

ZXSe Range Data Sheet

Analogue addressable fire alarm control panel

Product Overview

The ZXSe range of analogue addressable fire alarm control panels have been designed and constructed around proven and reliable microprocessor technology. This simple approach has produced a modular, scalable fire alarm platform suitable for protecting all types of premises.

Supporting a total of five industry leading protocols, Apollo, Hochiki ESP, Nittan, Morley-IAS and System Sensor, allows fire detection devices to be independently selected based on performance or aesthetic appeal.



Panel Features

The ZXSe range of intelligent fire alarm control panels has been designed to assist with the normal operation of a fire detection system. Standard weekly testing is available through a simple menu structure allowing selection of the zones to be tested either with or without activation of the output relays or sounders.

Additionally, the status of individual devices can be analysed to determine whether cleaning or replacement is required.

As the installation grows the ZXSe panel can expand with the building or site by adding additional devices, loop cards, printers or repeater panels. Additionally, further ZXSe panels can be networked together allowing an even bigger system to be created.

Remote (or local) printers can easily be connected to provide a paper copy of events as and when they occur or provide a historical record.

- All major device manufacturers devices supported
- Optional, local or remote printers
- Walk test facility
- Provide up to 72hr stand-by (subject to verification)

Software Features

The initial installation of the system is aided by sophisticated features like AUTOLEARN. An internal routine that will automatically detect all the devices on the detection and peripheral loops saving valuable commissioning time.

An off-line Windows™ configuration tool is included to further enhance the process, making text entry and specific, complex device programming easier. Complex cause and effect programming is simplified through a clearly designed user interface. Once completed the configuration of the panel can be saved for future reference. Enhanced features allow the complete archiving of the control panel history log.

- Event logic – facilitates complex cross-panel programming
- Auto-learn facility allows rapid and accurate commissioning of devices
- Windows™ configuration tool allows off-site programming
- Facility to print history and event logs

Networking Features

The Morley-IAS network is a unique, robust protocol that can be used over long distances, and utilise many different types of fire resistant cabling. All versions of the ZXSe range can be connected together creating a network of up to 99 control panels. The flexible network can be configured in two ways:

- Shared Zone System - Each networked control panel shares information
- Report & Control System - For multiple building sites where information is presented at the local and master panels only
- A compliant fault tolerant network can be created using the additional, optional Hi-485 network card
- 99 panel network allows systems in excess of 60,000 devices to be managed

User Interface

A quick glance enables users to assess the condition of the fire alarm system. Alarm and Fault conditions are highlighted by LEDs and supported by enhanced text descriptions on the LCD display. Clearly labelled buttons allow users to quickly manipulate the system providing both audible and tactile feedback of successful operations.

The panel has 3 access levels. Level 1 is unprotected and allows basic user functions. Level 2 is passcode protected and allows more advanced user functions. Level 3 is protected by a different passcode and allows programming functions.

- 4x40 – Character LCD alphanumeric display with back-light
- Up to 200 zone LEDs (by special request)
- Up to 10 individual level 2 user access codes
- Optional lockable glass door – provides added security/protection

Key Features

- Multi-protocol
- Modular concept
- Simple, robust design to EN54 Parts 2 & 4
- Intuitive to use
- Easy to maintain
- Easy to expand
- Easy to network
- Easy to install
- Easy to configure

Hardware Features

| | ZX1Se | ZX2Se | ZX5Se |
|---|--|--|---|
| Zones | 200 (max) | 200 (max) | 200 (max) |
| LED Type Zonal Indicators FIRE/FAULT/TEXT/DISABLED | 20 | 20 | 20 (Up to 200 available on special request) |
| Internal Sounder | ✓ | ✓ | ✓ |
| User Controls | Sound Alarms, Silence/Resound, Mute Buzzer, Accept, System Reset | | |
| Programming Controls | Alphanumeric multi-level keypad | Alphanumeric multi-level keypad | Alphanumeric multi-level keypad |
| LED Type General Panel Status Indicators | FIRE, FAULT, Acknowledged, Disablement, Test, Sounder Fault, Delayed Mode, Relays Disabled, Earth Fault, System/CPU Fault, Sounders Disabled, Alarms Silenced, Supply Fault, Power | | |
| Serial Interface | 2 serial ports with connections for optional RS485 or RS232 plug-in communication cards | 3 serial ports with connections for optional RS485 or RS232 plug-in communication cards | |
| Auxiliary Relays | 1 fault and 1 fire relay voltage free, changeover outputs contacts rated at 24V AC/DC, 1A, 0.6 PF maximum | EN54 format at 1 fault relay and 1 programmable relay voltage free, changeover outputs contacts rated at 24V AC/DC, 1A, 0.6 pF maximum | |
| Sounder Outputs | 2 programmable outputs. Open and short circuit monitoring. 1A maximum per output (Maximum total load 1.3A) | 4 Programmable outputs. Open and short circuit monitoring. 1A maximum per output (Maximum total load 1.3A) | |

Protocol Devices

Each panel is capable of supporting Apollo (Xplorer, XP95 & Discovery), Hochiki ESP, Nittan, Morley-IAS and System Sensor protocol devices.¹

ZX1Se Loop Capacity: 1 loop 460mA maximum

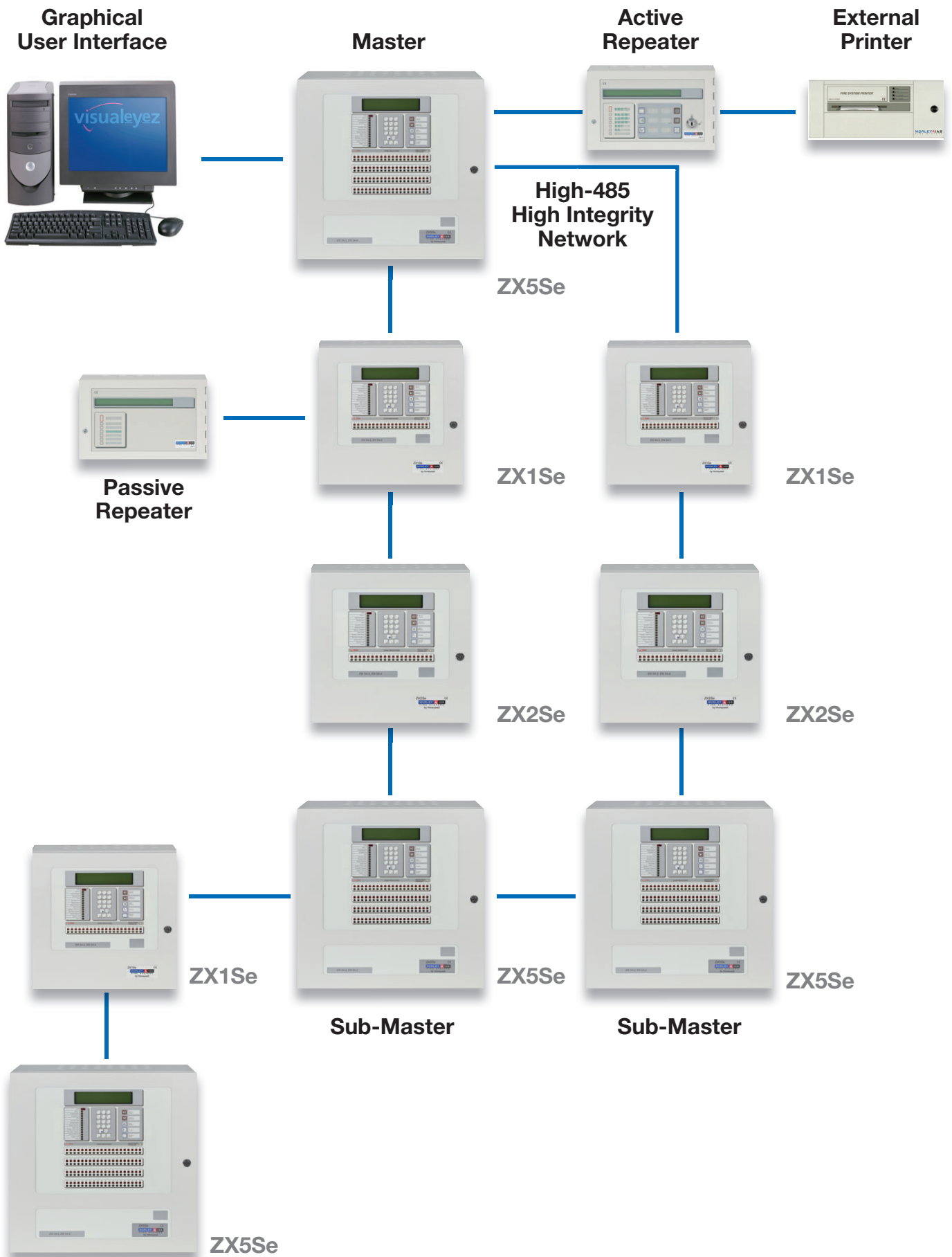
ZX2Se Loop Capacity: 1 or 2 loops 460mA per loop maximum

ZX5Se Loop Capacity: 1 to 5 loops 460mA per loop maximum

| Number of Devices | Apollo Protocol | Hochiki Protocol | System Sensor Protocol | Nittan Protocol | Morley Protocol |
|-------------------|-----------------|------------------|------------------------|-----------------|-----------------|
| 126 | ✓ | ✓ | | ✓ | |
| 198 | | | ✓ | | ✓ |

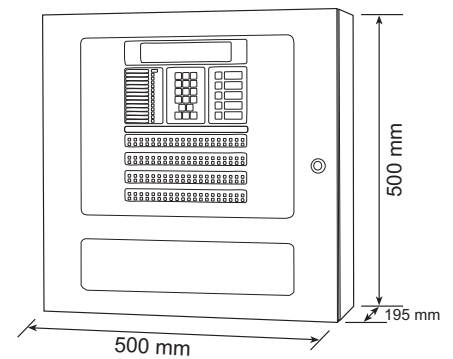
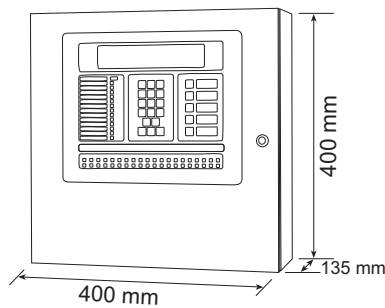
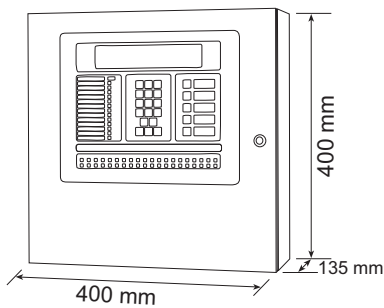


ZXSe System Example



Mechanical **ZX1Se** **ZX2Se** **ZX5Se**

| | | | |
|--|--|-------------------------------------|---|
| Dimensions (mm) | 400 x 400 x 135 (H x W x D) | 400 x 400 x 135 (H x W x D) | 500 x 500 x 195 (H x W x D) |
| Weight (without batteries) | 10 kg | 10 kg | 20 kg |
| Colour | RAL 9002 - Grey White | RAL 9002 - Grey White | RAL 9002 - Grey White |
| Environmental Operating Limits: | | | |
| Temperature | 0°C to + 40°C | 0°C to + 40°C | 0°C to + 40°C |
| Humidity | 85% non-condensing (max) | 85% non-condensing (max) | 85% non-condensing (max) |
| Construction | Sheet steel painted, sealed to IP30 | Sheet steel painted, sealed to IP30 | Sheet steel painted, sealed to IP30 |
| Cable Entry | 14 x 20mm knock-outs in top of cabinet 2 x 20mm knock-outs in bottom of cabinet | | 24 x 20mm knock-outs top 24 x 20mm knock-outs bottom |



* not drawn to scale

Electrical **ZX1Se** **ZX2Se** **ZX5Se**

| | | | |
|--|--|-----------------------------|--|
| Operating Voltage | 230V AC 50Hz (+10%,-15%) | 230V AC 50Hz (+10%,-15%) | 230V AC 50Hz (+10%,-15%) |
| Maximum PSU Rating | 4.2A total, comprised of 2.5A min @ 25V (panel and loop supply) 1.75A min charger current | | 8.6A total, comprised of 2.25A min @ 25V (panel supply) 2.5A min @ 35V (loop supply) 1.66A min @ 12V (printer supply) 2.2A min charger current |
| Loop Load | 460mA maximum | 460mA per loop maximum | 460mA per loop maximum |
| Stand-by Batteries: | | | |
| Minimum Capacity | 2 x 12V 7Ah | 2 x 12V 7Ah | 2 x 12V 12Ah |
| Maximum Capacity | 2 x 12V 12Ah | 2 x 12V 12Ah | 2 x 12V 24Ah |
| Panel Designed to Meet EN54-4 Charging Requirements For Larger Batteries if Required | up to max 38Ah ² | up to max 38Ah ² | up to max 38Ah ^{2&3} |

Notes

¹ Multiple sensor protocols cannot be used in the panel simultaneously. However, different panels on the same network can support different protocols

² Separate battery box required

³ Please contact your local business manager if there is a requirement to charge batteries >38Ah

Part Numbers

Panels

- 722-001-301** ZX1Se Fire Alarm Control Panel
- 720-001-301** ZX2Se Fire Alarm Control Panel
- 721-001-301** ZX5Se Fire Alarm Control Panel

Accessories

- 795-066-100** Apollo XP95 & Discovery Loop Driver Card 460mA
- 795-048** Apollo S90 Loop Driver Card
- 795-058-105** Hochiki ESP Loop Driver Card 460mA
- 795-044-001** Nittan Loop Driver Card
- 795-068-100** System Sensor Loop Driver Card 460mA
- 795-072-100** Morley-IAS Loop Driver Card 460mA
- 795-005** RS232 Communication Card
- 795-004-001** RS485 Communication Card
- 795-077-020** 20 Zone LED Display Indicator Card
- 795-077-060** 60 Zone LED Display Indicator Card
- 795-051-001** Internal Printer
- 797-061** ZX1Se Bezel Kit
- 797-063** ZX1Se Glass Door Kit
- 797-061** ZX2Se Bezel Kit
- 797-063** ZX2Se Glass Door Kit
- 797-062** ZX5Se Bezel Kit
- 797-064** ZX5Se Glass Door Kit
- 020-891** USB Isolated Upload/Download Lead
- 797-077** ZX1SE/ZX2SE Battery Box
- 797-078** ZX5SE Battery Box
- 795-014** 4 Way Programmable Relay Module, PCB Only
- 795-015** 4 Way Programmable Sounder Module, PCB Only
- 795-029** 8 Way Programmable Input Module, PCB Only
- 795-038-001** Hi-485 Communication Module, PCB Only
- 795-065** 40 Way Programmable Mimic Interface Module, PCB Only
- 709-601-001** ZXr-A Active Repeater. LCD, System Status Indicators and User Controls for Silence, Reset, Mute and Evacuate All Activated by a Key Switch
- 709-701-001** ZXr-P Passive Repeater. LCD and System Status Indicators
- 020-600-002** Bezel Kit for ZXr Series Repeaters
- 795-060-002** External Remote Printer Module
- 795-057** MODBUS Interface Unit
- 795-067-001** Paging System Interface Module. Suitable for SCOPE, ASCOM/TELENOVA

Fire System Compatibility

Morley-IAS is fully committed to offering practical solutions and supporting products that enhance your buildings control systems.

For further details on these or any other Morley-IAS products please contact your local distributor, Morley-IAS Business Manager or via our contact details found below. Morley-IAS by Honeywell - Providing a control panel solution, for fire industry professionals, committed to supporting our device partners.



Every care has been taken in the preparation of this datasheet but no liability can be accepted for the use of the information therein. Design features may be changed or amended without prior notice.
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by Honeywell

Charles Avenue
Burgess Hill
West Sussex
RH15 9UF UK

T: +44 (0) 1444 235 556
F: +44 (0) 1273 376 894
E: sales@morleyias.co.uk
www.morley-ias.co.uk