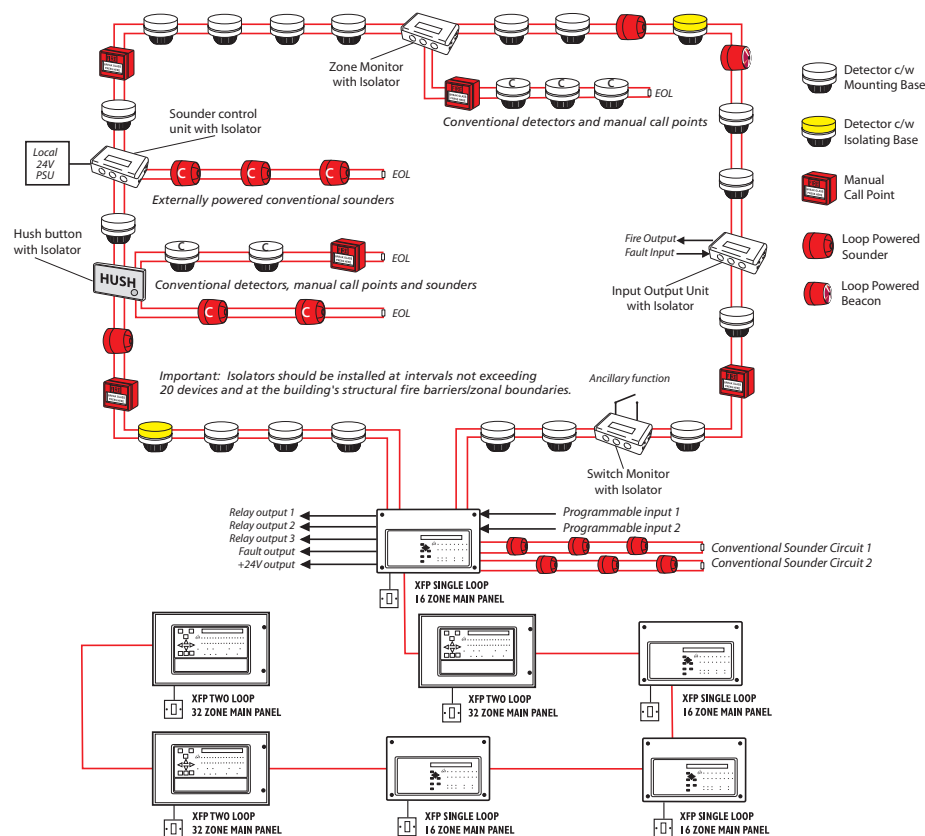**Powerful** loop and battery calculation tool now available online

Key Features

▸ **Third-party certified to EN54 parts 2 and 4 by the LPCB.**

▸ **Full compatibility with the Context Plus range of fire detectors, call points, sounders, beacons and control modules.**

▸ **Three access levels - 1 (general), 2 (authorised user) and 3 (engineer)**

▸ **Combined keypad/keyswitch entry to access levels 2 and 3**

▸ **The ability to interconnect up to eight XFP main panels (any variant) plus an additional four XFP repeater panels per main onto a two wire RS485 network.**

▸ **Two independently programmable conventional sounder circuits.**

▸ **Two programmable inputs.**

▸ **A fault output relay and three programmable relay outputs with voltage free changeover contacts.**

▸ **Three zone dependency functions (A, B & C to EN54-2 Clause 7.12)**

▸ **A day/night (building occupied/unoccupied) function.**

▸ **An investigation delay period function.**

▸ **Individual sensitivity settings for each device.**

▸ **A phased evacuation and delays to outputs facility (to EN54-2 Clause 7.11)**

▸ **An alarm counter that records the number of times the panel has been in an alarm state (to EN54-2 Clause 7.13).**

▸ **Powerful short circuit protected loop drivers, capable of supporting up to 40 loop powered 10mA sounders per loop.**

▸ **An integral EN54 switch mode PSU rated @ 185-260V a.c. 50/60Hz (3A on 32 zone panel, 1.4A on 16 zone panel).**

▸ **Adjustable contamination levels.**

▸ **Earth fault monitoring.**

▸ **Push button access code or keyswitch entry to Access Levels 2 and 3 (depending on model purchased).**

▸ **An easy to read, 80 character back-lit display.**

▸ **40 characters of custom text per device.**

▸ **999 event monitoring.**

▸ **Comprehensive test facilities (to EN54-2 Clause 10) and a wide range of maintenance and commissioning functions including auto-learn loops, monitor a point, test outputs, one man walk test and loop continuity test).**

▸ **An intuitive Windows based upload-download PC program that allows the system to be programmed quickly and easily.**

A TYPICAL XFP ADDRESSABLE LOOP / XFP NETWORKING DETAILS

Below is a diagram of a typical Context Plus analogue addressable loop fitted with a selection of detectors, loop powered sounders, modules and isolators, all connected to an XFP single loop 16 zone panel.

The diagram also illustrates how a series of XFP main panels can be networked using the range's powerful RS485 network.

Zone Monitor with Isolator

EOL

Conventional detectors and manual call points

Sounder control unit with Isolator

Local 24V PSU

C C C EOL

Externally powered conventional sounders

Hush button with Isolator

HUSH

Conventional detectors, manual call points and sounders

C C EOL

EOL

Important: Isolators should be installed at intervals not exceeding 20 devices and at the building's structural fire barriers/zonal boundaries.

Fire Output / Fault Input

Input Output Unit with Isolator

Ancillary function

Switch Monitor with Isolator

Detector c/w Mounting Base

Detector c/w Isolating Base

Manual Call Point

Loop Powered Sounder

Loop Powered Beacon

Relay output 1
Relay output 2
Relay output 3
Fault output
+24V output

Programmable input 1
Programmable input 2

Conventional Sounder Circuit 1
Conventional Sounder Circuit 2

XFP SINGLE LOOP 16 ZONE MAIN PANEL

XFP TWO LOOP 32 ZONE MAIN PANEL

XFP TWO LOOP 32 ZONE MAIN PANEL

XFP SINGLE LOOP 16 ZONE MAIN PANEL

XFP TWO LOOP 32 ZONE MAIN PANEL

XFP SINGLE LOOP 16 ZONE MAIN PANEL

XFP SINGLE LOOP 16 ZONE MAIN PANEL

This diagram is provided for illustration purposes only and you should always refer to the relevant XFP panel/device instructions as appropriate before installation.

Note that the descriptions and availability of the devices shown may not be applicable to all manufacturer's protocols.

FEATURES OF THE XFP'S NETWORK PROTOCOL

The XFP's network protocol allows the interconnection of up to eight XFP main panels (any mix) over a two-wire RS485 network. Alternatively, the network can be used to connect up to eight XFP repeaters to one XFP main panel. It is not possible to mix XFP main panels and repeaters on the same network.

Key features of the XFP's network protocol when used for interconnecting XFP main panels:

▸ Allows the interconnection of up to eight XFP main panels (any mix of single loop 16 zone XFPs and 1 and 2 loop 32 zone XFPs)

▸ Up to 1 km of cable may be fitted to an XFP main panel network.

▸ Each networked XFP main panel can be programmed to accept Fires, Faults and actions such as Silence Alarm Sounders and Panel Reset from other main panels. They will also Accept Disablement commands for zones, sounders and output sets from other main panels.

▸ All panels monitor all other panels for network wiring faults.

▸ Fires on remote panels are displayed on local panels including the point description of the alarm's origin.

▸ Faults on remote panels are displayed on local panels including the point description of detectors.

▸ The network supports the programming of data into remote panels from a PC at a local panel

▸ Time/date is common to all networked panels.

▸ All networked main panels require a network communication card

Key features of the XFP's network protocol when used for connecting XFP repeaters

▸ Allows the connection of up to eight XFP repeaters to one non-networked main panel. The XFP main panel must have a network communication card fitted.

▸ Up to 500m of cable may be fitted to an XFP repeater network.

▸ Each XFP repeater offers all the functions and controls of an XFP main panel.

XFP ORDER CODES

Code	Description
XFP501E/X/CON	XFP Networkable single loop 16 zone panel. Keypad/keyswitch entry, c/w 1.4A psu, plastic enclosure
XFP501/X/CON	XFP Networkable one loop 32 zone panel. Keypad/keyswitch entry, c/w 3A psu, metal enclosure
XFP502/X/CON	XFP Networkable two loop 32 zone panel. Keypad/keyswitch entry, c/w 3A psu, metal enclosure
XFP510-16/CON	XFP Networkable repeater panel, 16 zones. Keypad/keyswitch entry, c/w psu, plastic enclosure
XFP510-32/CON	XFP Networkable repeater panel, 32 zones. Keypad/keyswitch entry, c/w psu, metal enclosure
CFP761	XFP network communication card for XFP 16 zone main panels
AFP711	XFP network communication card for XFP 32 zone main panels
AFP385	Flush mount bezel for XFP 32 zone main & repeaters
XFP507	XFP Upload download software kit (all protocols). Windows compatible. Includes programming lead
AFP709	XFP off-board printer kit

Notes: *One network communication card is required per networked main panel. Repeaters are supplied with a network communication card already fitted. XFP 16 zone panels are designed so they can be surface or semi-flush mounted without the need for an additional bezel.*

XFP 1-2 LOOP NETWORKABLE ADDRESSABLE FIRE PANELS

XFP Technical Specifications

	SINGLE LOOP 16 ZONE XFP PANELS XFP501E/X/CON	ONE OR TWO LOOP 32 ZONE XFP PANELS XFP501/X/CON XFP502/X/CON
Power Supply Specification		
Mains supply	230V a.c. ± 10% 50/60Hz. Max current 350mA	230V a.± 10% 50/60Hz. Max current 680mA
Internal power supply	27V d.c Nominal	27V d.c Nominal
Total output current limited to	1.4A @ 230V a.c.	3A @ 230 V a.c.
Supply and battery charger monitored for failure	Yes	Yes
Batteries monitored for disconnection and failure	Yes	Yes
Batteries protected against deep discharge	Yes	Yes
Max. battery size and type	3.2 Ahr VRLA	7.0 Ahr VRLA
Specified batteries for LPCB approved systems	2 x Yuasa NP3.2-12	2 x Yuasa NP7-12
Quiescent current drain (1 loop unloaded)	< 50mA	< 80mA
Quiescent current drain (2 loop unloaded)	not applicable	<100mA
Earth fault monitoring	Yes (any conductor)	Yes (any conductor)
Temperature compensated charging	Yes	Yes

Loop Driver Specification		
Number of loop drivers	1	1 (XFP501/X/CON) 2 (XFP502/X/CON)
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
Max. loop output current	500mA (Voltage: 25V min, 34V max)	500mA (Voltage: 25V min, 34V max)
Max. number of addressable devices per loop	126	126
Max. number of loop powered sounders per loop @ 10mA	40	40
Number of programmable sounder groups	16	16
Number of programmable output sets	16	16

Conventional Sounder Circuit Specification		
Number of programmable circuits	2	2
End of line resistor value	6800 Ω 5% Tol. 0.25 W	6800 Ω 5% Tol. 0.25 W
Line monitored for open and short circuit faults	Yes	Yes
Outputs fused at	400mA	400mA
Max. number of sounders @ 20mA	40	80

Auxiliary Outputs	
Type	Relay voltage free single pole changeover
Max switching current	1A
Max switching voltage	30 V d.c
Relay 1	Programmed from cause and effect
Relay 2	Programmed from cause and effect
Relay 3	Programmed from cause and effect
Fault	Active when no faults are present
'24V' Aux Power Output	19.5V min, 28V max. Max current 100mA. Protected by resettable overload circuit

Auxiliary Inputs	
Input 1	Connect to 0V to trigger. Max input voltage 27V d.c (non-latching). Programmable from cause and effect.
Input 2	Connect to 0V to trigger. Max input voltage 27V d.c (non-latching). Programmable from cause and effect.

Fuses (to IEC - EN60127 Pt2)		
Mains Fuse	1A HRC Ceramic 20mm	1A HRC Ceramic 20mm
Battery Fuse - limits the current drawn from the battery	1.6A F 20mm	3.15A F 20mm

Panel Indicators and Controls		
Control buttons	Silence, Reset, Resound, Investigate; More Information; Menu	
Event scrolling and menu access buttons	Up (1); Down (2); Accept (3); Abort (4)	
Liquid Crystal Display	Two lines x 40 characters, backlit	
Number of Zonal LED indicators	16	32
Other LED indicators	General Fire, System Energised; Pre-Alarm; Remote Output Activated; Menus Accessed; Disablement; Test; Remote Output Disabled; Silenced; General Fault; System Fault;	

Physical Dimensions		
Approx. dimensions of back box (W x H x D)	380 x 235 x 77mm (plastic). Includes 'lip'.	410 x 250 x 80mm (metal)
Approx. dimensions of lid (W x H x D)	380 x 235 x 16mm (plastic)	439 x 274 x 7mm (metal)
Approx. weight (without batteries)	1.9Kg	4.5kg

Cabling Requirements	
Type of cable	Fire resistant screened cable, minimum size 1mm²
Max. cable length per loop	1km
Connector blocks	Plug-on type, largest acceptable conductor size 1.5mm²
Max. allowable loop impedance (each conductor)	20 Ω
Max. cable capacitance	.27µF

Network Specification		
Connection	Via CFP761 network driver card fitted at main panel	Via AFP711 network driver card fitted at main panel
Max. no. of main panels per network	8	8
Max. no of repeaters per non-networked main panel	8	8
Max. cable length per network	1km (main panel network); 500m (repeater network)	1km (main panel network); 500m (repeater network)

PC/Printer Interface		
PC connection	Via main panel RS232 molex connector (lead supplied in XFP507 upload/download software kit)	
Printer connection	Not applicable	Via main panel RS232 connector block.

Operating conditions

The components are selected to operate within their specification when the environmental conditions outside the enclosure comply with class 3k5 of IEC 721-3-3 : 1978.
Temperature range:- -5 to +40ºC. Maximum relative humidity: 95%

PICTURE a fire panel that is touchscreen-controlled, a breeze to install, provides clear and constant feedback on all aspects of system activity and is fully compliant with all relevant standards. Picture the ZFP - a powerful, intuitive and feature-rich range of 1 to 8 loop addressable fire panels from Context Plus.

ZFP Standard Cabinet
(PART NUMBERS ON PAGE 8)

Intertek

ZFP Medium Cabinet
(PART NUMBERS ON PAGE 8)

Intertek

Compact Repeaters
(PART NUMBERS ON PAGE 8)

Intertek

Powerful loop and battery calculation tool now available online

Key Features

▸ **Third-party certified to EN54 parts 2 and 4 by Intertek**

▸ **Communication protocol - Apollo XP95/Discovery**

▸ **Full compatibility with the Context Plus range of fire detectors, call points, sounders, beacons and control modules.**

▸ **Three cabinet sizes - standard (1, 2 or 4 loops), medium (2, 4, 6 or 8 loops) and large (2, 4, 6 or 8 loops)**

▸ **Full colour LCD touchscreen with an intuitive interface & digital QWERTY keyboard (touchscreen can be fully customised with a company logo)**

▸ **Secure fault tolerant network (needs separate network driver PCB)**

▸ **Up to 128 peer to peer node capacity (64 panels plus up to 64 Compact Controllers/Repeaters**

▸ **Very flexible cause and effects**

▸ **Wide range of Switch & Indicator modules c/w slide-in labels for straightforward customisation. (Common word processor templates available online)**

▸ **Multiple "A-Bus" peripherals (I/O Units, Relays, Sounder Extender Cards, Conventional Zone Cards, etc)**

▸ **Programmable via galvanically isolated USB port**

▸ **Up to 200 separate zonal LEDs per panel (100 on standard sized cabinets)**

▸ **10,000 programmable and indicatable detection zones**

▸ **Up to 38 characters of custom text per loop device**

▸ **Wide range of supported languages**

▸ **Emailable firmware updates (no flash programmer required!)**

▸ **20,000+ event memory (filterable by fire, fault and date)**

▸ **Automatic daylight saving (BST/GMT)**

▸ **4 programmable operational modes**

▸ **Optional thermal printer with front-loading paper**

▸ **PC logging option for end-user**

▸ **4 GB Micro SD memory simplifies off-site configuration**

▸ **Well-designed metal cabinets aid installation**

▸ **20-way heavy duty brass earth bar(s) as standard**

▸ **72-hour standby (plus 30 min alarm) in standard cabinets**

▸ **Powerful engineering and commissioning functions including 'SafeMode', 'DeviceManager' and more**

▸ **Powerful and intuitive PC programming tools**

▸ **Optional graphical interface solutions**

▸ **Up to 18Ah batteries in standard cabinets, 38Ah in larger cabinets.**

ZFP 1-8 LOOP NETWORKABLE ADDRESSABLE FIRE PANELS

ZFP PART NUMBERS

Standard

ZFP PANELS WITH 40 ZONAL LEDs

Z015040NS/X/CON
ZFP 1 loop Panel with 40 zonal LEDs (Z47), 5A PSU.

Z025040NS/X/CON
ZFP 2 loop Panel with 40 zonal LEDs (Z47), 5A PSU.

Z045040NS/X/CON
ZFP 4 loop Panel with 40 zonal LEDs (Z47), 5A PSU.

Standard

ZFP PANELS WITH 40 ZONAL LEDs & ONBOARD PRINTER

Z025040PS/X/CON
ZFP 2 loop Panel with 40 zonal LEDs and on-board printer (Z49), 5A PSU.

Z045040PS/X/CON
ZFP 4 loop Panel with 40 zonal LEDs and on-board printer (Z49), 5A PSU.

Compact

ZFP REPEATERS, EXPANSION PCBs & GRAPHIC INTERFACES

ZREP1S
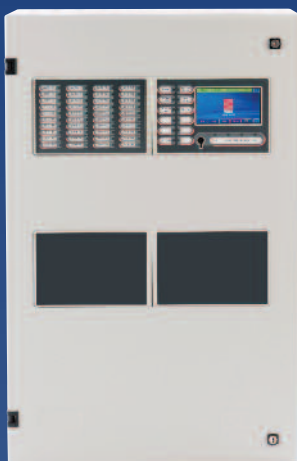ZFP Repeater/Compact Controller. Surface mount. Requires BF360-24 1A 24V boxed PSU.

ZHN
ZFP RS485 Network PCB (one req. per main ZFP panel)

Z02LOOP/X
2 loop Extender PCB. (Extends 2 loop ZFP to 4 loops)

Medium

ZFP PANELS WITH 40 ZONAL LEDs

Z065040NM/X/CON
ZFP 6 loop Panel with 40 zonal LEDs (Z47), 5A PSU.

Z085040NM/X/CON
ZFP 8 loop Panel with 40 zonal LEDs (Z47), 5A PSU.

Medium

ZFP PANELS WITH 40 ZONAL LEDs & ONBOARD PRINTER

Z065040PM/X/CON
ZFP 6 loop Panel with 40 zonal LEDs and on-board printer (Z49), 5A PSU.

Z085040PM/X/CON
ZFP 8 loop Panel with 40 zonal LEDs and on-board printer (Z49), 5A PSU.

Miscellaneous

ZTOOLS ZFP programming tools (Windows)

Z11 4 Relay PCB (half size)

Z12 8 Relay PCB (full size)

Z13 8 Input output PCB (half size)

Z14 16 Input output PCB (full size)

Z15 4 x Conventional 1A 6K8 Sounder Circuit PCB (full size)

Z16 4 x Detection Zone & 2 x 1A 6K8 Sounder Circuit PCB (full size)

GRAPHICS PACKAGES

ZG1 ZFP Single Panel Graphics Interface Package

ZG2 ZFP 1 to 5 Panel Graphics Interface Package

ZG3 ZFP 1 to 5 Panel Graphics Interface Package with TCP/IP remote access manager

ZG4 ZFP 1 to 99 Panel Graphics Interface Package with TCP/IP remote access manager

Contact us for a full list of graphic package features

BEZELS, STAINLESS STEEL FRAMES & VISION WINDOWS - *Contact us for details.*

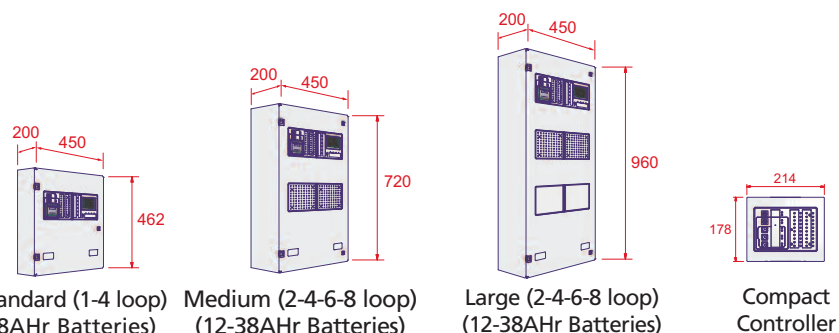| POWER SUPPLY & CHARGER	
Mains Supply Operating Voltage	230Vac ±10% 50/60Hz 810mA max.
Rated current	810mA Max (Standard cabinet ZFPs; 1.35A Max (Medium & Large Cabinet ZFPs)
Internal power supply	5A (Standard cabinet ZFPs); 5A (Medium & Large Cabinet)
Max. continuous output current (incl. charging)	5A (Standard cabinet ZFPs; 5A (Medium & Large Cabinet)
Max. VRLA battery size and type	2 x 12V 18Ah (Standard cabinet ZFPs); 2 x 12V 38Ah (Medium & Large Cabinet)
LOOP DRIVERS	
Number of loops	1, 2, 4, 6 or 8 dependent on model
Max. output current per loop	500mA (Voltage: 25V min; 34V max)
Communication Protocol	Context Plus XP95 (max. 127 addressable devices per loop)
Type of cable / Max. cable length per loop	Fire resistant screened, up to 2.5mm2 / 1KM max length
Max. allowable loop impedance/capacitance	20 ohm (each conductor)
Max. cable capacitance	.27uF
CONVENTIONAL SOUNDER CIRCUITS	
Number/type of conventional sounder circuits	2 x 1A outputs. Protected by resettable overload circuit 19.5V min; 28V max
Output voltage	19.5V minimum, 28V maximum
Type of cable / Max. cable length per loop	Fire resistant screened, up to 2.5mm2 / 1KM max length
AUXILIARY INPUTS (PROGRAMMABLE)	
Number of auxiliary inputs	2 (Connect to 0V to trigger, Max. input voltage 27Vdc non-latching). 6800 ohm, 5%Tol, 0.25W
EOL resistor value (supplied)	6800 ohm, 5% tolerance, 0.25W
Trigger resistor (supplied)	470R, 0.25W
RELAY OUTPUTS (PROGRAMMABLE)	
Number of relay outputs	2 x programmable auxiliary relays; 1 x failsafe fault relay; 1 x 24Vdc aux. power output
Relay type & outputs	1A, 30Vdc (maximum). Voltage free, single pole changeover
Fault relay	Active when faults are present or on total power failure
24Vdc auxiliary power output	19.5V minimum, 28V maximum. Max current 100mA.
INDICATORS AND CONTROLS	
Standard provision	All models include a Z41 Control module which comprises a full colour 4.3"touchscreen All mandatory EN54 indicators, 3 spare LEDs & a keyswitch allowing access to AL2
Zonal Indicators	Up to 200 programmable LEDs available via Switch & Indicator expansion modules
Switches & onboard printers	Multiple switch & printer configs available via Switch & Indicator expansion modules
Switch & Indicator module capacity	2 (standard cabinets); 4 (medium cabinets); 6 (large cabinets). 1 x Z41 req. per panel
COMMUNICATION BUSES	
On-board Serial Printer (Optional)	1 x RS232 connector
Pager/DECT Interface	1 x RS232 connector
Networking	1 x RS485 connector (hi-integrity fault-tolerant)
Peripheral Bus (A-Bus)	1 x RS485 connector. Allows the connection of up to 15 A-Bus PCBs. Wiring requirements = 2 core plus screen plus 2 core for power.
PC Interface	Galvanically isolated USB connector (provided on the Z41 Control/Display module)
NETWORKING	
Network type	RS485 (hi-integrity fault tolerant, ring wired). 1xZHN PCB required per networked panel
Maximum no. of network nodes	128 (up to 64 x 8 loop panels and 64 x compact controllers)
Type of cable / Max. cable length	Fire resistant screened, up to 2.5mm2; 1KM between nodes; 128KM (max network length)
Network wiring	Fire resistant screened cable, up to 2.5mm2
Detail	Events (Fires, Faults, Disablements, Tests) & Actions (Silence/Resound Sounders, Reset) can be accepted over the network.Zones, Input & Output Groups, etc can be shared over the network
MECHANICAL & ENVIRONMENTAL	
Finish & IP rating	Light grey texture (RAL7035) epoxy. Mild steel. Zintec 1.2mm
Operating temperature / humidity	-5°C to +40°C / 5% to 95 % R.H non condensing
Dimensions (lid & back box) H x W x D mm	

Standard (1-4 loop)
(18AHr Batteries)

Medium (2-4-6-8 loop)
(12-38AHr Batteries)

Large (2-4-6-8 loop)
(12-38AHr Batteries)

Compact
Controller

Context Plus

Other products in the Context Plus range

Conventional fire detection panels

Conventional smoke and heat detectors

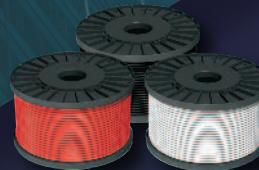HFC227ea Conventional fire suppression systems

Conventional signalling devices

Conventional wireless fire alarm systems

Stand-alone mains & battery operated smoke, heat & CO alarms

Fire resistant cables

EN54 compliant power supplies

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MADE IN ENGLAND