Conventional Fire Control Products

The Complete Fire System

When you are looking for a complete fire system it is important that this system offers you high performance, exceptional reliability and ease-of-use. With the FireStar conventional panels, you have made the top choice for small to medium installations. Combined with the innovative ECO1000 conventional detectors, you have everything you need for a reliable and flexible fire system.

Conventional Fire Control Panels

FireStar FS-1, FS-2 and FS-4 Conventional Fire Control Panels

These modern and elegant conventional fire control panels form a part of the comprehensive range of conventional fire detection equipment. The FireStar panels provide a cost-effective solution to fire detection in most small to medium installations. Compatible products include the ECO1000 series heat and smoke detectors, the sounders and the manual call points.

One, Two and Four Zone Fire Control Panels
The FS-1, FS-2 and FS-4 conventional fire control panels provide one, two and four zones (respectively) of fire detection. All panels have been designed to offer high standards of performance, reliability and quality. The Control PCB contains all of the electronics allowing an “electronics free” front cover to be used. This stylish, moulded cover features custom designed “buttons” which provide a positive tactile action. The housing can accommodate stand-by batteries capable of providing up to 72 hours of operating in the event of mains failure.

Core Features
- Robust moulded housing and steel back box.
- The FS-2 and FS-4 models are microprocessor controlled.
- Isolate and test facilities on 2 and 4 zone models.
- Two fully monitored sounder circuits.
- Head removal monitoring with Active End of Line units supplied.
- Fire and fault relays on 2 and 4 zone models.
- Class change input.
- Space for 72 hours stand-by batteries.
- One cabinet size for all models.
- Conforms to BS5839, Part 4 (1988).

Technical Data

Mains voltage	: 220 or 240 VAC, 50 ~ 60 Hz
Nominal operating voltage	: 24 VDC
Controls (all panels)	: 3-position keyswitch: Normal, Mute/Enable, Operate Sounders, Reset pushbutton
Recommended standby batteries:	
1 zone	: 2.8 Ah 72 hours - maximum
2 zones	: 6.0 Ah 72 hours - maximum
4 zones	: 6.0 Ah 72 hours - maximum
Detector zones voltage	: 17 to 28 VDC
Quiescent line current	: 2.4 mA = 20 detectors ECO1000 @ 120 uA or = 10 detectors ECO1002 @ 240 uA.
Alarm current limiting resistor	: 82 R to 1K (Nominal 470 R)
EOL device	: active device or 4K7 EOLR
Sounder circuits (2)	: output voltage 17 ~ 28 VDC
Output current:	
1 zone	: maximum load 300 mA total
2/4 zones	: maximum load 1 A total
Common fire output:	
1 zone	: maximum load 100 mA @ 17 ~ 30 VDC
Common fire relay output:	
2/4 zones	: volt-free changeover 1.0 A @ 24 VDC
Common fault relay output:	
2/4 zones	: volt-free changeover 1.0 A @ 24 VDC
Zone repeat outputs:	
2/4 zones	: 10 mA (limited by internal resistors)
24 VDC fused output:	
2/4 zones	: maximum load 100 mA @ 17 ~ 30 VDC
Dimensions	: 290 mm x 350 mm x 86 mm (h x w x d)

FireStar EFS-8 Eight Zone Conventional Fire Control Panel

This top model in the conventional range of panels utilises the very latest in microprocessor and surface mount technologies to provide a compact but versatile unit. The panel may be programmed via the built-in pushbuttons to provide a host of special user applications. The EFS-8 conventional fire control panel provides eight zones of fire detection and four sounder circuits. The unit has been designed to offer high standards of performance, reliability and quality whilst complying with the requirements of both EN-54, Parts 2 & 4 and BS5839, Part 4 (1988).
The control PCB contains all of the electronics and a switch mode power supply allowing an “electronics free” back box to be supplied for “first fix”. The moulded cover features custom designed “buttons” which provide a positive tactile action. The housing can accommodate stand-by batteries capable of providing up to 72 hours of operation in the event of mains failure.

Features
- Robust, moulded housing and steel back box.
- Isolate and test facilities.
- Conforms to BS5839, Part 4 (1988) and EN-54, Part 2 & 4.
- Four fully monitored sounder circuits.
- Head removal monitoring with Active End of Line units supplied.
- Fire and fault outputs.
- Sounder and Fire Relay delays.
- Class change input.
- Day/night input.
- Configurable options.

Technical Data

Mains input voltage	: 230 +/- 15% VAC, 50 ~ 60 Hz
Input current rating	: 0.75A
Operating voltage	: 17 ~ 28 VDC (24 VDC nominal)
Controls	: 3-position keyswitch and Mute, Reset, Step, State pushbuttons
Standby batteries	: 7.0 Ah - 24 hours; 12.0 Ah - 72 hours - maximum
Detector zones (8 off)	: 17 ~ 28 VDC
Quiescent line current	: 2.4 mA = 20 detectors ECO1000 @ 120 uA or = 10 detectors ECO1002 @ 240 uA.
‘Fire’ resistor	: 82R to 1K (Nominal 470R)
EOL device	: active device or 4K7 EOLR

Sounder circuits (4 off)	: output voltage 17 ~ 28 VDC; output current: 1.0 A; maximum total load 1.5 A
Common fire relay output	: 0.5 A @ 24 VDC
Common fault relay output	: volt-free changeover 1.0 A @ 24 VDC
Zone repeat outputs	: 10 mA (limited by internal resistors)
24 VDC fused output	: maximum load: 500 mA @ 17 ~ 28 VDC
Battery charging current limit	: 600 mA

FireStar NFS-8 Eight Zone Conventional Fire Control Panel

The NFS-8 fire control panel is the VdS approved version of the FS-8 panel.

Additional Feature

- Alarm counter.

Conventional Smoke Detectors

ECO1000 Conventional Detectors

The ECO1000 range from System Sensor Europe consists of a photoelectric detector, a combined photo-thermal unit and fixed and rate-of-rise thermal detectors.

The photoelectric and the photo-thermal detectors have automatic drift compensation, a feature previously found only in analogue addressable sensors. A highly integrated design, on-board digital signal processing and a new optical chamber design results in an exceptionally stable and sensitive smoke detector.

Another innovative feature to be incorporated in the ECO1000 is its laser-based remote test capability. The engineer can set the detector into alarm from ground level, which consequently saves considerable time during commissioning or maintenance.

All models operate at both 12 and 24 VDC, making them suitable for both security and fire systems. They meet the requirements of the latest EN54 Part 5 and Part 7 (2000) standards.

ECO1000 Product Range

- ECO1002 combined photoelectric smoke / thermal detector
- ECO1003 photoelectric smoke detector
- ECO1005 rate of rise thermal detector
- ECO1005T fixed temperature thermal detector

Features

- Advanced design.
- High performance to price ratio.
- Major pan-European approvals.
- Installer friendly.
- Micro IC controlled.
- Laser-based remote test capability.
- Suitable for both security and fire systems.

Advanced Features

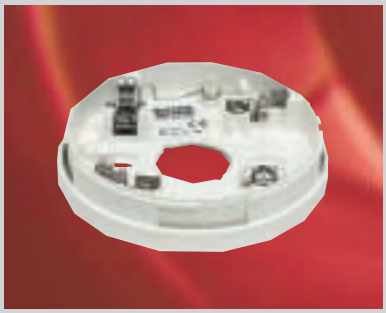
- New chamber design: reduces the effect of settled dust, minimising maintenance requirements.
- Bi-material moulding: no wax process.
- Low component count: minimal mechanical assembly.
- Common components used in all variants.

Technical Data

Operating voltage range	: 8 ~ 30 VDC
Typical standby current	: 120 uA, (ECO1002: 240 uA)
Maximum alarm current	: 50 mA
Operating temperature range	: -20°C to 60°C / -30°C to 70°C for short duration
Relative humidity	: 5 to 95%, non-condensing
Sensitivity static thermal element	: 58°C
Max wire gauge for terminals	: 1.5 mm^2
Dimensions	: 40.5 mm x 102 mm (h x ø) (ECO1003: 32.5 mm x 102 mm)
Housing	: white RAL9016, ABS
Weight	: 75 g

ECO1000BR Base

- Standard detector base required for mounting the ECO1000 series detectors.
- Built-in resistor 1K.
- Remote LED output.
- Shorting Spring + Anti-Tamper.



ECO1000RTU Remote Test Unit

The ECO1000RTU is a laser-based, hand-held keyfob-style, remote test unit.
It is a laser pointer that can send a code via a detector's alarm LED to activate the alarm in the detector. This means that the engineer can set the detector into alarm from ground level, which consequently saves considerable time during commissioning or maintenance.

Accessories

WR2001 Manual Call Point

The WR2001 is a simple conventional NO / NC contact device. Break glass is foil coated for safety, and pre-cut for easier break. Surface mount and flush mount installation is possible with the enclosed back box.

Technical Data

Contact	: NO / NC
Quiescent current	: 0
Contact resistance	: < 100 mOhm
IP rating	: 40
Housing	: red thermoplastic
Dimensions	: 87 mm x 87 mm x 52 mm (h x w x d)
Test key	: included
Back box	: included

KG-1 Spare Glasses
Glass replacement; packed per 5 pieces.
The glass is laminated with transparent foil and has a diamond cut line to make breaking easier and safe.

Red Bell 6”

This bell is designed to combine good styling with functional efficiency. The base plate has a complex of fixing holes to enable fitting to various types of conduit boxes, or directly to a flat wall surface.

Sound level	: 94 dB at 1 meter
Quiescent current	: 25 mA
Housing	: red steel
Plate	: black thermoplastic; 58 mm x 153 mm (h x ø)

Red Bell 8”

As Bell 6”, except 8” version; 64 mm x 202 mm (h x ø)

Power Supplies

General Specifications
Output voltage:
27.2 VDC (adjustable)
Operating temperature:
-10° to 40° C
Dimensions:
315 mm x 325 mm x 110 mm (h x w x d)

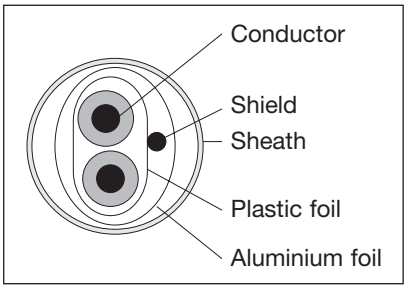
Power Supply PSU 24/1
Output current : max. 1 A total

Power Supply PSU 24/2
Output current : max. 2 A total
Internal LEDs : fault (red); low battery (red)

Power Supply PSU 24/3
Output current : max. 3 A total
Internal LEDs : fault (red); low battery (red)

Power Supply PSU 24/5
Output current : max. 5 A total
Internal LEDs : fault (red); low battery (red)

Cable



Flexible plain annealed copper conductors with flame retardant insulation. Screened in aluminised polyester tape with 0.5 mm^2 copper drain wire. Sheathed overall in flame retardant red LSF Halogen free compound.
Designed to provide high integrity electricity supply to fire alarms, annunciator panels, emergency lighting systems etc.

- **CV2P** : 2 cores x 0.75 mm ø; red / black
- **CV2Q** : 2 cores x 1.00 mm ø; red / black

For further information, please contact: