



## MFP 16-28 Zone Conventional Fire Panel to BS5839-4

- Fully compliant with BS 5839 Part 4
- Robust metal lid and metal back box with heavy-duty base connections
- Four sounder circuits and head out (detector removed) fault indication provided as standard
- FF516/CON supplied as a 16 zone panel, extendable to 20, 24 or 28 zones using FF501Z Four zone extender kits
- End of line units included (one per zone)
- Separate indication of open circuit, short circuit, head out, sounder and battery/PSU faults
- Non-latching 'class change' sounder input, latching fire & non-latching fault outputs (via MFPX loom)
- Fault buzzer mute facility
- Short circuit = fire facility (pre-1980 BS, no resistors in call points), selectable on a zone by zone basis for retro-installations
- Non-latching zones facility for cross connection to other panels
- Wide range of engineer facilities including one man detector test, sounder walk test, sounder isolate, sounder delay and auxiliary isolate
- Up to eight two-wire repeaters with full external control (except isolate) per system (requires one FF596T Repeater Transmitter PCB fitted at the main panel)
- Fully compatible with the Context Plus UL-listed Series 65A range of conventional detectors, the ActiV range of Intertek certified conventional detectors and the Ei range of wireless detectors and ancillaries.

### Order codes

FF516/CON	MFP 16 ZONE FIRE PANEL, EXTENDABLE TO 20, 24 OR 28 ZONES USING A FF501Z 4 ZONE EXTENDER CARD)
FF501Z	MFP 4 ZONE EXTENDER PCB KIT
FF596	MFP REPEATER PANEL, 8 ZONES, EXTENDS TO 28 ZONES
FF596R	MFP REPEATER, 8 ZONE EXTENDER PCB KIT
FF596T	MFP REPEATER TRANSMITTER PCB KIT. ONE REQUIRED PER REPEATER SYSTEM (FIT AT MASTER PANEL).
FF574X	MFPX EXPANSION LOOM AND TERMINALS
FF502P	UNIVERSAL 4 ZONE MONITORED SOUNDER EXTENDER KIT
FF387	FLUSH BEZEL FOR FF516/CON
FF385	FLUSH BEZEL FOR MFP REPEATER

# MFP Technical Specification

## Power Supply Specification

Mains supply voltage	230Va.c±10% 50/60Hz
Internal power supply	27Vd.c.
Total output current limited to	3A
Supply and battery charger monitored for failure	Yes
Batteries monitored for disconnection and failure	Yes

## Detector Circuit Specification

Number of circuits	16 (extendable to 20, 24 or 28 zones using FF501Z Four zone extender kits)
Line monitored for open and short circuit faults	Yes (short circuits can be disabled for each zone)
Line monitored for head out/detector removed faults	Yes
End of line device (provided)	Miniature circuit board
Detector continuity diodes	Silicon 1N4001 or Schottky type
Call point resistor value	W 470 - 680 ½ 0 . 5W
Max. number of smoke detectors per zone	20 (max detector current 2mA)
Max. number of manual call points per zone	No limit

## Sounder Circuit Specification

Number of circuits	4
End of line resistor value	6800 ½ 5 % Tol. 0. 25 W
Line monitored for open and short circuit faults	Yes
Outputs fused at	1. 6A
Maximum total output current to all outputs	3A
Maximum number of bells @ 25mA	120
Maximum number of electronic sounders @ 20mA	150
Auxiliary volt free relay contacts	1A 30Vd.c max (do not connect mains voltages)

## Auxiliary Inputs / Outputs

Available via optional MFPX expansion loom (not supplied)	Class change input; Fire 1, Fire 2 and Fault outputs. These open collector outputs have a max. sink current of 100mA each and are typically used to drive relays. to control ventilation systems, gas valves and door release systems (do not use the panel's power for door release systems as this will drastically reduce battery stand-by time).
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## Fuses (to IEC - EN60127 Pt2)

Mains terminal block	630mA T 20mm
Sounder outputs F1,F2,F3,F4	1.6A F 20mm
Auxiliary output F6	1A F 20mm
Battery fuse	3A F 20mm

## Panel Indicators and Controls

External indicators	Mains On, General Fire, Zone Fire, Zone Fault (indicates S/C, head out, O/C & zone disabled) Sounder Fault, Processor Fault, Battery/Power Supply Fault,Aux. Outputs Disabled; Fault Sounder (indicates fault, silenced fire and delayed alarm sounders).
Internal indicators	One Man Detector Test; Sounder Walk Test
External controls (keyswitch operated)	Reset/Test Scroll; Silence Alarm/Fault Sounders; Evacuate; Disable.
Internal controls	One Man Detector Test; Sounder Walk Test; Sounder Isolate; Sounder Delay; Revert to short = fire; Non-latching zones

## Dimensions

Approx. dimensions of enclosure	521 x 334 x 140mm
Battery volume dimensions (W x H x D)	350 x 110 x 105mm
Weight (without batteries)	9.5 Kg

## Repeater Specification

Max. number of repeaters	One repeater transmitter PCB (part no. FF596T) fitted at the main panel allows the connection of up to eight monitored MFP Repeaters.
Repeater wiring	Two wires (power and data). Star or daisy chain wiring.

## Battery Stand-By Times

	FF516/CON (not extended)	FF516/CON (extended to 20z)	FF516/CON (extended to 24z)	FF516/CON (extended to 28z)
Quiescent current	90mA	105mA	120mA	135mA
Max. load current	3A	3A	3A	3A
Stand-by time in hours using 2.0 A hr batteries	20	18	16	14
Stand-by time in hours using 2.6 A hr batteries	30	25	22	19
Stand-by time in hours using 6.0 A hr batteries	65	55	50	45
Stand-by time in hours using 10.0 A hr batteries	110	95	80	75
Stand-by time in hours using 12.0 A hr batteries	130	110	100	85

The quiescent currents are given for the following conditions - no mains supply, fault beeper active, no aux. output connections, end of line devices and resistors only fitted to detector and sounder loops. The battery stand-by times are guidelines only based on the above conditions. Additional loads that increase the quiescent current in the normal state and sounder loads must be considered when calculating stand-by time. Batteries in poor condition greatly reduce stand-by time.