# ZONE MONITOR WITH ISOLATOR


Part Number 55000-845IMC

The Context Plus XP95 Zone Monitor with Isolator powers and controls the operation of a zone of up to 20 Series 65 conventional fire detectors from a loop of Context Plus analogue addressable detectors and interfaces.

## FEATURES

The Zone Monitor with Isolator is factory preset to return an analogue value of 16 when all detectors on the zone are in quiescent state and 64 when a detector changes to the alarm state. The Zone Monitor with Isolator latches in the alarm state.

A 5.1kΩ end-of-line resistor is fitted to detector cables for open- and short-circuit faults. Alternatively, an active end-of-line monitor may be used in conjunction with diode bases and a capacitor of up to 50µF fitted at the Zone Monitor with Isolator wiring terminals.

In either case an analogue value of 4 is transmitted during open- or short-circuit faults. The Zone Monitor with Isolator is fitted with a bi-directional short circuit isolator and will be unaffected by loop short circuits on either the loop input or loop output.

## ELECTRICAL CONSIDERATIONS

The Zone Monitor with Isolator is loop powered and operates at 17–28V DC with protocol pulses of 5–9V.

## MECHANICAL CONSTRUCTION

The Zone Monitor with Isolator is normally supplied with a backbox for surface mounting, and is also available without the backbox for flush mounting. Both versions are for indoor use only.

Two LEDs, one red and one yellow, are visible through the front cover of the enclosure.

The red LED is illuminated to indicate that a fire alarm condition has been detected on the zone wiring.

The yellow LED is illuminated whenever the built-in isolator has sensed a short circuit loop fault.

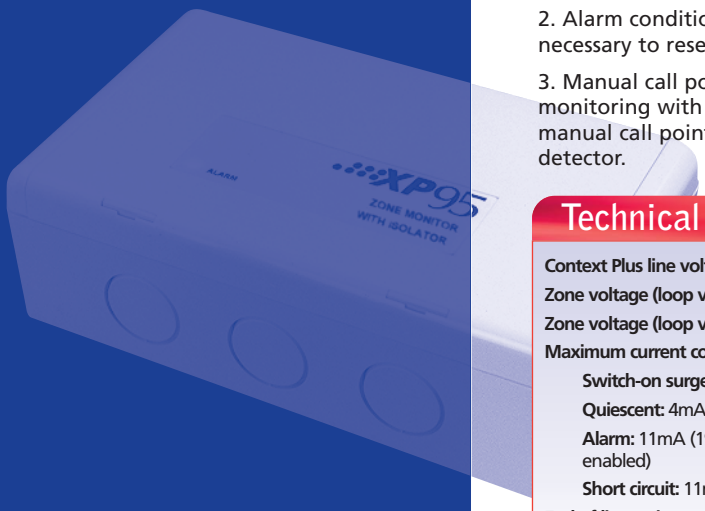
The backbox is a polycarbonate moulding.

### NOTES ON USE

1. Zone voltage is regulated to 19 ± 1V for any loop voltage greater than 22V. If the loop voltage falls below 22V, the zone voltage is approximately 1.5V below the loop voltage. It is important to ensure that under worst-case conditions, the zone voltage is above the minimum operating voltage for the conventional detectors.

2. Alarm conditions are latched internally by the Zone Monitor with Isolator. It is therefore necessary to reset the alarm even if non-latching conventional detectors are used.

3. Manual call points can be located at any point in the zone wiring if active end-of-line monitoring with diode detector bases is used. If a 5.1kΩ resistor is used for monitoring, manual call points must be connected between the Zone Monitor with Isolator and the first detector.




## Technical Data

**Context Plus line voltage:** 17V-28V DC
**Zone voltage (loop voltage ≥22V):** 19V±1V
**Zone voltage (loop voltage <22V):** Loop voltage -1.5V
**Maximum current consumption at 24V (5.1KΩ EOL):**
- **Switch-on surge, max 150ms:** 3.5mA
- **Quiescent:** 4mA + detector load
- **Alarm:** 11mA (19mA when increased current enabled)
- **Short circuit:** 11mA

**End of line resistor value:** 5.1KΩ ± 5% 1/3W
**Stabilisation time on power up:** 4 seconds
**Maximum capacitor on zone terminals:** 5µF
**Operating temperature:** –20°C to +70°C
**Humidity (no condensation):** 0–95%RH
**Shock, vibration and impact:** to GEI 1-052
**IP rating:** 54
**Radiated and conducted RF emissions to:** BS EN50081-1 & 2
**Radiated and conducted RF immunity to:** BS EN50130-4
**Dimensions of Zone Monitor (surface mount):** 150 x 90 x 48mm
**Weight:** 230g