



ORION-PLUS

Expandable Conventional Fire Detection Panel

The ORION-PLUS range of expandable conventional control panels offers an aesthetically pleasing and functional cabinet design for larger projects demanding ease of installation and commissioning, as well as simple operation, typical of conventional installations.

The unit can be expanded easily from 8 to 16 zones in regular box and 20 to 32 in large box version. Expansion is made by installing additional modules with 4 zones. The range also includes two types of repeater.

The outstanding programming features included in this panel range exceed the possibilities of standard conventional panels, using a graphic LCD display and real time clock which permits the recording of events in a time stamped log.

Operation is intuitive, offering simple control and one-button disablement facilities, as well as a one man test routine, which provides a highly effective way to perform regular testing of the fire alarm system.

Advanced configuration interfacing includes RS232, RS422/485, Fibre Optic, GSM-GPRS and TCP/IP. All of the above making use of our own proprietary interfaces.

These allow for connection to up to 4 remote repeater panels, extinguishing interface modules and multiplexed output relays, giving one of the highest levels of system integration possible in conventional systems.

ORION-PLUS

Key Features

- ▶ 8 Zone expandable control panels with a maximum of 16 zones
- ▶ 20 Zone expandable control panels with a maximum of 32 zones (Large Box version)
- ▶ Up to 32 conventional smoke and/or heat detectors per zone
- ▶ Zone expansion via 4 zone expansion module (GFE-EXP-MOD)
- ▶ Active or Resistive End of Line monitoring
- ▶ Programmable non-latching zones
- ▶ Programmable on/off delay timer per zone
- ▶ Programmable coincidence for adjacent zones
- ▶ One man test
- ▶ Supervised auxiliary 24 volt output
- ▶ 2 Supervised/ monitored sounder circuits
- ▶ 3 Programmable remote inputs.
- ▶ 2 Relay outputs 1 fire and 1 fault
- ▶ Fully EN54-2 and EN54-4 compliant
- ▶ Repeater output using RS232, RS485, Fibre Optic and TCP/IP

TECHNICAL SPECIFICATIONS

SUPPLY SPECIFICATION	
PRIMARY SUPPLY VOLTAGE - IN	90 to 265 V AC
PRIMARY SUPPLY VOLTAGE - OUT	28.5 V DC nominal
PRIMARY SUPPLY CURRENT - OUT	1.7 A @ 28.5 V DC nominal (max.)
SECONDARY SUPPLY VOLTAGE	21.0 min. - 27.2 max. V DC - BAT charger o/p 28 V DC
SECONDARY SUPPLY CURRENT OUTPUT	1.1 Amp Maximum @ 20°C
INTERNAL BATTERY CAPACITY - MAXIMUM	2 x 12 V x 7 Ah Sealed VRLA Lead Acid Batteries
MAINS FUSE	4 A -250 V Slow Blow - 20 mm
BATTERY FUSE	1.6 Amp - Resettable
DETECTION CIRCUIT SPECIFICATION	
NUMBER OF CIRCUITS	16 Max.
ZONE CURRENT - QUIESCENT / ALARM	4 mA / 60 mA - Maximum
MAX. CABLE RESISTANCE / CAPACITANCE	40 Ohms / 0.470 uF
END OF LINE MONITORING	Active EOL - 10uF/50V Bipolar Electrolytic Aluminium Capacitor
BS-5839 DETECTOR REMOVAL COMPLIANT	YES (provided diodes are fitted to detector base)
DEVICES PER ZONE	32 Maximum - EN54 pt.2
ALARM RESISTANCE VALUE	270 - 1000 Ohms
SOUNDER CIRCUIT SPECIFICATION	
CURRENT OUTPUT	2 outputs w/ 500 mA max. current drive per circuit - fully monitored
ALARM VOLTAGE / END OF LINE RESISTOR	27.5 V DC Nominal / 10 K Ohms - 1/4 Watt
AUXILIARY OUTPUTS SPECIFICATION	
AUXILIARY RELAY OUTPUT	1 Fire (COM-NC-NO) - 1 Fault (COM-NC) non-supervised
RELAY CONTACT RATING	50 V DC - 1 Amp resistive loads
REMOTE INPUT SPECIFICATION	
PROGRAMMABLE INPUT 1	Non-Latching - Voltage free contact
PROGRAMMABLE INPUT 2	Non-Latching - Voltage free contact
MECHANICAL & OPERATING SPEC.	
HUMIDITY	Max 95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
WEIGHT (ORION-PLUS)	2 Kg without batteries, 7 Kg with batteries (2 x 12 V x 7Ah)
WEIGHT (ORION-PLUS-L)	2 Kg without batteries, 7 Kg with batteries (2 x 12 V x 7Ah)
DIMENSIONS (ORION-PLUS)	273 (L) x 107 (W) x 404 (H) mm
DIMENSIONS (ORION-PLUS-L)	375 (L) x 345 (W) x 139 (H) mm
COLOUR	White or Red
ORDER CODE	
ORION-PLUS 8	8 ZONE EXPANDABLE TO 16 ZONE CONVENTIONAL FACP / REGULAR BOX
ORION-PLUS 12	12 ZONE EXPANDABLE TO 16 ZONE CONVENTIONAL FACP / REGULAR BOX
ORION-PLUS 16	16 ZONE CONVENTIONAL FACP / REGULAR BOX
ORION-PLUS 20L	20 ZONE EXPANDABLE TO 32 FACP / LARGE BOX
ORION-PLUS 24L	24 ZONE EXPANDABLE TO 32 FACP / LARGE BOX
ORION-PLUS 28L	28 ZONE EXPANDABLE TO 32 FACP / LARGE BOX
ORION-PLUS 32L	32 ZONE CONVENTIONAL FACP / LARGE BOX
GFE-EXP-MOD	GFE-EXP-MOD: 4 ZONE ORION-PLUS EXPANSION MODULE