

SH-14-3201-0001-99

Excellence SmartCell Addressable Wireless Gateway

General

The SH-14-3201-0001-99 is a Excellence protocol gateway for interfacing a zone of wireless SmartCell fire alarm devices into a wired Excellence addressable fire alarm system. It enables these wireless devices to be managed directly from the control panel and provides a seamless interface between the hardwired components and the wireless zone.

System design

The Excellence gateway comprises of a wireless transceiver capable of managing up to 32 wireless devices. An LCD display is provided on the gateway along with function buttons to allow programming and diagnostics to be carried out for associated devices locally. The interface is addressed on the loop electronically. A total of 4 gateways may be fitted onto a single fire alarm control panel loop controlling up to 124 wireless loop devices.

Seamless addition of wireless devices

Every wireless device controlled through the Excellence gateway has its own unique address with which the main fire alarm control panel communicates with it, providing the same system capabilities as directly wired devices. A full range of wireless detection and alarm devices is available, including multi-sensors capable of dual sensing heat and smoke, smoke only or heat only configurations, manual call points, notification devices (sounders with and without VIDs or VADs) as well as input/output units and all-in-one devices.

Full flexibility

Wireless devices are featured in many fire detection and alarm systems. They are specified where the installation of hard wiring would be difficult or impossible to complete e.g. decorative finishes to the interior of the protected building preclude wiring runs or where the time scales to complete installation are minimal. The Excellence gateway allows the system designer full flexibility in selecting which devices on the loop are to be hardwired and which are to be wireless.

Software Compatibility

Recommended minimum firmware/software versions for full compatibility:

2X-AT Panel V5.5.23

SmartCell Devices V2.22

Configuration Utility V5.5.0.6



Details

- Quick and easy to install
- Freely programmable to suit the protected area
- Automatic selection from 32 wireless channels for reliable signalling
- Multipath technology ensures a robust wireless solution
- Diversity transceivers allow maximum operational range

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Technical specifications

General

Status indication	80 character LCD display
Compatibility	Excellence series addressable systems
Addressing method	Electronic
Address range	1 to 128
Wireless frequency	868 to 870 MHz

Electrical

Power supply type	Loop powered
Operating voltage	17 to 29 VDC
Current consumption	55 mA (typical) 85 mA (max)
Configuration	< 4 Gateways per loop
Output transmitter power	14 dBm / 25 mW

Isolation

Type	Negative line break
Loop current	17 to 29 VDC
Series resistance	< 0.2 Ω
Switch current	< 1.2 A
Leakage current	< 1 mA
Isolation voltage	14 to 15.5 VDC
Reconnect voltage	14 to 15.5 VDC
Constant current	< 1 A

Physical

Physical dimensions	270 x 220 x 80 mm (W x H x D)
Net weight	1.45 kg
Colour	Traffic white (RAL9016)
Mounting type	Wall mount
Material	Plastic
Cable specification	0.13 to 3.31 mm ² (26 to 12 AWG) shielded or unshielded twisted-pair (52 Ω / 500 nF max.)
Loop length	2 km (using 0.8 mm ² cable) 3 km (using 1.5 mm ² cable)

Environmental

Vandal proof	No
Operating temperature	-10 to +55°C
Storage temperature	0 to +30°C
Relative humidity	0 to 95% noncondensing
Environment	Indoor
IP rating	IP54
Application temperature	25 °C (typical)

Regulatory

Compliance	CE, ICASA, REACH, RoHS 3, UKCA, WEEE
Certification	CPR
Standards	EN54-13, EN54-17, EN54-18, EN54-25, ETSI 300-220

Compatible products

Category	Reference	Description
Detection device	SH-21-0200-000 1-99	SmartCell Dual Smoke/Heat Detector
Detection device	SH-51-0100-000 1-06	SmartCell Fire Manual Call Point - Sweden
Detection device	SH-51-0100-000 1-18	SmartCell fire Manual Call Point - Poland
Detection device	SH-51-0100-000 1-99	SmartCell Fire Manual Call Point
Detection device	SH-51-0300-000 1-04	SmartCell Hausalarm Manual Call Point
Door Holders	SH-44-0200-000 1-99	SmartDoor (white)
Door Holders	SH-44-0300-000 1-99	SmartDoor (black)
Interface unit	SH-41-0200-000 1-99	SmartCell Dual Input/Output Device for Fire Zones
Notification device	SH-22-0200-000 1-99	SmartCell Dual Smoke/Heat Detector and Combined Sounder
Notification device	SH-23-0210-000 1-99	SmartCell Dual Smoke/Heat Detector and Combined Sounder-Beacon (VAD Red Flash)
Notification device	SH-23-0220-000 1-99	SmartCell Dual Smoke/Heat Detector and Combined Sounder-Beacon (VAD White Flash)
Notification device	SH-31-0100-000 1-18	SmartCell Red Sounder - Poland
Notification device	SH-31-0100-000 1-99	SmartCell Red Sounder
Notification device	SH-31-0200-000 1-99	SmartCell White Sounder
Notification device	SH-32-0110-000 1-99	SmartCell Red Sounder and Wall-Beacon (VAD Red Flash)
Notification device	SH-32-0120-000 1-99	SmartCell Red Sounder and Wall-Beacon (VAD White Flash)
Notification device	SH-32-0210-000 1-99	SmartCell White Sounder and Wall-Beacon (VAD Red Flash)
Notification device	SH-32-0220-000 1-99	SmartCell White Sounder and Wall-Beacon (VAD White Flash)
Notification device	SH-33-0110-000 1-99	SmartCell Red Sounder and Ceiling-Beacon (VAD Red Flash)
Notification device	SH-33-0120-000 1-99	SmartCell Red Sounder and Ceiling-Beacon (VAD White Flash)
Notification device	SH-33-0210-000 1-99	SmartCell White Sounder and Ceiling-Beacon (VAD Red Flash)
Notification device	SH-33-0220-000 1-99	SmartCell White Sounder and Ceiling-Beacon (VAD White Flash)