

## HAES-1L - HAES-2L - HAES-4L INTELLIGENT ADDRESSABLE FIRE ALARM CONTROL PANEL



**EN54-2**

**EN54-4**

### FEATURES

- ▶ One to four 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
- ▶ 36 zonal LEDs
- ▶ 3.4A 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 4,5 W  |
| Cable entry            | Via 20mm knockouts located in the top and rear of the cabinet        |
| Dimensions             | Back box: 450 W x 385 H x 100 D (mm), Lid: 463 W x 394 H x 25 D (mm) |
| Mains supply           | Universal switch mode PSU, 3.4A                                      |
| Battery capacity       | Up to 18 Ah 24V  |
| Charger current        | 1.2A   |
| Auxiliary supply       | 400mA aux supply output (21-28vdc)                                   |
| Loop                   | Argus Protocol. Up to 4 loops.                                       |
| Sounder circuits       | Each loop - 500mA maximum current<br>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                                       |

### Electrical Specification Inputs & Outputs

|                                     |   |  |
|-------------------------------------|---|--|
| <b>Common fire relay</b>            | Fire relay contact. Clean C/O. Max 3A at 30VDC.   | Unfused  |
| <b>Common fault relay</b>           | Maintained fault relay contact. Clean C/O Max 3A at 30VDC.  | Unfused  |
| <b>Inputs: CC, PULSE</b>            | 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.  |
| <b>SOUNDERS 1 and 2</b>             | 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. |
| <b>PBUS Output + / -</b>            | RS-485  | RSU Comms, fused at 20mA   |
| <b>Zone normal threshold</b>        | Minimum 192 analogue value  | Analogue value within (0 – 255)  |
| <b>Temp Sense Input</b>             | 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.  |
| <b>LOOP</b>                         | Addressable circuit   | Maximum current limit 500mA. Max 240 devices per loop.   |
| <b>Number of detection circuits</b> | 1 to 4 loops  | 1 to 36 Detection Zones  |

### Power Supply Specification

|  |   |  |
|--|---|--|
| <b>Mains supply</b>                    | 230vac +10% / -15% 50Hz max current 0.347Amp (35W) 1.08A (100W) |  |
| <b>Internal power supply rating</b>    | 3.4 Amps total including battery charging                       | Maximum load shared between outputs = 3A   |
| <b>Power supply output voltage</b>     | 19.8 - 29.7vdc  | Tolerance +/- 0.1%                         |
| <b>Battery charging voltage</b>        | 27.3VDC nominal at 20°C   | Temperature compensated                    |
| <b>Battery charging output current</b> | 1.2A current limited  | Charging suppressed during alarm condition |
| <b>Min/max battery size and type</b>   | 2 x 17.2Ah 12v VRLA.  |  |
| <b>Battery type</b>                    | YUASA NP18-12 (12V 17.2Ah)                                      |  |
| <b>Maximum quiescent current</b>       | Approx. 370mA at 28V  |  |

### Quiescent and Alarm Current Details for Standby Battery Calculations

| Models                           | Standby Current | Alarm Current |
|----------------------------------|-----------------|---------------|
| ESA-1002- one to four loop panel | 360mA           | 3000mA        |