

ESPRIT[®]

One to two loop analogue addressable control panel

The Esprit 1-2 loop analogue addressable control panels have been developed to provide a simple to use and cost effective, robust solution for the intelligent fire systems market.

Extendable up to two loop circuits, and with up to 240 devices per loop, the control panels' compact styling and programming power makes it ideal for all small and medium site requirements.

The large graphical display with easy to navigate menus provide fast and simple setup and maintenance.

Esprit-A panels support the full range of Argus protocol devices including their range of wireless accessories.

The panels are supplied with a 1.2 amp internal switch mode power supply module. This module complies with the requirements of EN54-4 : 1988 and provides temperature compensated battery management charging.

Esprit-A panels are approved to European standards; EN54-2 & EN54-4.



Features

Main Features

- One to two loops
- 2 programmable sounder circuits
- Large graphical display
- 255 date and time stamped event logs
- Auto learn function
- 240 devices per loop
- False alarm management
- Programmable company logo
- Loop fault diagnostics
- Delays to outputs
- 64 programmable groups
- 18 zonal LEDs
- 1.2A integral PSU
- Approved to EN54-2 & EN54-4
- Robust metal enclosure

Technical specifications

| | |
|------------------------|---|
| Enclosure | 1.2mm Mild Steel IP30. Colour ref MW334E Interpon Powder coat |
| Cable entry | Via 20mm knockouts located in the top and rear of the cabinet |
| Dimensions | Back box: 350 W x 300 H x 80 D (mm), Lid: 357 W x 310 H x 25 D (mm) |
| Mains supply | Universal switch mode PSU, 1.2A |
| Battery capacity | Up to 7 Ah 24V |
| Charger current | 700mA |
| Auxiliary supply | 400mA aux supply output (21-28vdc) |
| Loop | Argus Protocol. Up to 2 loops. Each loop - 500mA maximum current |
| Sounder circuits | 2 x 400mA 21-28vdc |
| Switch inputs | CC, PULS |
| Event log | 255 events, time & date stamped |
| Earth fault monitoring | Yes |
| Display | 240 x 64 Graphical LCD backlit |

Models

| | |
|----------|--|
| ESA-1001 | One loop analogue addressable control panel (extendable to two loops) - Argus protocol |
| ESA-3001 | Loop extension card - Argus protocol |



KM 683147
BS EN 54-2 & 54-4

Specifications

Electrical Specification Inputs & Outputs

| | | |
|------------------------------|---|--|
| Common fire relay | Fire relay contact. Clean C/O. Max 3A at 30VDC. | Unfused |
| Common fault relay | Maintained fault relay contact. Clean C/O Max 3A at 30VDC. | Unfused |
| Inputs: CC, PULSE | Switched -ve inputs, connect to 0v to trigger. Max input voltage = 30VDC. Non-latching, max resistance = 100R. | Protected via 10K Ohm impedance, 3v6 Zener diode. |
| SOUNDERS 1 and 2 | 28VDC polarity reversal monitored sounder outputs to fire alarm devices. End of line resistor: 6K8 Ohm 5% 0.25W EOL resistor. | Monitoring current limit 28mA, fused at 500mA. Typical max load 22 devices at 18mA each per circuit. |
| PBUS Output + / - | RS-485 | RSU Comms, fused at 20mA |
| Zone normal threshold | Minimum 192 analogue value | Analogue value within (0 – 255) |
| Temp Sense Input | Input for connection of battery temperature sensor. Attach to central point of sealed lead acid battery pair. | Thermistor TTC5103 10,000 Ohms at 25°C. |
| LOOP | Addressable circuit | Maximum current limit 500mA. Max 240 devices per loop. |
| Number of detection circuits | 1 to 2 loops | 1 to 18 Detection Zones |

Power Supply Specification

| | | |
|---------------------------------|---|--|
| Mains supply | 230vac +10% / -15% 50Hz max current 0.347Amp (35W) 1.08A (100W) | |
| Internal power supply rating | 1.2 Amps total including battery charging | Maximum load shared between outputs = 1A |
| Power supply output voltage | 19.8 - 29.7vdc | Tolerance +/- 0.1% |
| Battery charging voltage | 27.3VDC nominal at 20°C | Temperature compensated |
| Battery charging output current | 700mA current limited | Charging suppressed during alarm condition |
| Min/max battery size and type | 2 x 7.0Ah 12v VRLA. | |
| Battery type | YUASA NP7-12 (12V 7.0Ah) | |
| Maximum quiescent current | Approx. 230mA at 28V | |

Quiescent and Alarm Current Details for Standby Battery Calculations

| Models | Standby Current | Alarm Current |
|----------------------------------|-----------------|---------------|
| ESA-1001 - one to two loop panel | 220mA | 1000mA |