

PRODUCTS CATALOGUE

# MANUFACTURERS OF FIRE DETECTION EQUIPMENT



**GLOBAL**  
FIRE EQUIPMENT

# THE WAY WE LEAD

Building on a long tradition of excellence in the field of Fire Alarm Control Panels, **Global Fire Equipment S.A.**, founded in Denmark by João Paulo Ajami, has experienced a remarkable organic growth both in turnover and customer numbers since 1994 and is now a world player, supplying customers across 75 countries with state of the art equipment, installed in prestige premises ranging from major airports to an Antarctic research base. Based in a modern logistics center in the Algarve region of Portugal, **GFE** designs, manufactures and exports a complete range of Fire Detection Products and puts customer satisfaction at the top of its priorities.





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# PANELS





EN54-2 and EN54-4  
CERTIFIED  
1328-CPR-0160



## JUNO NET

### Networkable Fire Detection System

**JUNO NET is a powerful Analogue Addressable Fire Alarm Control System with networking capabilities that facilitate the configuration of complex Wide Area Fire Detection Systems. Modular construction and distributed intelligence allow systems of up to 96 Loops to be constructed. With a high level of built-in redundancy and emergency back-up features, the JUNO NET is fully equipped to control the most complex installations.**

Using its wide array of interfacing capabilities the **JUNO NET** is ideally placed to provide an efficient and effective solution to the logistics of protecting large institutions. **JUNO NET** is available as a standalone system of up to 13 Loops in a single cabinet and can be expanded to up to **96 Loops** via a networked array of sub-panels which can be supplied in a blank box version or combined with a repeater to allow remote display and control of the system. Networking is done by a monitored, redundant, double RS422/RS485, Fibre optic loop or TCP/IP network.

The **JUNO NET** networking capabilities are further enhanced by a wide range of programming options which provide the capability to customise the system according to the needs of the customer. Flexible cause and effect programming of I/O devices and warning devices ensure that Fire or Fault warnings trigger the appropriate response.

An interactive graphic representation of the system can be displayed on the users' computer via the **ODYSSEY** graphical software (optional). All the devices on the system can be displayed on a building plan showing their status in real time. In the event of fire or fault the customer can control the system and access all the necessary information with a few mouse-clicks.

Automatic device detection at start up reduces time spent at the commissioning stage. In Installation mode the **JUNO NET** detects and recognises addressed and connected devices with the system being fully operational in less than two minutes. The default programming ensures that the system is ready to detect Fire/Fault alerts from the moment that power is applied.

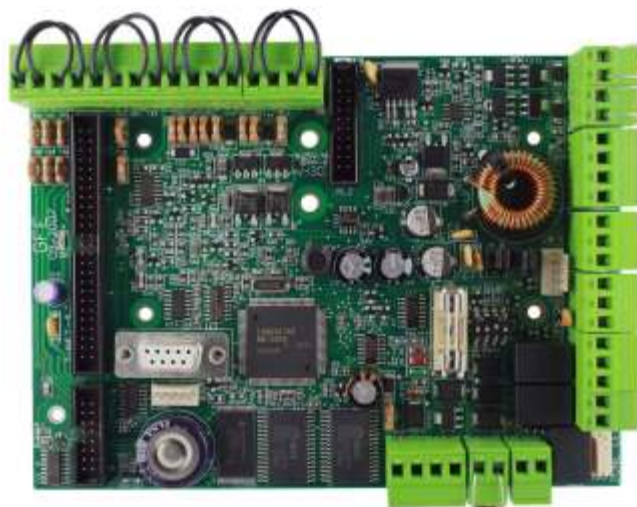
Additional programming, to customise the system can be implemented via the onboard keypad, IR programmer, PS/2 keyboard or with a laptop PC running the **GFE Connector** software which is available free of charge on the Global Fire website.

## JUNO NET

## Key Features

- ▶ Fully expandable system from 1-96 Loops with distributed intelligence for added security
- ▶ 125 Device addresses per loop
- ▶ Up to 96 Loop sounders with 32 individually programmable addresses per Loop
- ▶ 96 VULCAN 2 (addressable) ultra low current sounders or beacons per Loop. Only 64 of these units should be installed per loop when combined sounder beacons are being used. This number includes addressable, shadow, auxiliary and detector-sounder/beacon versions of these units
- ▶ Compatible with major analogue addressable communications protocols
- ▶ 2 Fire output changeover relays and 1 Fault output relay (NC)
- ▶ Open collector outputs for Fire, Fault and pre-alarm remote indication
- ▶ 2 Fully monitored conventional sounder outputs on main panel and each sub panel
- ▶ Repeaters with optional integrated Sub-Panels (J-NET-REP + Loop Card)
- ▶ 384 Programmable zones
- ▶ 512 Fully programmable sounder and I/O groups
- ▶ Event Log 2000 entries FIFO
- ▶ Backlit LCD display 4 row x 40 characters
- ▶ Programming options: onboard keypad, Remote IR (optional), PS2 Keyboard and GFE Connector Software
- ▶ PC Graphics package ODYSSEY for alarm management and reporting (optional)
- ▶ Multiple Language support (menu selectable)
- ▶ MODBUS (ASCII & RTU) and BMS support

TECHNICAL SPECIFICATIONS	1 - 4 LOOPS	4 - 13 LOOPS
LOOPS	1 to 4 loops - Max 275 mA per loop	4 to 13 loops - Max 275 mA per loop
SOUNDER OUTPUTS	2 at 28 V DC / 500 mA each	4/6/8 24V DC / 500 mA each
AUX. RELAYS FIRE	2 rated 50 VAC / DC 1A resistive	2 rated 50 VAC / DC 1A resistive
AUX. RELAY FAULT	1 rated 50 VAC / DC 1A resistive	1 rated 50 VAC / DC 1A resistive
AUX POWER OUTPUT	28 V DC 600 mA	28 V DC 600 mA
ADDITIONAL OUTPUTS	Multiplexed up to 384 Zones	Multiplexed up to 384 Zones
PRIMARY SUPPLY	230 +10% -15% V AC	230 +10% -15% V AC
SECONDARY SUPPLY	28 V DC Nominal	28 V DC Nominal
POWER SUPPLY RATING	65 W (1-3 Loop) - 150 W (4 Loop)	150 W (4-6 Loop) - 200 W (7-13 Loop)
QUIESCENT CURRENT (NO DEVICES)	130 mA (1-3 Loop) - 180 mA (4 Loop)	130 mA + 90 mA / sub-panel
BATTERIES (INTERNAL)	2 x 12 V 12 AH	2 x 12 V 12 AH
DIMENSIONS	375 (H) x 345 (W) x 139 (D) mm	420 (H) x 550 (W) x 127 (D) mm
WEIGHT	5,1 Kg (no batteries)	8,1 Kg (no batteries)
COLOUR	White or Red	White or Red
OPERATING TEMPERATURE	-10°C to 50°C	-10°C to 50°C
STORAGE TEMPERATURE	-10°C to 50°C	-10°C to 50°C
HUMIDITY / PROTECTION	Max 95% no condensation / IP21	Max 95% no condensation / IP21
ORDER CODE		
J-NET-EN54-SC-001	1328-CPR-0160	1 LOOP - PSU 2.4A
J-NET-EN54-SC-002	1328-CPR-0160	2 LOOPS - PSU 2.4A
J-NET-EN54-SC-003	1328-CPR-0160	3 LOOPS - PSU 2.4A
J-NET-EN54-SC-004		4 LOOPS - PSU 5A
J-NET-EN54-SC-004-L		LARGE BOX - 4 LOOPS - PSU 5A
J-NET-EN54-SC-005		LARGE BOX - 5 LOOPS - PSU 5A
J-NET-EN54-SC-006		LARGE BOX - 6 LOOPS - PSU 5A
J-NET-EN54-SC-007		LARGE BOX - 7 LOOPS - PSU 7.5A
J-NET-EN54-SC-008		LARGE BOX - 8 LOOPS - PSU 7.5A
J-NET-EN54-SC-009		LARGE BOX - 9 LOOPS - PSU 7.5A
J-NET-EN54-SC-010		LARGE BOX - 10 LOOPS - PSU 7.5A
J-NET-EN54-SC-011		LARGE BOX - 11 LOOPS - PSU 7.5A
J-NET-EN54-SC-012		LARGE BOX - 12 LOOPS - PSU 7.5A
J-NET-EN54-SC-013		LARGE BOX - 13 LOOPS - PSU 7.5A



## J-NET-CON-SP1

### Juno Net Main Connector Board inc. 1 Loop Expansion Sub-Panel

The introduction of the J-NET-CON-SP1, brings in a new level of flexibility and competitiveness to our customers.

By including a single loop sub-panel in the **J-NET-CON** board, we were able to pack **4 loops** into our standard box. The new range of self contained JUNO NET panels covers all variants in steps of 1 from **1 to 13 loops**. Using this new board the JUNO NET panel can be provided in the standard box from 1 to 4 loops and on the larger enclosure from 4 to 13 loops.

The J-NET-CON-SP1 is compatible with all models of interface cards used either when interfacing the JUNO NET Main Panel to other Sub-Panels and/or Repeaters or when connecting JUNO NET Systems to GFE's graphical software **ODYSSEY**, BMS or MODBUS.

TECHNICAL SPECIFICATIONS	
LOOPS	1 loop - Max 275 mA per loop
SOUNDER OUTPUTS	2 rated at 28 V DC 500 mA each
AUX. RELAYS FIRE	2 - Changeover C-NO-NC rated @ 50 VAC / DC 1A resistive
AUX. RELAY FAULT	1 - Normally Closed rated @ 50 VAC / DC 1A resistive
AUX POWER OUTPUT	2 rated @ 28 V DC 300 mA / output
ADDITIONAL OUTPUTS	Multiplexed up to 384 Zones
QUIESCENT CURRENT (NO DEVICES)	80 mA
DIMENSIONS	163 (D) x 120 (W) x 27 (H) mm
WEIGHT	240 g
OPERATING TEMPERATURE	-10°C to 50°C
STORAGE TEMPERATURE	-10 to 50°C
ORDER CODE	
<b>J-NET-CON-SP1</b>	JUNO NET MAIN CONNECTOR BOARD INC. 1 LOOP EXP. SUB-PANEL



# J-NET-SP

## Juno Net Sub-Panel

JUNO NET Sub-Panels allow expansion of the system in groups of either 1, 2 or 3 loops. When supplied in an enclosed cabinet with independent primary and secondary power supplies up to 9 Loops may be installed in each cabinet which also contains a 5 A PSU/ Charger unit and space for standby rechargeable batteries. One RS422/RS485, Fibre Optic or TCP/IP interface is required per cabinet to enable networking with the rest of the system.

Each sub-panel board controls up to 3 Analogue Addressable Detection Loops via its own independent processor. In the event of communication failure with the main control unit, the sub panel is capable of operating independently, detecting Fire/ Fault events and activating its own sounders and relays.

TECHNICAL SPECIFICATIONS	J-NET-SP STAND ALONE	J-NET-SPX (BOXED)
LOOPS	1, 2 or 3 loops - Max. 275 mA/ Loop	1 to 9 loops - Max. 275 mA per loop
SOUNDER OUTPUTS / sub-panel	2 at 28 V DC / 500 mA each	4/6/8 24 V DC / 500 mA each
AUX. RELAYS FIRE / sub-panel	2 rated 50 VAC / DC 1A resistive	2 rated 50 VAC / DC 1A resistive
AUX. RELAY FAULT / sub-panel	1 rated 50 VAC / DC 1A resistive	1 rated 50 VAC / DC 1A resistive
AUX POWER OUTPUT	28 V DC 300 mA	28 V DC 300 mA
ADDITIONAL OUTPUTS	N/A	N/A
PRIMARY SUPPLY	N/A	230 +10% -15% V AC
SECONDARY SUPPLY	28 V DC Nominal	28 V DC Nominal
POWER SUPPLY RATING	N/A	150 W
QUIESCENT CURRENT (NO DEVICES)	90 mA	90 mA/sub-panel
BATTERIES (INTERNAL)	2 x 12 V 12 AH	2 x 12 V 12 AH
DIMENSIONS	113 (L) x 180 (W) x 26 (H) mm	375 (H) x 345 (W) x 139 (D) mm
WEIGHT (NO BATTERIES)	0,3 Kg	4,2 Kg (no batteries)
OPERATING TEMPERATURE	-10°C to 50°C	-10°C to 50°C
STORAGE TEMPERATURE	-10°C to 50°C	-10°C to 50°C
HUMIDITY/ PROTECTION	N/A	Max 95% no condensation / IP21
<b>ORDER CODE</b>		
<b>J-NET-SP</b>	SUB-PANEL BOARD W/O LOOP CARD	
<b>J-NET-SP-001-SA</b>	SUB-PANEL BOARD W/ 1 LOOP	
<b>J-NET-SP-002-SA</b>	SUB-PANEL BOARD W/ 2 LOOPS	
<b>J-NET-SP-003-SA</b>	SUB-PANEL BOARD W/ 3 LOOPS	
<b>J-NET-SPX-001</b>		1 LOOP - 5.4A PSU
<b>J-NET-SPX-002</b>		2 LOOP - 5.4A PSU
<b>J-NET-SPX-003</b>		3 LOOPS - 5.4A PSU
<b>J-NET-SPX-004</b>		4 LOOPS - 5.4A PSU
<b>J-NET-SPX-005</b>		5 LOOPS - 5.4A PSU
<b>J-NET-SPX-006</b>		6 LOOPS - 5.4A PSU
<b>J-NET-SPX-007</b>		7 LOOPS - 5.4A PSU
<b>J-NET-SPX-008</b>		8 LOOPS - 5.4A PSU
<b>J-NET-SPX-009</b>		9 LOOPS - 5.4A PSU





## J-NET-EN54-REP

### Juno Net Repeater

The Juno Net Repeater Panel, J-NET-EN54-REP, fully replicates the control panel information and control facilities allowing multiple operating points within the system. The J-NET-EN54-REP communicates with the Master Control Panel via an RS422/RS485, Fiber Optic or TCP/IP network. Sub-Panels can be integrated into the repeater panel to allow the connection of up to 3 additional detection loops, per sub-panel, to the system.

J-NET-EN54-REP is ideal for multiple building complexes where display and control of the system is required in various locations. Depending on control panel loading, power for the J-NET-EN54-REP can be supplied from the control panel's auxiliary power output, an external 24 Volt power supply or an optional complete built-in 24 V, 2,4 A or 5 A power supply unit. If a sub-panel is installed in the repeater housing, then a 5 A power supply unit is required.

TECHNICAL SPECIFICATIONS	NO LOOP CARD	WITH LOOP CARD
LOOPS	N/A	1, 2 or 3 loops - Max. 275 mA per loop
SOUNDER OUTPUTS	2 at 28 V DC / 500 mA each	2 - 28 V DC / 500 mA each
AUX. RELAYS FIRE	2 rated 50 VAC / DC 1 A resistive	2 rated 50 VAC / DC 1A resistive
AUX. RELAY FAULT	1 rated 50 VAC / DC 1 A resistive	1 rated 50 VAC / DC 1A resistive
AUX POWER OUTPUT	28 V DC 600mA	28 V DC 600 mA
ADDITIONAL OUTPUTS	Multiplexed up to 384 Zones	Multiplexed up to 384 Zones
PRIMARY SUPPLY	N/A	230 +10% -15% V AC
SECONDARY SUPPLY	28 V DC Nominal	28 V DC Nominal
POWER SUPPLY RATING	N/A	65 W
QUIESCENT CURRENT (NO DEVICES)	110 mA	130 mA no loop devices fitted
BATTERIES (INTERNAL)	2 x 12 V 12 AH	2 x 12 V 12 AH
DIMENSIONS	375 (H) x 345 (W) x 139 (D) mm	375 (H) x 345 (W) x 139 (D) mm
WEIGHT (NO BATTERIES)	4,5 Kg (no batteries)	5,1 Kg (no batteries)
COLOUR	White or Red	White or Red
OPERATING TEMPERATURE	-10°C to 50°C	-10°C to 50°C
STORAGE TEMPERATURE	-10°C to 50°C	-10°C to 50°C
HUMIDITY/ PROTECTION	Max 95% no condensation - IP21	Max 95% no condensation / IP21
<b>ORDER CODE</b>		
J-NET-EN54-REP	JUNO NET EN54 REPEATER	



EN54-2 and EN54-4  
CERTIFIED  
1328-CPR-0179



## JUNIOR V4

### Single Loop Analogue Addressable Control Panel Expandable to 2 Loops

The Global Fire JUNIOR V4 is a single loop Analogue addressable control panel which can be expanded to 2 loops. It provides a cost effective solution for small to medium sized installations. The JUNIOR V4 can support up to 125 addressable devices on each loop which are compatible with major analogue addressable communications protocols.

Using Global Fire's advanced communications mechanism, up to **32 individually addressed Loop sounders** can be connected to each of the JUNIOR V4 detection Loops. The JUNIOR V4 also supports Shadow and Auxiliary Sounder/ Beacons together with GFE's new VULCAN 2 addressable Sounder-Beacon-Isolator along with all other GFE Interface devices.

The panel is equipped with a backlit LCD display of 4 rows each with 40 characters to give clear textual indications of Fire/ Fault occurrences to the end user. There are also **16 Zone Fire LED indicators**.

**Junior Repeaters** and Mini-Repeaters can be connected via an RS422/RS485, Fibre Optic or TCP/IP interface to facilitate remote display and control of the system.

An interactive graphic representation of the system can be displayed on the users' computer via the **ODYSSEY** graphical software (optional). All the devices on the system can be displayed on a building plan showing their status in real time. In the event of fire or fault the customer can control the system and access all the necessary information with a few mouse-clicks.

**Automatic Device Detection** at start up reduces time spent at the commissioning stage. In Installation mode the JUNIOR V4 detects and recognises addressed and connected devices with the system being fully operational in less than 2 minutes.

The default programming ensures that the system is ready to detect Fire/ Fault alerts from the moment that power is applied. Additional programming, to customise the system can be implemented using a laptop PC running the GFE Connector software which is available free of charge on GFE's website.

**JUNIOR V4****Key Features**

- ▶ Single loop panel - Expandable to two Loops using JNR-V4-Card
- ▶ Supports connection to Mini-repeaters via RS422/RS485, Fibre Optic or TCP/IP interfaces
- ▶ 125 Device addresses per loop
- ▶ 32 Individually programmable sounder addresses per Loop
- ▶ 96 VULCAN 2 (addressable) ultra low current sounders or beacons per Loop. Only 64 of these units should be installed per loop when combined sounder beacons are being used. This number includes addressable, shadow, auxiliary and detector-sounder/ beacon versions of these units
- ▶ 2 Fire output relays (change-over) and 1 Fault relay (normally closed)
- ▶ 2 Conventional alarm outputs (individually programmable)
- ▶ 384 Fully programmable zones
- ▶ 512 Fully programmable sounder groups together with 512 Input/Output groups
- ▶ Event log (rolling, 2000 entries)
- ▶ Compatible with GFE's range of Analogue Addressable Devices
- ▶ Backlit LCD display with 4 rows of 40 characters
- ▶ PC Programming using Upload/Download GFE Connector Software
- ▶ PC Graphics package ODYSSEY for alarm management and reporting (optional)
- ▶ Multiple language support (menu selectable)
- ▶ Integrated 16 zone LED fire zone indication

**TECHNICAL SPECIFICATIONS**

PRIMARY SUPPLY VOLTAGE - INPUT	230 +10% -15% V AC
PRIMARY SUPPLY VOLTAGE - OUTPUT	28.5 V DC nominal
PRIMARY SUPPLY CURRENT - OUTPUT	2.4 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	1.6 Amp Maximum @ 20°C
INTERNAL BATTERY CAPACITY - MAXIMUM	2 x 12 V 7Ah Sealed VRLA Lead Acid Batteries
LOOP CURRENT DRIVE	275 mA/Loop
AUXILIARY RELAY OUTPUTS	2 Fire (COM-NC-NO) - 1 Fault (COM-NC) non-supervised
CONVENTIONAL SOUNDER CIRCUITS	2 - 400 mA Max. current drive per circuit - Fully monitored
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
WEIGHT	2.0 Kg - 7 Kg (inc. 2 x 7 AH 12 V bat.)
DIMENSIONS	272 (W) x 404 (H) x 107 (D) mm
COLOUR	White or Red

**ORDER CODE**

<b>JNR-V4-1</b>	<b>1328-CPR-0179</b>	JUNIOR V4, 1 LOOP EXPANDABLE TO 2 LOOPS, PSU 2.4 A
<b>JNR-V4-2</b>	<b>1328-CPR-0179</b>	JUNIOR V4, 2 LOOPS, PSU 2.4 A
<b>JNR-V4-CARD</b>		JUNIOR V4 LOOP CARD EXPANSION FROM 1 TO 2 LOOP



# JUNIOR REP

## Junior Repeater Panel

The JUNIOR REP will provide remote control, system status display and monitoring functions for any of GFE's Analogue Addressable Fire Detection Panels. All Fire, Fault, Test and Disabled conditions are displayed. User is able to control all functions at access Level's 1, 2 (authorized user level) and 3 (installer/programming level). Compliant with EN54-2. Display and Control Functions are replicated and shown in the same manner as on any of GFE's Analogue Addressable Fire Detection Panel. Access to Levels 2 and 3 is via the same code as programmed for the associated panel.

This unit uses the same plastic enclosure as the JUNIOR V4 panel and is available in 2 colours: **white and red**.

It includes as standard an RS485 interface. This unit is also compatible with all of GFE's standard data loop interfaces allowing the JUNIOR REP panel to be interfaced to both JUNIOR and JUNO NET addressable panels using RS485, Fibre Optic or TCP/IP.

A maximum of **4 JUNIOR REP** panels can be connected to a single Addressable Panel if powered directly from the Control Panel's Auxiliary Supply Output. This number is always dependent on maximum current.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	28 V DC nominal derived from panel's Aux. Supply O/P
SUPPLY CURRENT	80 mA
CONNECTIONS	+Supply, -Supply plus interface connections
REPEATER NETWORK	RS485, Fibre Optics, TCP/IP
NOTE	4 units max. when powered from aux. supply o/p from panel
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	272 (W) x 404 (H) x 107 (D) mm
WEIGHT	1.6 Kg
COLOUR	White or Red
ORDER CODE	
JUNIOR REP	JUNIOR REPEATER PANEL - NO LOOPS - INCLUDES 1 X RS485 INTERFACE



# JUNIOR MINI-REP

## Junior Mini-Repeater Panel

The JUNIOR MINI-REP will provide remote control, system status display and monitoring functions for any of GFE's Analogue Addressable Fire Detection Panels. All Fire, Fault, Test and Disabled conditions are displayed. User is able to control all functions at access Level's 1, 2 (authorized user level) and 3 (installer/programming level). Compliant with EN54-2. Display and Control Functions are replicated and shown in the same manner as on any of GFE's Analogue Addressable Fire Detection Panel. Access to Levels 2 and 3 is via the same code as programmed for the associated panel. This unit is available in 2 colours: white and red.

It includes as standard an RS485 interface. This unit is also compatible with all of GFE's standard data loop interfaces allowing the JUNIOR MINI-REP panel to be interfaced to both JUNIOR and JUNO NET addressable panels using RS485, Fibre Optic or TCP/IP.

A maximum of **4 JUNIOR MINI-REP** panels can be connected to a single Addressable Panel if powered directly from the Control Panel's Auxiliary Supply Output. This number is always dependent on maximum current.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	28 V DC nominal derived from panel's Aux. Supply O/P
SUPPLY CURRENT	80 mA
CONNECTIONS	+Supply, -Supply plus interface connections
REPEATER NETWORK	RS485, Fibre Optics, TCP/IP 4 units max. when powered from aux. supply o/p from panel
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	256 (L) x 194 (W) x 75 (H) mm
WEIGHT	1.5 Kg
COLOUR	White or Red
ORDER CODE	
JUNIOR-MINI-REP	JUNIOR MINI REPEATER PANEL - NO LOOPS INCLUDES 1 X RS485 INTERFACE





EN54-2 and EN54-4  
CERTIFIED  
1328-CPR-0224



## ORION

### Conventional Fire Detection Panel

The ORION conventional control panel range offers a creatively designed and visually pleasing solution for smaller cost-conscious projects demanding simplicity of operation. Versions available include 2, 4 and 8 zone panels and two styles of repeater.

The **outstanding programmable features** included in this panel range contradict the facilities commonly available in this type of panel and include: programmable time delay by zone, Day/Night mode, selectable non-latching zones and coincidence detection.

**Operation is extremely intuitive**, offering simple control and one-button disablement facilities, as well as the one man test mode which provides simple and efficient testing of the system.

**Advanced configuration** solutions include the following: a dedicated RS232 communication interface allowing connection of up to 4 remote repeater panels, addressable loop interface modules and multiplexed zonal output relays; giving one of the most highly advanced levels of system integration and compatibility existing on the market at this level.

## ORION

## Key Features

- ▶ 2, 4 and 8 Zone non-expandable control panels
- ▶ Up to 32 conventional smoke and/or heat detectors per Zone
- ▶ Active End of Line monitoring
- ▶ Programmable non-latching Zones
- ▶ Delay timer programmable on/off per Zone
- ▶ Coincidence programmable for adjacent Zones
- ▶ One man test
- ▶ Supervised auxiliary 24 volt output
- ▶ 2 Supervised/ monitored sounder circuits
- ▶ 3 Remote inputs used for activation of Class Change, Day/Night mode, and Reset
- ▶ 2 Relay outputs fire and fault
- ▶ Fully EN54 part 2 and 4 compliant
- ▶ Repeater output
- ▶ Multiplexed output for LEDs and additional relay outputs per zone (GFE-MPX-REL)
- ▶ Multiplexed output for sounders per zone (GFE-MPX-SNDR)
- ▶ Addressable Loop Interface card (GFE-ADLI)

## TECHNICAL SPECIFICATIONS

SUPPLY SPECIFICATION		
PRIMARY SUPPLY VOLTAGE- IN		230 +10% -15% 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 12V x 7Ah 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		2,4 or 8
ZONE CURRENT - QUIESCENT / ALARM		4 mA / 60 mA - Maximum
MAX. CABLE RESISTANCE / CAPACITANCE		40 Ohms / 0.470 uF
END OF LINE MONITORING		Active EOL - Capacitor
Bs5839 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		2 - 500mA 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		
EVACUATION (CC) - DAY/ NIGHT MODE		Non-Latching - Voltage free contact
RESET		Non-Latching - Voltage free contact
MECHANICAL & OPERATING SPEC.		
MAX. HUMIDITY		95% RH Non-Condensing
OPERATING TEMPERATURE		-10°C to 50°C
WEIGHT		1.7 Kg - 7 Kg (inc. 2 x 7 AH 12 V bat.)
DIMENSIONS		272 (W) x 404 (H) x 107 (D) mm
COLOUR		White or Red
ORDER CODE		
ORION 2	1328-CPR-0224	2 ZONES CONVENTIONAL FIRE DETECTION CONTROL PANEL
ORION 4	1328-CPR-0224	4 ZONES CONVENTIONAL FIRE DETECTION CONTROL PANEL
ORION 8	1328-CPR-0224	8 ZONES CONVENTIONAL FIRE DETECTION CONTROL PANEL



# ORION MINI

## 1 & 2 Zone Conventional Fire Detection Panel - Low Profile

The ORION MINI 1 & 2 zones conventional control panel, offers a creatively designed and aesthetically pleasing solution for smaller cost-conscious projects demanding simplicity of operation. The programmable features included in this panel are: programmable time delay and Day/Night mode.

Operation is extremely intuitive, offering simple control and one-button disablement facilities, as well as the one man test mode which provides simple and efficient testing of the system.

### Key Features

- ▶ Up to 32 conventional smoke and/or heat detectors per Zone
- ▶ Active End of Line monitoring
- ▶ Delay timer programmable ON/OFF and Day/Night mode
- ▶ One man test
- ▶ 1 Supervised/ monitored sounder circuit
- ▶ Fully EN54 -2 and EN54-4 compliant
- ▶ Addressable Loop Interface card-GFE-ADLI (optional)

### TECHNICAL SPECIFICATIONS

PRIMARY SUPPLY VOLTAGE- IN	230 +10% -15% V AC
PRIMARY SUPPLY VOLTAGE/ CURRENT- OUT	0.5 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
INTERNAL BATTERY CAPACITY - MAXIMUM	2 x 12 V x 1.2 Ah Sealed VRLA Lead Acid Batteries
MAINS FUSE/ BATTERY FUSE	1 A -250 V Slow Blow - 20 mm/ 1.0 Amp - Resettable
ZONE CURRENT - QUIESCENT/ ALARM	4 mA / 65 mA
MAX. CABLE RESISTANCE/ CAPACITANCE	40 Ohms / 0.470 uF
END OF LINE MONITORING	Active EOL - Capacitor
BS5839 DETECTOR REMOVAL COMPLIANT	YES provided diodes are fitted to detector base
DEVICES PER ZONE	32 Maximum - EN 54-2
ALARM RESISTANCE VALUE	270 - 1000 Ohms
SOUNDER CIRCUIT SPECIFICATION	1 - 300 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 E.O.L.
OPERATING TEMPERATURE/ MAX. HUMIDITY	-10°C to 50°C/ 95% RH Non-Condensing
WEIGHT	1.1 Kg - 2.3 Kg (inc. 2 x 1.2 AH 12 V bat.)
DIMENSIONS	256 (L) x 194 (W) x 86 (H) mm
COLOUR	White or Red
<b>ORDER CODE</b>	
<b>ORION MINI 1</b>	ONE ZONE CONVENTIONAL FIRE DETECTION CONTROL PANEL - LOW PROFILE
<b>ORION MINI 2</b>	TWO ZONE CONVENTIONAL FIRE DETECTION CONTROL PANEL - LOW PROFILE



# ORION MINI-REP

## Orion Mini-Repeater Panel

The ORION MINI-REP will provide remote control, system status display and monitoring functions. All Fire, Fault, Test and Disabled conditions are displayed. User is able to control all functions at access Level's 1 and 2.

Compliant with EN54-2. Display and Control Functions are replicated and shown in the same manner as on the ORION Fire Detection Panel. Access to Level 2 is via a four digit code (same code as used on the ORION Conventional Panel).

It includes as standard an **RS232 interface**. This unit is also compatible with all of GFE's standard data loop interfaces, allowing the ORION MINI-REP panel to be interfaced to an ORION Conventional Panel using 4 different interfacing technologies:

- ▶ RS232
- ▶ RS485
- ▶ Fibre Optics
- ▶ TCP/IP (specific for ORION Conventional Systems)

A maximum of **4 ORION MINI-REP** panels can be connected to a single ORION Conventional Fire Detection Panel. When using data loop interfaces, only one repeater panel will offer both control and display of the system. The remainder of the repeater panels will only offer system status display. This unit is available in both white and red colours.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	28 V DC nominal derived from Orion Aux. Supply O/P
SUPPLY CURRENT	40 mA
CONNECTIONS	+Supply, -Supply, TX and RX
REPEATER NETWORK	RS232, RS485, FO or TCP/IP - 1 Display & Control 3 Display Only
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
WEIGHT	1.4 Kg
DIMENSIONS	256 (L) x 194 (W) x 75 (H) mm
COLOUR	White or Red
ORDER CODE	
ORION MINI-REP	CONVENTIONAL MINI-REPEATER PANEL - INCLUDES 1 X RS232 INTERFACE



## ORION EX

### Conventional Fire Detection & Extinguishing Panel

**The ORION EX Conventional Fire Detection and Extinguishing Panel offers a creatively designed and aesthetically pleasing solution to satisfy the growing world demand for dependable Fire Suppression Systems.**

The ORION EX is designed and manufactured to comply with **EN54-2, EN54-4 and EN12094-1**. The **outstanding programmable features** included in this panel are best suited to be installed in expensive housing areas and in general in all areas where loss of equipment can partially or totally disrupt the proper functioning of a business.

**Operation is extremely intuitive**, offering simple control and one-button disablement facilities, as well as the one man test mode which provides simple and efficient testing of the system.

**Advanced configuration** solutions include the following: programmable pre-release and extinguishing times, electrovalve and flow switch status indications, manual and abort remote activation. There are 3 normal fire detection zones. All inputs are fully monitored for both Fire, Activation and Fault Conditions.

Plans are under way to further complement this new range of extinguishing devices. Devices such as repeater panels, addressable system interfaces, I/O expansion boards as well as manual/abort call buttons for remote connection are just some of the additions to this range.



## ORION EX

## Key Features

- ▶ 3 Fire Detection Zones
- ▶ Up to 32 conventional smoke and/or heat detectors per Zone
- ▶ Active End of Line monitoring
- ▶ Programmable Pre-Release and Extinguishing times
- ▶ Remote Manual Activation and Remote Abort Input
- ▶ Electrovalve and Pressure Switch Status Indication
- ▶ One man test
- ▶ Supervised auxiliary 24 volt supply output
- ▶ 2 Supervised/ monitored sounder circuits
- ▶ 2 Remote inputs used for activation of Evacuation and Reset
- ▶ 2 Relay outputs fire and fault with status indication
- ▶ Fully EN54-2, EN54-4 and EN12094-1 compliant

## TECHNICAL SPECIFICATIONS

SUPPLY SPECIFICATION	
PRIMARY SUPPLY VOLTAGE- IN	230 +10% -15% 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	1.85 Amp Maximum @ 20°C
INTERNAL BATTERY CAPACITY - MAXIMUM	2 x 12V x 7Ah Sealed VRLA Lead Acid Batteries
MAINS FUSE	4 A -250 V Slow Blow - 20 mm
BATTERY FUSE	1.85 Amp - Resettable
DETECTION CIRCUIT SPECIFICATION	
NUMBER OF FIRE CIRCUITS	3
ZONE CURRENT - QUIESCENT / ALARM	4 mA / 60 mA - Maximum
MAX. CABLE RESISTANCE / CAPACITANCE	40 Ohms / 0.470 uF
END OF LINE MONITORING	Active EOL - Capacitor
BS5839 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	2-300 mA max. current drive per circuit - fully monitored
VOLTAGE OUTPUT	27.5 V DC Nominal
END OF LINE RESISTOR	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	
FULLY MONITORED INPUTS	Remote Activation, Remote Abort, Electrovalve Status, Flow Switch Status
EVACUATION AND RESET	Non-Latching - Voltage free contact
MECHANICAL & OPERATING SPEC.	
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
WEIGHT	1.7 Kg - 7 Kg (inc. 2 x 7 AH 12 V bat.)
DIMENSIONS	272 (W) x 404 (H) x 107 (D) mm
COLOUR	White or Red
ORDER CODE	
ORION EX	CONVENTIONAL FIRE DETECTION & EXTINGUISHING PANEL



# ORION EX MINI-REP

## Orion Mini-Repeater Panel

The ORION EX MINI-REP will provide remote control, system status display and monitoring functions for the ORION EX Extinguishing Panel. All Fire, Fault, Test and Disabled conditions are displayed. User is able to control all functions at access Level's 1 and 2. Compliant with EN54-2. Display and Control Functions are replicated and shown in the same manner as on the ORION EX Fire Detection and Extinguishing Panel. Access to Level 2 is via a four digit code (same code as used on the ORION EX Panel).

It includes as standard an **RS232 interface**. This unit is also compatible with all of GFE's standard data loop interfaces, allowing the ORION MINI-REP panel to be interfaced to an ORION EX Panel using 4 different interfacing technologies:

- ▶ RS232
- ▶ RS485
- ▶ Fibre Optics
- ▶ TCP/IP (specific for ORION EX systems)

A maximum of 4 **ORION EX MINI-REP** panels can be connected to a single ORION EX Panel. When using data loop interfaces, only one repeater panel will offer both control and display of the system. The remainder of the repeater panels will only offer system status display. This unit is available in both white and red colours.

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	28 V DC nominal derived from Orion Aux. Supply O/P
SUPPLY CURRENT	40 mA
CONNECTIONS	+Supply, -Supply, TX and RX
REPEATER NETWORK	RS232, RS485, FO or TCP/IP - 1 Display & Control 3 Display Only
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
WEIGHT	1.4 Kg
DIMENSIONS	256 (L) x 194 (W) x 75 (H) mm
COLOUR	White or Red

### ORDER CODE

<b>ORION EX MINI-REP</b>	CONVENTIONAL MINI-REPEATER PANEL FOR ORION EX - INCLUDES 1 X RS232 INTERFACE
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# DETECTORS



# ZEOS-AD

## Analogue Addressable Fire Detectors

The ZEOS-AD series of Analogue Addressable Detectors have been designed to be fully compatible with the Global Fire Equipment range of intelligent control panels, JUNIOR and JUNO NET.

Certified to **EN54-5** and **EN54-7** the ZEOS-AD series detectors are available in Optical, Heat and combined Smoke/Heat detector versions. Optionally they can be fitted with a short-circuit loop isolator.

### Key Features

- ▶ Dual LEDs for 360° visibility
- ▶ Advanced detection and communication protocols
- ▶ Easy installation and maintenance
- ▶ Sleek low-profile housing
- ▶ Durable sensor head, no need for replacement
- ▶ SMD circuit board design. High quality and reliability guaranteed

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop Powered 17-30 V DC
CURRENT - QUIESCENT / SURGE	450 uA max.
CURRENT - DEVICE IN ALARM	4 mA - Alarm LED illuminated
SENSITIVITY	According to EN54-5 and EN54-7
CABLE SIZE	0.5-2.5 mm <sup>2</sup>
RESET/STAR-UP TIMES	20 seconds max.
COLOUR / CASE MATERIAL	White / ABS
OPER. TEMPERATURE / MAX. HUMIDITY	-10°C to 50°C / 95% RH Non-Condensing
DIMENSIONS / WEIGHT	100 (D) x 50 (H) mm inc. base / 92 g (without base) & 144 g inc. base

### ORDER CODE

<b>ZEOS-AD-S</b>	<b>1328-CPR-0521</b>	ANALOGUE ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR
<b>ZEOS-AD-H</b>	<b>1328-CPR-0520</b>	ANALOGUE ADDRESSABLE TEMPERATURE/HEAT DETECTOR
<b>ZEOS-AD-SHI</b>	<b>1328-CPR-0492</b>	ANALOGUE ADDRESSABLE COMBINED SMOKE & HEAT DETECTOR WITH ISOLATOR



# ZEOS-AS

## Analogue Addressable Fire Detectors with Smart Addressing

The ZEOS-AS series of Analogue Addressable Detectors have been designed to be fully compatible with Global Fire Equipment's range of intelligent control panels, JUNIOR and JUNO NET.

GFE's ZEOS-AS series is certified to **EN54-5** and **EN54-7** and consists of combined photoelectric smoke and heat detectors. Optionally they can be fitted with a short-circuit **loop isolator**.

The ZEOS-AS range of fire detectors is not addressed using a D.I.L. switch, it uses instead GFE's proprietary Smart Addressing Mechanism (**SAM**). The address can be set either by using GFE's analogue device programmer or alternatively, when used in conjunction with GFE's range of Intelligent Analogue Addressable Fire Detection Panels, GFE's automatic address setting mode **ASET**.

### Key Features

- ▶ Dual LEDs for 360° visibility
- ▶ Advanced detection and communication protocols
- ▶ Easy installation and maintenance
- ▶ Sleek low-profile housing
- ▶ Durable sensor head, no need for replacement
- ▶ SMD circuit board design. High quality and reliability guaranteed

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop Powered 17-30 V DC
CURRENT - QUIESCENT / SURGE	450 uA max.
CURRENT - DEVICE IN ALARM	4 mA - Alarm LED illuminated
SENSITIVITY	According to EN54-5 or/and EN54-7, EN54-17
CABLE SIZE	0.5-2.5 mm <sup>2</sup>
RESET/STAR-UP TIMES	20 seconds max.
COLOUR / CASE MATERIAL	White / ABS
OPER. TEMPERATURE / MAX. HUMIDITY	-10°C to 50°C / 95% RH Non-Condensing
DIMENSIONS / WEIGHT	100 (D) x 50 (H) mm inc. base / 92 g (without base) & 144 g inc. base
<b>ORDER CODE</b>	
<b>ZEOS-AS-S</b>	<b>1328-CPR-0526</b> ANALOGUE ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR WITH SMART ADDRESSING
<b>ZEOS-AS-H</b>	<b>1328-CPR-0527</b> ANALOGUE ADDRESSABLE TEMPERATURE/HEAT DETECTOR WITH SMART ADDRESSING
<b>ZEOS-AS-SHI</b>	<b>1328-CPR-0524</b> ANALOGUE ADDR. COMBINED SMOKE & HEAT DETECTOR W/ ISOLATOR WITH SMART ADDRESSING





# ZEOS BASE

## Standard Detector Base

Zeos Base design and materials guarantees a proper electrical contact with detector head which is key to ensure a stable system. Mounting Zeos Base to uneven ceilings has been made easier because of narrow contact points.

## Deep Detector Base

This mounting option enables external wiring conduits in locations like car parking's, warehouses, etc.

### TECHNICAL SPECIFICATIONS

DIMENSIONS	Standard: 100 (D) x 10 (H) mm / Deep: 100 (D) x 30 (H) mm
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COLOUR / CASE MATERIAL	White / ABS
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### ORDER CODE

ZEOS-BASE	STANDARD DETECTOR BASE
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ZEOS-DEEP-BASE	DEEP DETECTOR BASE
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# GFE-ZEOS-PROGRAMMER

## Portable Programmer

This device was designed to program ZEOS detectors made by GFE – Global Fire Equipment SA.

### LED Status

**Green** – Programmer is working correctly

**Yellow** – Operation in progress

**Red** – Electric voltage on device is above correct value

**Red Flashing** – Battery needs to be charge

### Operation

- OK** -> Power ON
- OK (2 seconds)** -> Power OFF
- UP** -> Increase Address
- DOWN** -> Decrease Address
- OK** -> Program Address
- UP & DOWN** -> Find Address
- DOWN** -> Escape from Program and Find operations

### TECHNICAL SPECIFICATIONS

OPERATING VOLTAGE	3.3V (DC)
CURRENT CHARGE	100 mA max.
CHARGE VOLTAGE	5 V (Mini USB)
CHARGE DURATION	4 hours min.
AUTO POWER OFF	After 2 minutes
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	0°C to 40°C
DIMENSIONS (PLASTIC)	86 (D) x 25 (H) mm
WEIGHT	172 g
<b>ORDER CODE</b>	
GFE-ZEOS-PROGRAMMER	PORTABLE PROGRAMMER



## GFE-REM-IND-A

### Addressable Flashing Remote Indicator

The GFE-REM-IND-A is designed to provide discreet remote indication and is controlled by the addressable control panel, whilst providing the ability to monitor multiple sensors within a zone thereby minimising wiring requirements. The GFE-REM-IND-A is compatible with any of GFE's analogue addressable panels.

The unit can be activated either by any of GFE's analogue addressable fire detectors sharing the same loop address or alternatively by the panel's cause and effect programming and in this particular mode of operation, multiple detectors can be used to activate the device.

The GFE-REM-IND-A is supplied complete with a back box, enabling the device to be surface mounted. It will also fit on to a standard single gang box.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop Powered - 20 V to 30 V DC
LOOP CURRENT - Remote Indicator	0.12 mA (Quiescent) - 2.5 mA (LED ON)
LOOP CURRENT - IO	0.625 mA (Quiescent) - 2.5 mA (LED ON)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	86 (L) x 86 (W) x 25 (H) mm
WEIGHT	60 g Boxed
<b>ORDER CODE</b>	
<b>GFE-REM-IND-A</b>	ADDRESSABLE FLASHING REMOTE INDICATOR



## GFE-REM-IND-C

### Conventional Flashing Remote Indicator

**This remote indicator can be used with any fire alarm detector, be it of the conventional types, to indicate remotely the activation of the relevant detection device.**

Its main characteristics are the high visibility due to the flashing of 2 high efficiency LEDs and the wide operating voltage range (3.3 V to 10 V DC) with a maximum 7mA current consumption. The connections of this device are non-polarised.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	3.3 V to 10 V DC
SUPPLY CURRENT	7 mA max.
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	86 (L) x 86 (W) x 25 (H) mm
WEIGHT	50.1 g = module 4,8 g + box 45,3 g
ORDER CODE	
GFE-REM-IND-C	CONVENTIONAL FLASHING REMOTE INDICATOR



# MANUAL CALL POINTS





## GFE-MCPE-A

### Addressable Manual Call Point

The GFE-MCPE-A is an Analogue Addressable Manual Call Point, designed and manufactured to comply with EN54-11, compatible with all GFE Addressable Control panels. With its enhanced communications mechanism the typical response time, when in alarm, is approximately one second, depending on the number of call points connected to the device loop. There is also a version incorporating a Loop Isolator.

A **bi-colour LED** flashes Green when the unit is interrogated by the control panel and is illuminated Red when in Alarm. The command to illuminate the Red LED is emitted by the control panel in response to activation of the individual call point thus confirming that the Alarm signal has been received at the control panel. The individual address, up to **125**, of each call point is set via an **eight way DIL switch**.

The unit is supplied complete with a **hinged flap** which protects the trigger element from accidental activation and reduces malicious activations as **two actions** are required in order to activate the device. This unit can be both surface and flush mounted and it can be easily reset using the supplied key after activation.

TECHNICAL SPECIFICATIONS		
SUPPLY VOLTAGE		Loop Powered 20-30 V DC
CURRENT - QUIESCENT		500 uA - 650 uA for GFE-MCPE-AI
CURRENT - DEVICE IN ALARM		3.1mA - Yellow LED ON only applies to GFE-MCPE-AI
CABLE SIZE		0.5-2.5 mm²
MAX. RECOMMENDED PER LOOP		30 GFE-MCPE-A or 6 GFE-MCPE-AI
COLOUR / CASE MATERIAL / IP PROTECTION		Red / ABS & Clear/ PC - Flame Retardant 94 V0 / IP24D
OPERATING TEMPERATURE		-10°C to 55°C
MAX. HUMIDITY		95% RH Non-Condensing
DIMENSIONS		92.6 (W) x 92.6 (H) x 60.1 mm
WEIGHT		152 g
ORDER CODE		
GFE-MCPE-A	1328-CPR-0374	ADDRESSABLE MANUAL CALL POINT
GFE-MCPE-AI	1328-CPR-0375	ADDRESSABLE MANUAL CALL POINT WITH LOOP ISOLATOR



## GFE-MCPE-C

### Conventional Manual Call Point

The GFE-MCPE-C is a Conventional Manual Call Point, designed and manufactured to comply with EN54-11, compatible with all GFE Conventional Control panels. A bi-colour LED flashes Green when the unit is connected to a control panel and is illuminated Red when in Alarm.

The unit is supplied complete with a **hinged flap** which protects the trigger element from accidental activation and reduces malicious activations as **two actions** are required in order to activate the device. This unit can be both surface and flush mounted and it can be easily reset using the supplied key after activation.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	20-30 V DC
CURRENT - QUIESCENT	200 uA
CURRENT - DEVICE IN ALARM	50 mA @ 24 V DC - Alarm Resistance 470 Ohms Max.
CABLE SIZE	0.5-2.5 mm <sup>2</sup>
COLOUR / CASE MATERIAL / IP PROTECTION	Red / ABS & Clear/ PC - Flame Retardant 94 V0 / IP24
OPER. TEMPERATURE	-10°C to 55°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	92.6 (W) x 92.6 (H) x 60.1 mm
WEIGHT	152 g

#### ORDER CODE

<b>GFE-MCPE-C</b>	<b>1328-CPR-0377</b>	CONVENTIONAL MANUAL CALL POINT
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## GFE-MCPE-AI-IP67

### Addressable Manual Call Point Outdoor Use-IP67

The GFE-MCPE-AI-IP67 is an Analogue Addressable Manual Call Point, designed and manufactured to comply with EN54- 11, compatible with all GFE Addressable Control panels specially recommended for outdoor use.

With its enhanced communications mechanism, the typical response time, when in alarm, is approximately **one second**, depending on the number of call points connected to the device loop. The individual address, up to **125**, of each call point is set via an **eight way DIL switch**. Each unit is supplied, as standard, with a loop short circuit isolator. A bi-colour LED flashes Green when the unit is interrogated by the control panel and is illuminated Red when in alarm.

The GFE-MCPE-AI-IP67 has been designed to deal with today's difficult and harsh environments. It is a unique fire alarm manual call point that mimics the feel of breaking glass whilst offering the user the benefits and safety advantages of a glass-free resettable operating element. Once activated a warning flag drops in to view easily identifying the call point that has been operated. A key can then reset the unit.

The GFE-MCPE-AI-IP67 provides an ideal solution for GFE's addressable fire alarm systems. Ideal for all outdoor applications such as oil rigs, ships, factories as well as wash down areas that are sensitive to broken glass.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop Powered 20-30 V DC
CURRENT - QUIESCENT	500 uA
CURRENT - DEVICE IN ALARM	3.5 mA - Alarm LED illuminated
MAX. CABLE SIZE	0.5-2.5 mm <sup>2</sup>
MAX. RECOMMENDED PER LOOP	30
COLOUR / CASE MATERIAL / PROTECTION	Red / ABS & Clear/ Polycarbonate - Flame Retardant 94 V0 / IP67
OPER. TEMPERATURE / MAX. HUMIDITY	-10°C to 50°C / 95% RH Non-Condensing
DIMENSIONS	111.9 (H) x 111.9 (W) x 81.3 (D) mm

#### ORDER CODE

GFE-MCPE-AI-IP67	1328-CPR-0376	IP67 RATED ADDRESSABLE CALL POINT
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## GFE-MCPE-C-IP67

### Conventional Manual Call Point Outdoor Use-IP67

The GFE-MCPE-C-IP67 is a Conventional Manual Call Point, designed and manufactured to comply with EN54-11, compatible with all GFE Conventional Control panels specially recommended for outdoor use.

The unit is supplied complete with a hinged flap which protects the trigger element from accidental activation and reduces malicious activations as 2 actions are required in order to activate the device.

A bi-colour LED flashes Green when the unit is connected to a control panel and is illuminated Red when in Alarm.

The GFE-MCPE-C-IP67 has been designed to deal with today's difficult and harsh environments. It is a unique fire alarm manual call point that mimics the feel of breaking glass whilst offering the user the benefits and safety advantages of a glass-free resettable operating element. Once activated a warning flag drops in to view easily identifying the call point that has been operated. A key can then reset the unit.

The GFE-MCPE-C-IP67 provides an ideal solution for most conventional fire alarm systems. Ideal for all outside applications such as oil rigs, ships, factories as well as wash down areas that are sensitive to broken glass.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	20-30 V DC
CURRENT - QUIESCENT	200 uA
CURRENT - DEVICE IN ALARM	50 mA - Alarm LED illuminated
MAX. CABLE SIZE	0.5-2.5 mm <sup>2</sup>
COLOUR / CASE MATERIAL / PROTECTION	Red / ABS & Clear/ Polycarbonate - Flame Retardant 94 V0 / IP67
OPER. TEMPERATURE / MAX. HUMIDITY	-10°C to 50°C / 95% RH Non-Condensing
DIMENSIONS	111.9 (H) x 111.9 (W) x 81.3 (D) mm

#### ORDER CODE

GFE-MCPE-C-IP67	1328-CPR-0373	IP67 RATED CONVENTIONAL CALL POINT
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The background is a light gray with a faint, intricate circuit board pattern. A large, white, stylized letter 'S' is superimposed over the circuitry, extending from the top to the bottom of the page. A solid orange horizontal band is positioned across the middle of the image, containing the text.

# SOUNDERS / BEACONS



EN54-3 Type A  
CERTIFIED  
1328-CPR-0286



# VALKYRIE AS

## Addressable Wall Mount Sounder/ Beacon

The VALKYRIE AS is a Wall Mounted Addressable Sounder/ Beacon with low power consumption. Up to 32 individually addressed sounders can be installed per loop occupying address 94 to 125. The address is set using switches 1 to 5 of the 8 way DIL switch. Four different tones are available and selected using DIL switches 6 and 7.

When individual address reporting is not required, VALKYRIE AS can be configured as a Shadow Sounder. In this case sounders do not occupy an address in the loop thus freeing up addresses for more detection devices. Shadow sounders do not report back to the control panel so their presence on the loop is not monitored. Shadow sounders draw current from the loop (10 mA in alarm) and must be included in loop load calculations.

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop: 20 V to 30 V DC
LOOP CURRENT - QUIESCENT	0.5 mA
LOOP CURRENT - SOUNDER/ BEACON ACTIVE	10 mA - 280 mW @ 30 V DC inc. isolator
MAXIMUM SOUNDER OUTPUT	100 dB (@ 1 meter - 30 V DC)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 55°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	Red or White / ABS
PROTECTION CATEGORY	IP21C - Type A - Indoor use
DIMENSIONS	110 (D) x 85 (H) mm inc. base
WEIGHT	254 g - inc. mounting base

### ORDER CODE

<b>VALKYRIE AS</b>	<b>1328-CPR-0286</b>	VALKYRIE ADDRESSABLE WALL SOUNDER
<b>VALKYRIE ASB</b>	<b>1328-CPR-0286</b>	VALKYRIE ADDRESSABLE WALL SOUNDER/ BEACON
<b>VALKYRIE ASI</b>	<b>1328-CPR-0286</b>	VALKYRIE ADDRESSABLE WALL SOUNDER WITH ISOLATOR
<b>VALKYRIE ASBI</b>	<b>1328-CPR-0286</b>	VALKYRIE ADDRESSABLE WALL SOUNDER/ BEACON WITH ISOLATOR





EN54-3 Type A  
CERTIFIED  
1328-CPR-0287



# VALKYRIE CS

## Conventional Wall Mount Sounder/ Beacon

The VALKYRIE CS is a wall mounted Conventional Sounder/ Beacon with low power consumption. Four different tones are available and selected using DIL switches 1 and 2.

Both continuous and pulsing outputs are provided via separate negative supply connections allowing for the presence of differentiated evacuation and alert sounds.

TECHNICAL SPECIFICATIONS		
SUPPLY VOLTAGE		20 V to 30 V DC
CURRENT - SOUNDER/ BEACON ACTIVE		10 mA - 280 mW @ 30 V DC
MAXIMUM SOUNDER OUTPUT		97 dB (@ 1 meter - 30 V DC)
MAX. CABLE SIZE		2.5 mm²
OPERATING TEMPERATURE		-10°C to 55°C
MAX. HUMIDITY		95% RH Non-Condensing
COLOUR / CASE MATERIAL		Red or White / ABS
PROTECTION CATEGORY		IP21C - Type A - Indoor use
DIMENSIONS		110 (D) x 85 (H) mm inc. base
WEIGHT		254 g - inc. mounting base
ORDER CODE		
VALKYRIE CS	1328-CPR-0287	VALKYRIE CONVENTIONAL WALL SOUNDER
VALKYRIE CSB	1328-CPR-0287	VALKYRIE CONVENTIONAL WALL SOUNDER/ BEACON



EN54-3 Type B  
CERTIFIED  
1328-CPR-0299



## VALKYRIE AS IP65

### Addressable Wall Mount Sounder/ Beacon Outdoor Use-IP65

The VALKYRIE AS IP65 is a Wall Mounted Addressable Sounder/ Beacon with low power consumption. It is specifically designed to be used outdoors. Up to 32 individually addressed sounders can be installed per loop occupying address 94 to 125. The address is set using switches 1 to 5 of the 8 way DIL switch. Four different tones are available and selected using DIL switches 6 and 7.

When individual address reporting is not required, VALKYRIE AS IP65 can be configured as a Shadow Sounder. In this case sounders do not occupy an address in the loop thus freeing up addresses for more detection devices. Shadow sounders do not report back to the control panel so their presence on the loop is not monitored. Shadow sounders draw current from the loop (10 mA in alarm) and must be included in loop load calculations.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop: 20 V to 30 V DC
LOOP CURRENT - QUIESCENT	0.5 mA
LOOP CURRENT - SOUNDER/ BEACON ACTIVE	10 mA - 280 mW @ 30 V DC inc. isolator
MAXIMUM SOUNDER OUTPUT	108 dB (@ 1 meter - 30 V DC)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-25°C to 70°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	Red / ABS
PROTECTION CATEGORY	IP65 - Type B - Outdoor use
DIMENSIONS	112 (D) x 110 (H) mm inc. base
WEIGHT	315 g / 350 g - including packaging
<b>ORDER CODE</b>	
<b>VALKYRIE ASI IP65</b>	<b>1328-CPR-0299</b>
VALKYRIE ADDRESSABLE WALL SOUNDER WITH ISOLATOR - IP65 RATED	
<b>VALKYRIE ASBI IP65</b>	<b>1328-CPR-0299</b>
VALKYRIE ADDRESSABLE WALL SOUNDER/ BEACON WITH ISOLATOR - IP65 RATED	



# VALKYRIE CS IP65

## Conventional Wall Mount Sounder/ Beacon Outdoor Use-IP65

The VALKYRIE CS IP65 is a wall mounted Conventional Sounder/ Beacon with low power consumption. It is specifically designed to be used outdoors. Four different tones are available and selected using DIL switches 1 and 2.

Both continuous and pulsing outputs are provided via separate negative supply connections allowing for the presence of differentiated evacuation and alert sounds.

TECHNICAL SPECIFICATIONS		
SUPPLY VOLTAGE		20 V to 30 V DC
CURRENT - SOUNDER/ BEACON ACTIVE		10 mA - 280 mW @ 30 V DC
MAXIMUM SOUNDER OUTPUT		97 dB (@ 1 meter - 30 V DC)
MAX. CABLE SIZE		2.5 mm <sup>2</sup>
OPERATING TEMPERATURE		-20°C to 70°C
MAX. HUMIDITY		95% RH Non-Condensing
COLOUR / CASE MATERIAL		Red / ABS
PROTECTION CATEGORY		IP65 - Type B - Outdoor use
DIMENSIONS		112 (D) x 110 (H) mm inc. base
WEIGHT		315 g / 350 g - including packaging
ORDER CODE		
VALKYRIE CS IP65	1328-CPR-0300	VALKYRIE CONVENTIONAL WALL SOUNDER - IP65 RATED
VALKYRIE CSB IP65	1328-CPR-0300	VALKYRIE CONVENTIONAL WALL SOUNDER/ BEACON - IP65 RATED



# VALKYRIE VOX A

## Addressable Voice Sounder

The VALKYRIE VOX A is a wall mounted Addressable Voice Sounder which is available in either Red or White housings. The VALKYRIE VOX voice sounder is based on our successful Horn type sounder and sounder/ beacon. Up to 32 individually addressed sounders can be installed per loop occupying an address in the range 94 to 125, it can be also configured the shadow mode. The address is set using switches 1 to 5 of the 8 way DIL switch.

With message selection directly programmable via the standard sounder programming of the JUNIOR and JUNO NET Panels, the VALKYRIE VOX A, can broadcast up to 5 differentiated pre-loaded messages: Alert, Fire, Evacuation, Test and Silence Message. The desired messages can be downloaded from our own proprietary recording PC application, via a standard USB interface. This product is Loop Controlled and Loop Powered.

### Key Features

- ▶ Multi-Message. Follows Panel's Sounder Programming
- ▶ Multi-Language
- ▶ 107 dBA maximum sounder output at 1 m
- ▶ Messages easily programmed via USB interface using dedicated software
- ▶ Synchronization for fast activation

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop: 20 V to 30 V DC
LOOP CURRENT	0.7 mA (Quiescent) - 7.5 mA Max. (Sounder active or charging)
LOOP CURRENT - ALARM BEACON	1.4 mA
SOUNDER OUTPUT @ 1 METER	Tone 104 dBA - Voice Message 107 dBA
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
COLOUR / CASE MATERIAL	Red or White / ABS
OPERATING TEMPERATURE / MAX. HUMIDITY	-10°C to 55°C / 95% RH Non-Condensing
PROTECTION	IP21C - Type A - Indoor use
DIMENSIONS	110 (D) x 83.6 (H) mm
WEIGHT	270 g / 325 g - inc. mounting base
ORDER CODE	
VALKYRIE VOX A	VALKYRIE VOX ADDRESSABLE
VALKYRIE VOX AB	VALKYRIE VOX ADDRESSABLE WITH BEACON



# VALKYRIE VOX C

## Conventional Voice Sounder

The VALKYRIE VOX C is a wall mounted Conventional Voice Sounder which is available in either Red or White housings. The VALKYRIE VOX C voice sounder is based on our successful Horn type sounder and sounder/ beacon.

The VALKYRIE VOX C, can broadcast up to 2 differentiated pre-loaded messages: Fire and Alert. The desired messages can be downloaded from our own proprietary recording PC application, via a standard USB interface.

### Key Features

- ▶ Multi-Message
- ▶ Multi-Language
- ▶ 106 dB maximum sounder output at 1 m
- ▶ Messages easily programmed via USB interface using dedicated software
- ▶ Synchronization for fast activation
- ▶ Compatible with most conventional fire panels

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	20 V to 30 V DC
LOOP CURRENT - SOUNDER ACTIVE	28 mA (Average) - 65 mA (Peak) @ 24 V DC
SOUNDER OUTPUT @ 1 METER	Tone 103 dBA - Voice Message 106 dBA
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
COLOUR / CASE MATERIAL	Red or White / ABS
OPERATING TEMPERATURE	-10°C to 55°C
MAX. HUMIDITY	95% RH Non-Condensing
PROTECTION	IP21C - Type A - Indoor use
DIMENSIONS	110 (D) x 83.6 (H) mm
WEIGHT	265 g / 315 g - inc. packaging
ORDER CODE	
VALKYRIE VOX C	VALKYRIE VOX CONVENTIONAL
VALKYRIE VOX CB	VALKYRIE VOX CONVENTIONAL WITH BEACON



# VALKYRIE VOX A IP65

## Addressable Voice Sounder/ Beacon Outdoor Use-IP65

The VALKYRIE VOX A IP65 is a wall mounted Addressable Voice Sounder which is available in Red housings. It is specifically designed to be used outdoors. Up to 32 individually addressed sounders can be installed per loop occupying an address in the range 94 to 125, it can be also configured the shadow mode. The address is set using switches 1 to 5 of the 8 way DIL switch.

With message selection directly programmable via the standard sounder programming of the JUNIOR and JUNO NET Panels, the VALKYRIE VOX A IP65, can broadcast up to 5 differentiated pre-loaded messages: Alert, Fire, Evacuation, Test and Silence Message. The desired messages can be downloaded from our own proprietary recording PC application, via a standard USB interface. This product is Loop Controlled and Loop Powered.

### Key Features

- ▶ Multi-Message. Follows Panel's Sounder Programming
- ▶ Multi-Language
- ▶ 107 dBA maximum sounder output at 1 m
- ▶ Messages easily programmed via USB interface using dedicated software
- ▶ Synchronization for fast activation

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop: 20 V to 30 V DC
LOOP CURRENT	0.7 mA (Quiescent) - 7.5 mA Max. (Sounder active or charging)
LOOP CURRENT - ALARM BEACON	1.4 mA
SOUNDER OUTPUT @ 1 METER	Tone 104 dBA - Voice Message 107 dBA
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
COLOUR / CASE MATERIAL	Red or White / ABS
OPERATING TEMPERATURE / MAX. HUMIDITY	-10°C to 50°C / 95% RH Non-Condensing
PROTECTION	IP65 - Type B - Outdoor use
DIMENSIONS	110 (D) x 83.6 (H) mm
WEIGHT	333 g / 400 g - inc. packaging
ORDER CODE	
VALKYRIE VOX AS IP65	VALKYRIE VOX ADDRESSABLE IP65 RATED
VALKYRIE VOX ASB IP65	VALKYRIE VOX ADDRESSABLE WITH BEACON IP65 RATED





# VALKYRIE VOX C IP65

## Conventional Voice Sounder/ Beacon Outdoor Use-IP65

The VALKYRIE VOX C IP65 is a wall mounted Conventional Voice Sounder which is available in Red housings. It is specifically designed to be used outdoors.

The VALKYRIE VOX C IP65, can broadcast up to 2 differentiated pre-loaded messages: Fire and Alert. The desired messages can be downloaded from our own proprietary recording PC application, via a standard USB interface.

### Key Features

- ▶ Multi-Message
- ▶ Multi-Language
- ▶ 106 dB maximum sounder output at 1 m
- ▶ Messages easily programmed via USB interface using dedicated software
- ▶ Synchronization for fast activation
- ▶ Compatible with most conventional fire panels

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	20 V to 30 V DC
LOOP CURRENT - SOUNDER ACTIVE	28 mA (Average) - 65 mA (Peak) @ 24 V DC
SOUNDER OUTPUT @ 1 METER	Tone 103 dBA - Voice Message 106 dBA
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
COLOUR / CASE MATERIAL	Red / ABS
OPERATING TEMPERATURE / MAX. HUMIDITY	-10°C to 50°C / 95% RH Non-Condensing
PROTECTION	IP65 - Type B - Outdoor use
DIMENSIONS	110 (D) x 83.6 (H) mm
WEIGHT	323 g / 390 g - inc. packaging
ORDER CODE	
VALKYRIE VOX CS IP65	VALKYRIE VOX CONVENTIONAL IP65 RATED
VALKYRIE VOX CSB IP65	VALKYRIE VOX CONVENTIONAL WITH BEACON IP65 RATED



# VALKYRIE AB

## Addressable Beacon

The VALKYRIE AB is a Wall Mounted Addressable Beacon with low power consumption. Up to 32 individually addressed beacons can be installed per loop occupying address 94 to 125. The address is set using switches 1 to 5 of the 8 way DIL switch.

When individual address reporting is not required, VALKYRIE AB can be configured as a Shadow Beacon. In this case sounders do not occupy an address in the loop thus freeing up addresses for more detection devices. Shadow beacons do not report back to the control panel so their presence on the loop is not monitored. Shadow beacons draw current from the loop (3 mA in alarm) and must be included in loop load calculations.

These units are produced using the latest high intensity LED technology and use extremely low levels of current consumption providing a highly visible flash.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop: 20 V to 30 V DC
LOOP CURRENT - QUIESCENT	0.5 mA
LOOP CURRENT - ALARM BEACON	3 mA Max.
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 55°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	Red or White / ABS
PROTECTION	IP44 - Type A - Indoor use
DIMENSIONS	110 (D) x 49.5 (H) mm
WEIGHT	150 g - inc. beacon / 180 g - inc. packaging
ORDER CODE	
VALKYRIE AB	VALKYRIE ADDRESSABLE BEACON
VALKYRIE ABI	VALKYRIE ADDRESSABLE BEACON WITH ISOLATOR



# VALKYRIE CB

## Conventional Beacon

The VALKYRIE CB is a Conventional Beacon produced using the latest high intensity LED technology and use extremely low levels of current consumption providing a highly visible flash. It can be supplied in either white or red colour.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop: 20 V to 30 V DC
LOOP CURRENT - QUIESCENT	0.5 mA
LOOP CURRENT - ALARM BEACON	3 mA Max.
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 55°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	Red or White / ABS
PROTECTION	IP44
DIMENSIONS	110 (D) x 49.5 (H) mm
WEIGHT	150 g - inc. beacon / 180 g - inc. packaging
ORDER CODE	
VALKYRIE CB	VALKYRIE CONVENTIONAL BEACON



## VALKYRIE ABI IP65

### Addressable Wall Mounted Beacon w/ Isolator Outdoor Use-IP65

The VALKYRIE ABI IP65 is a Wall Mounted Addressable Beacon with Isolator and low power consumption. It is specifically designed to be used outdoors. Up to 32 individually addressed beacons can be installed per loop occupying address 94 to 125. The address is set using switches 1 to 5 of the 8 way DIL switch.

When individual address reporting is not required, VALKYRIE ABI IP65 can be configured as a Shadow Beacon. In this case sounders do not occupy an address in the loop thus freeing up addresses for more detection devices. Shadow beacons do not report back to the control panel so their presence on the loop is not monitored. Shadow beacons draw current from the loop (3 mA in alarm) and must be included in loop load calculations.

These units are produced using the latest high intensity LED technology and use extremely low levels of current consumption providing a highly visible flash.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop: 20 V to 30 V DC
LOOP CURRENT - QUIESCENT	0.5 mA
LOOP CURRENT - ALARM BEACON	3 mA Max.
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-25°C to 70°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	Red / ABS
PROTECTION	IP65 - Type B - Outdoor use
DIMENSIONS	112 (D) x 82 (H) mm
WEIGHT	205 g inc. sounder base / 240 g - inc. packaging
ORDER CODE	
VALKYRIE ABI IP65	VALKYRIE ADDRESSABLE WALL MOUNTED BEACON WITH ISOLATOR - IP65 RATED



# VALKYRIE CB IP65

## Conventional Wall Mounted Beacon Outdoor Use-IP65

The VALKYRIE CB IP65 is a Wall Mounted Conventional Beacon produced using the latest high intensity LED technology and use extremely low levels of current consumption providing a highly visible flash. It is specifically designed to be used outdoors.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	20 V to 30 V DC
CURRENT - QUIESCENT	0.5 mA
CURRENT - ALARM BEACON	3 mA Max.
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-25°C to 70°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	Red / ABS
PROTECTION	IP65 - Type B - Outdoor use
DIMENSIONS	112 (D) x 110 (H) mm
WEIGHT	205 g inc. sounder base / 240 g - inc. packaging
ORDER CODE	
VALKYRIE CB IP65	VALKYRIE CONVENTIONAL WALL MOUNTED BEACON - IP65 RATED



EN54-3 Type A  
CERTIFIED  
1328-CPR-0288



# VULCAN 2 A

## Addressable Low-Profile Sounder/ Beacon

The addressable VULCAN 2 A is available as an Addressable Sounder/ Beacon which may be field configured to operate in either SHADOW or AUXILIARY modes. There are also versions available incorporating a loop isolator. Up to 64 VULCAN 2 A Sounder/ Beacon devices can be connected to a single Loop depending on Loop Loading. All VULCAN 2 A devices have dip-switch Address setting while Tone and Mode selection is via a jumper. There is also a potentiometer which may be used to adjust the sound level if required. Normally the VULCAN 2 A will be used in conjunction with a detector however a lid is available as an option for the VULCAN 2 A.

Shadow Sounder/ Beacon: A Shadow Sounder/ Beacon does not have an individual address thus freeing up addresses for more detection devices. Shadow Sounder/ Beacons do not report back to the control panel so their presence on the Loop is not monitored.

Auxiliary Sounder/ Beacon: When the VULCAN 2 A is configured as an Auxiliary device, it shares the same address as the detector with which it is co-located. When operating in this mode the VULCAN 2 A monitors the Address loop for the command from the control Panel to the detector to illuminate its LED. When this command is received the VULCAN 2 A is also activated. If a Fire is confirmed the remaining sounders may be activated using the Evacuate command. This reduces the inconvenience to other guests in the event of a false alarm while at the same time giving early warning to the occupant of the room in the case of an actual Fire event. Pressing Sounder silence at the panel silences all active sounders. The maximum number of Auxiliary Sounder/ Beacons is 63 and they can be allocated between address 1 and 63.

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop Powered - 20 V to 30 V DC
LOOP CURRENT - QUIESCENT	0.5 mA
LOOP CURRENT - BEACON	Beacon 2.5 mA - Beacon with isolator 2.7 mA
MAXIMUM SOUNDER OUTPUT	97 dB (@ 1 meter - 30 V DC)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 55°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	White or Red / ABS - Transparent PC
DIMENSIONS / WEIGHT	100 (D) x 50 (H) mm / 144 g inc. base

### ORDER CODE

VULCAN 2 AS	1328-CPR-0288	VULCAN 2 - ADDRESSABLE BASE SOUNDER
VULCAN 2 ASI	1328-CPR-0288	VULCAN 2 - ADDRESSABLE BASE SOUNDER WITH ISOLATOR
VULCAN 2 ASB	1328-CPR-0288	VULCAN 2 - ADDRESSABLE BASE SOUNDER WITH BEACON
VULCAN 2 ASBI	1328-CPR-0288	VULCAN 2 - ADDRESSABLE BASE SOUNDER WITH BEACON WITH ISOLATOR
VULCAN 2 AB		VULCAN 2 - ADDRESSABLE BEACON
VULCAN 2 ABI		VULCAN 2 - ADDRESSABLE BEACON WITH ISOLATOR
VULCAN 2 L		OPAQUE LID FOR VULCAN 2
VULCAN 2 LT		TRANSPARENT LID FOR VULCAN 2





EN54-3 Type A  
CERTIFIED  
1328-CPR-0289



## VULCAN 2 C

### Conventional Sounder/ Beacon

The VULCAN 2 C is a low consumption sounder designed to be used as an unobtrusive low profile sounder or as a base sounder to be installed in conjunction with a conventional detector. This leads to reduced installation costs and improves the aesthetics of the fire alarm system.

Four different tones are available and selected by jumpers. The Sound level can be adjusted if required, using the potentiometer.

The complete range is composed of 3 varieties in both base and wall mounted versions: Beacon, Sounder and combined Sounder/ Beacon.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	20 V to 30 V DC
LOOP CURRENT - BEACON	Beacon 2.5 mA
MAXIMUM SOUNDER OUTPUT	96 dB (@ 1 meter - 30 V DC)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 55°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	White or Red / ABS - Transparent PC
DIMENSIONS	100 (D) x 50 (H) mm
WEIGHT	144 g inc. base

#### ORDER CODE

VULCAN 2 CS	1328-CPR-0289	VULCAN 2 - CONVENTIONAL BASE SOUNDER
VULCAN 2 CSB	1328-CPR-0289	VULCAN 2 - CONVENTIONAL BASE SOUNDER WITH BEACON
VULCAN 2 CB		VULCAN 2 - CONVENTIONAL BEACON
VULCAN 2 L		OPAQUE LID FOR VULCAN 2
VULCAN 2 LT		TRANSPARENT LID VULCAN 2



# VULCAN 2 VOX A

## Addressable Voice Sounder

The VULCAN 2 VOX A is a ceiling mounted Addressable Voice Sounder which is available in either White or Red housings. Normally the VULCAN 2 VOX A will be used in conjunction with a detector however a lid is available as an option. Up to 32 individually addressed sounders can be installed per loop occupying an address in the range 94 to 125. It can also be configured as shadow mode. The address is set using switches 1 to 5 of the 8 way DIL switch.

With message selection directly programmable via the standard sounder programming of the JUNIOR and JUNO-NET panels, the VULCAN 2 VOX A, can broadcast up to 5 differentiated pre-loaded messages: Alert, Fire, Evacuation, Test and a Silence Message. The desired messages can be downloaded from our own proprietary recording PC application, via a standard USB interface. This product is exclusively loop powered and controlled.

### Key Features

- ▶ Multi-Message. Follows Panel's Sounder Programming
- ▶ Multi-Language
- ▶ 94 dBA Maximum Sounder Output at 1m
- ▶ Messages easily programmed via USB interface using dedicated software
- ▶ Synchronization for fast activation
- ▶ Compatible with GFE's range of addressable panels

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop: 20 V to 30 V DC
LOOP CURRENT	0.7 mA (Quiescent) - 7.5 mA Max. (Sounder active or charging)
LOOP CURRENT - ALARM BEACON	1.4 mA
SOUNDER OUTPUT @ 1 METER	Tone 90 dBA - Voice Message 94 dBA
TOTAL AUDIO MEMORY SIZE	4 minutes (decoded audio) up to 16 min (encoded audio)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE / MAX. HUMIDITY	-10°C to 55°C / 95% RH Non-Condensing
COLOUR / CASE MATERIAL	White or Red / ABS - Transparent PC
PROTECTION	IP21C - Type A - Indoor use
DIMENSIONS	110 (D) x 29 (H) mm with Lid
WEIGHT	120 g / 140 g with Lid

### ORDER CODE

VULCAN 2 VOX AS	VULCAN 2 VOX ADDRESSABLE VOICE BASE SOUNDER
VULCAN 2 VOX ASB	VULCAN 2 VOX ADDRESSABLE VOICE BASE SOUNDER WITH BEACON
VULCAN 2 L	OPAQUE LID FOR VULCAN 2
VULCAN 2 LT	TRANSPARENT FOR VULCAN 2



# VULCAN 2 VOX C

## Conventional Voice Sounder

The VULCAN 2 VOX C is a wall mounted Conventional Voice Sounder which is available in either White or Red housings.

The VULCAN 2 VOX C, can broadcast up to 2 differentiated pre-loaded messages: Fire and Alert. The desired messages can be downloaded from our own proprietary recording PC application, via a standard USB interface.

### Key Features

- ▶ Multi-Message. Follows Panel's Sounder Programming
- ▶ Multi-Language
- ▶ 92 dBA maximum output
- ▶ Messages easily programmed via USB interface using dedicated software
- ▶ Synchronization for fast activation
- ▶ Compatible with most conventional panels

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	20 V to 30 VDC
SUPPLY CURRENT - SOUNDER ACTIVE	28 mA (Average) - 65 mA (Peak) @ 24 VDC
SOUND OUTPUT @ 1 METER	Tone 88 dBA / Voice message 92 dBA
TOTAL AUDIO MEMORY SIZE	4 minutes (decoded audio) up to 16 min (encoded audio)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE / MAX. HUMIDITY	-10°C to 50°C / 95% RH Non-Condensing
COLOUR / CASE MATERIAL	White or Red / ABS - Transparent PC
PROTECTION	IP21C - Type A - Indoor use
DIMENSIONS	100 (D) x 29 (H) mm - with Lid 37.5 (H) mm
WEIGHT	127 g - 149 g with Lid
ORDER CODE	
VULCAN 2 VOX CS	VULCAN 2 VOX -CONVENTIONAL VOICE BASE SOUNDER
VULCAN 2 VOX CSB	VULCAN 2 VOX -CONVENTIONAL BASE SOUNDER WITH BEACON



## VULCAN 2 DS

### Addressable Detector Sounder/ Beacon

The addressable VULCAN 2 DS is available as a Detector Sounder, Beacon or combined Sounder/ Beacon. This particular device permits a conventional detector to be connected to the addressable loop via the Sounder and/or Beacon. There are also versions available incorporating a loop isolator.

All VULCAN 2 DS devices have dip-switch Address setting while Tone selection is via a jumper. Shadow Sounder and Detector Sounder settings are also achieved using the 8 way dip switch and a jumper respectively. There is also a potentiometer which may be used to adjust the sound level if required.

The number of Detector Sounders/ Beacons connected to each Loop is dependent on Loop loading and in any case the total number/ loop should not exceed 64. If only detector sounders are used then this number may be increased to 96 sounders per loop. This includes normal addressable sounder beacons placed between address 94 and 125. These are fully programmable in sounder groups. Detector Sounders are always placed between address 1 and 63 and cannot be included in sounder groups. Device will report to the panel as either a SMOKE or HEAT detector depending on Mode jumper position.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop Powered - 20 V to 30 V DC
LOOP CURRENT - QUIESCENT	1.1 mA + conventional detector quiescent current
LOOP CURRENT - ALARM - 800 TO 1000 HZ	4 mA sounder only - 5.5 mA inc. Beacon
LOOP CURRENT - ALARM - 2.0 TO 3.0 KHZ	7 mA sounder only - 8 mA inc. Beacon
LOOP CURRENT - ALARM BEACON	2.5 mA
LOOP CURRENT - ISOLATOR	150 uA - added to device quiescent/ alarm current load
DETECTOR - ALARM CURRENT	12 mA - add to addressable device alarm loop current
SOUNDER OUTPUT - LOW / HIGH FREQ.	84 / 88 dB @ 1 m
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
COLOUR / CASE MATERIAL	White or Red / ABS - Transparent PC - FR rating 94V0
DIMENSIONS	100 (D) x 29 (H) mm - with Lid 37.5 (H) mm
WEIGHT	100 g / 120 g with Lid

#### ORDER CODE

<b>VULCAN 2 DS</b>	VULCAN 2 - ADDRESSABLE DETECTOR SOUNDER
<b>VULCAN 2 DSI</b>	VULCAN 2 - ADDRESSABLE DETECTOR SOUNDER - ISOLATOR
<b>VULCAN 2 DSB</b>	VULCAN 2 - ADDRESSABLE DETECTOR SOUNDER/ BEACON
<b>VULCAN 2 DSBI</b>	VULCAN 2 - ADDRESSABLE DETECTOR SOUNDER/ BEACON - ISOLATOR
<b>VULCAN 2 DB</b>	VULCAN 2 - ADDRESSABLE DETECTOR BEACON



## GFE-PA-VOX-A

### Addressable PA Speaker Amplifier/ Controller

The GFE-PA-VOX-A is an addressable PA Speaker Amplifier/ Controller which is available in either Red or White housings. The GFE-PA-VOX-A is able to provide a maximum of 24 W of sound output to a single PA Speaker. Up to 32 individually addressed controllers can be installed per loop occupying an address in the range 94 to 125. The address is set using switches 1 to 5 of the 8 way DIL switch.

With message selection directly programmable via the standard sounder programming of the JUNIOR and JUNO NET panels, the GFE-PA-VOX-A, can broadcast up to 5 differentiated pre-loaded messages. The desired messages can be downloaded from our own proprietary recording PC application, via a standard USB interface.

This product is loop controlled and externally powered.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop: 17-30 V DC - External Supply: 20-30 V DC
LOOP CURRENT	0.5 mA (Quiescent) - 0.5 mA (Sounder Active)
POWER OUTPUT MAX.	2.0 mA (Quiescent) - 1.0 A (Sounder Active)
EXTERNAL SUPPLY - CURRENT	24 Watts rms
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	85% RH Non-Condensing
ENCLOSURE / MATERIAL	White or Red / ABS
PROTECTION CATEGORY	IP44 - Type A - Indoor use
DIMENSIONS	100 (D) x 48 (H) mm
WEIGHT	125 g / 160 g inc. packaging
ORDER CODE	
GFE-PA-VOX-A	ADDRESSABLE PA SPEAKER AMPLIFIER/ CONTROLLER



## GFE-PA-VOX-C

### Conventional PA Speaker Amplifier/ Controller

The GFE-PA-VOX-C is a conventional PA Speaker Amplifier/ Controller which is available in either Red or White housings. The GFE-PA-VOX-C is able to provide a maximum of 24 W of sound output to a single PA Speaker.

The GFE-PA-VOX-C, can broadcast pre-loaded messages. The desired message can be downloaded from our own proprietary recording PC application, via a standard USB interface. This product is controlled by a conventional sounder circuit and externally powered.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Sounder Circuit: 17-30 V DC - External Supply: 20-30 V DC
SOUNDER CIRCUIT - CURRENT	2.0 mA (Sounder Active)
EXTERNAL SUPPLY - CURRENT	5.0 mA (Quiescent) - 1.0 A (Sounder Active)
POWER OUTPUT MAX.	24 Watts rms
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	85% RH Non-Condensing
ENCLOSURE / MATERIAL	White or Red / ABS
PROTECTION CATEGORY	IP44 - Type A - Indoor use
DIMENSIONS	100 (D) x 48 (H) mm
WEIGHT	125 g / 160 g inc. packaging
ORDER CODE	
GFE-PA-VOX-C	CONVENTIONAL PA SPEAKER AMPLIFIER/ CONTROLLER



## LSC-ISO

### Loop Sounder Control Module (with 1 A monitored output)

The LSC-ISO Module is a fully monitored interface which is used to connect a line of conventional sounders to the GFE's range of Addressable Fire Detection Control Panels via the detection loop. The Green LED will pulse every time the unit is polled by the panel. Three LEDs are provided to indicate module status. The Yellow LED will be ON whenever there is a fault condition in the module and finally the Red LED will be ON when there is an alarm condition in the conventional zone.

The module requires an external 24V DC power supply and can supply up to 1A at the sounder output which is monitored for both open and short circuit faults. A 10 K ohm end of line resistor is connected to the last sounder to provide line monitoring.

The LSC-ISO uses the Global Fire proprietary sounder control protocol and therefore is only compatible with GFE's range of addressable control panels.

The output can be programmed as pulsed or continuous. A maximum of 32 LSC-ISO can be connected to each Loop using address numbers 94 to 125 inclusive.

Also available complete with housing. Address setting is via switches 1 to 5 of the 6 way DIL switch where all off represents address 94.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	17 V to 30 V DC
LOOP CURRENT	1.0 mA (Quiescent or OC/ SC FAULT) - 1.65 mA O/P active
EXT. SUPPLY CURRENT @ 24 V DC	1.2 mA Quiescent - 1 Amp maximum for sounders
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
ENCLOSURE / MATERIAL	White or Red / ABS
DIMENSIONS	100 (D) x 48 (H) mm
WEIGHT - MODULE	24 g
WEIGHT - BOXED	155 g
ORDER CODE	
LSC-ISO	LOOP SOUNDER CONTROL UNIT





# MODULES



## GFE-GSM-INT

### GSM/GPRS Interface Module

The GFE-GSM-INT Modules can interface directly to GFE's range of panels, providing the panel with the capability of event transmission via either voice or SMS messaging. The unit can also be used in standalone mode using the digital inputs and relay outputs provided.

The module interfaces directly to the panel's data loop and SMS messages can be programmed to be sent for each new event. A total of 11 voice messages can also be programmed using the module's configuration software GSM Loader. This software is available for download from GFE's web site. Both SMS and Voice messages can be associated with the following events: Fire, Fault, Acknowledge, Reset, Input and Output Activation.

Standalone operation is obtained using the 3 digital inputs and 3 output relays. Both SMS and Voice messages can be associated to any of the inputs/ outputs available to report change of condition/ operation.

#### Key Features

- ▶ GSM and GPRS Operation
- ▶ SMS and Voice Messaging
- ▶ Data Loop Connection to GFE's Fire Detection Panels
- ▶ 3 Digital Inputs and 3 Relay Outputs for Standalone operation
- ▶ Easy to Use Configuration Software GSM Loader

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	20 V to 30 V DC
OUTPUT RELAY CONTACT RATING	2 A 30 V DC / 0.5 A 125 V AC
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
CASE MATERIAL	ABS
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	150 (W) x 90 (L) x 32 (H) mm
WEIGHT	216 g - boxed
<b>ORDER CODE</b>	
<b>GFE-GSM-INT</b>	GSM/ GPRS INTERFACE MODULE



# QUAD ZMU

## Addressable QUAD Zone Monitoring Unit

The QUAD-ZMU is a fully monitored interface module which is used to connect up to four individually addressed zones of current-limited conventional detection devices to the Global Fire Addressable control panel via the detection loop.

The module requires an external 24 V DC power supply. Active End of Line Monitoring with BS5839 Detector Removal compliance when Diode bases are used (New Feature).

The detection Zones and their supply voltage are optically isolated from the addressable detection loop which allows the use of a local power supply. If that supply fails, a fault condition is reported at the control panel.

The status of each zone is indicated by two LEDs. A Red LED signals Fire, Yellow indicates Fault on that zone. The normal state is indicated by neither LEDs being illuminated. A Green LED indicates the presence of 24 Volts.

### TECHNICAL SPECIFICATIONS

EXTERNAL SUPPLY VOLTAGE	20 V to 30 V DC
LOOP CURRENT	0.5 mA
EXT. SUPPLY CURRENT @ 24 V DC	5.3 mA Quiescent - per zone OC/ SC/ FIRE - 7/ 33/ 23 mA
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
CASE MATERIAL	ABS
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	150 (W) x 90 (L) x 32 (H) mm
WEIGHT	220 g - boxed

### ORDER CODE

QUAD-ZMU V3 - 1 ZONE	ADDRESSABLE 1 CONVENTIONAL ZONE MONITORING UNIT
QUAD-ZMU V3 - 2 ZONES	ADDRESSABLE 2 CONVENTIONAL ZONES MONITORING UNIT
QUAD-ZMU V3 - 3 ZONES	ADDRESSABLE 3 CONVENTIONAL ZONES MONITORING UNIT
QUAD-ZMU V3 - 4 ZONES	ADDRESSABLE 4 CONVENTIONAL ZONES MONITORING UNIT



## 4 & 8 INPUT

### 4 & 8 Input Addressable Module

The Addressable 4 or 8 Input Modules are fully monitored devices which permit the interfacing of third party equipment with the Fire Alarm Control panel using normally open dry contact connections.

The connection to each input is monitored for fault (open or short-circuit) and Alarm conditions.

The interface is used to monitor the contacts of an external system which must be interfaced to the Fire Alarm System, for example a Flow Switch in a sprinkler system to indicate if the sprinklers have been activated or extinguishant level monitoring in Gas Extinguishing Systems etc.

A 4 way D.I.L. switch is provided to configure the module's address. This value can be set in the range 1 to 125.

#### Key Features

- ▶ Fast Activation Response
- ▶ Loop Powered
- ▶ Individual Status LEDs for each Input
- ▶ Low Power Consumption
- ▶ Plastic Enclosure

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 17 V to 30 V DC
LOOP CURRENT - QUIESCENT ( $I_0$ )	4 Input 2.6 mA - 8 Input 3.2 mA
LOOP CURRENT - ALARM	IQ+ 0.9 mA for each I/P in alarm
LOOP CURRENT - SHORT-CIRCUIT	IQ+ 0.9 mA for each I/P in short-circuit
LOOP CURRENT - OPEN CIRCUIT	IQ+ 0.5 mA for each I/P in open circuit
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
CASE MATERIAL	ABS
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	150 (W) x 90 (L) x 32 (H) mm
WEIGHT	4 Input 205 g / 8 Input 215 g - boxed
ORDER CODE	
4 INPUT-BOXED	4 INPUT ADDRESSABLE MODULE WITH DUAL GANG BOX
8 INPUT-BOXED	8 INPUT ADDRESSABLE MODULE WITH DUAL GANG BOX



## 3 IO-PLUS

### Addressable Triple Input/Output Module

The 3 IO-PLUS Modules are fully monitored loop powered devices which permit the interfacing of third party equipment with the Fire Alarm Control panel using normally open dry contact connections. Each module can be fitted with a maximum of 3 inputs and 3 outputs. The connection to each input is monitored for fault (open or short-circuit) and Alarm conditions.

The interface is used to monitor the contacts of an external system which must be interfaced to the Fire Alarm System, for example a Flow Switch in a sprinkler system to indicate if the sprinklers have been activated or extinguishant level monitoring in Gas Extinguishing Systems, etc.

Module is provided with a loop short-circuit isolator and with up to 3 voltage free single pole change over relay outputs. The output relays are always powered directly from the detection loop. It is not required to use an external 24V DC power supply. Relay operation is confirmed by an onboard red LED. A 8 way D.I.L. switch is provided to configure the module's address. This value can be set in the range 1 to 125.

The following programmable functions are available: Input Activation Mode, Delayed Input Alarm Activation, Output Delayed Activation.

#### Key Features

- ▶ Fast Activation Response
- ▶ Loop Powered
- ▶ Status LEDs for each I/O and O/P
- ▶ Low Power Consumption
- ▶ Module features an integral short-circuit loop isolator

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 17 V to 30 V DC
LOOP CURRENT - QUIESCENT (I <sub>q</sub> )	1.4 mA (1 ch.) - 1.5 mA (2 ch.) - 1.6 mA (3 ch.)
LOOP CURRENT - ALARM	IQ+ 1.2 mA for each I/P in alarm
LOOP CURRENT - SHORT-CIRCUIT	IQ+ 1.4 mA max.
LOOP CURRENT - OPEN CIRCUIT	IQ+ 1.0 mA max.
LOOP CURRENT - OUTPUT	IQ+ 1.1 mA for each O/P activated
OUTPUT RELAY CONTACT RATING	2 A 30 V DC / 0.5 A 125 V AC
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
CASE MATERIAL	ABS
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	150 (W) x 90 (L) x 32 (H) mm
WEIGHT	216 g - boxed
ORDER CODE	
3 IO-PLUS - 1CHANNEL	1 CHANNEL - ADDRESSABLE TRIPLE I/O MODULE - W/ ISOLATOR - W/ DUAL GANG BOX
3 IO-PLUS - 2CHANNEL	2 CHANNELS - ADDRESSABLE TRIPLE I/O MODULE - W/ ISOLATOR - W/ DUAL GANG BOX
3 IO-PLUS - 3CHANNEL	3 CHANNELS - ADDRESSABLE TRIPLE I/O MODULE - W/ ISOLATOR - W/ DUAL GANG BOX



# MAINS IO

## 1 channel Input/Output Module

The MAINS IO Modules are fully monitored loop powered devices which permit the interfacing of third party equipment with the Fire Alarm Control panel using normally open dry contact connections.

The connection to the input is monitored for fault (open or short circuit) and Alarm conditions.

The interface is used to monitor the contacts of an external system which must be interfaced to the Fire Alarm System, for example a Flow Switch in a sprinkler system to indicate if the sprinklers have been activated or extinguishant level monitoring in Gas Extinguishing systems, etc.

Module is provided with a loop short-circuit isolator and with a voltage free single pole change over mains rated output. The output relay is always powered directly from the detection loop. It is not required to use an external 24V DC power supply. Relay operation is confirmed by an onboard red LED.

A 8 way D.I.L. switch is provided to configure the module's address. This value can be set in the range 1 to 125.

The following programmable functions are available: Input Activation Mode, Delayed Input Alarm Activation, Output Delayed Activation.

### Key Features

- ▶ Fast Activation Response
- ▶ Loop Powered
- ▶ Five Status LEDs provided
- ▶ Low Power Consumption
- ▶ Module features an integral short-circuit loop isolator
- ▶ Single mains rated relay contact

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 17 V to 30 V DC
LOOP CURRENT - QUIESCENT ( $I_0$ )	1.3 mA
LOOP CURRENT - ALARM	2.9 mA
LOOP CURRENT - FAULT	2.9 mA (SC) - 2.6 mA (OC)
LOOP CURRENT - OUTPUT ACTIVE	2.8 mA
OUTPUT RELAY CONTACT RATING	8A 250 VAC/ 30V DC
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
CASE MATERIAL	ABS
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	150 (W) x 90 (L) x 32 (H) mm
WEIGHT	210 g - boxed
ORDER CODE	
MAINS IO-BOXED	1 CHANNEL INPUT/OUTPUT - W/ MAINS RATED RELAY W/ ISOLATOR - W/ DUAL GANG BOX



# CCPI

## Conventional Control Panel Interface

The Conventional Control Panel Interface provides 8 individually addressed normally open inputs and 3 pre-defined outputs. The interface permits the connection of a Conventional Fire Alarm Control Panel with up to 8 Zones to the Global Fire Analogue Addressable Fire Control Panel via the detection loop.

The outputs are pre-defined as Silence, Reset and Evacuation and allow these functions on the conventional panel to be executed from the Addressable System. An external 24 V DC supply is required to power the onboard relays. This supply is optically isolated from the detection Loop. The silence, reset and evacuation relay operations are indicated by 3 Red LEDs.

Each CCPI occupies 8 addresses on the Loop even when not all inputs are used. Each INPUT should be fitted with an end-of-line resistor (22 K Ohm) and open short circuit fault conditions are also individually monitored.

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	Loop Powered - 17 V to 30 V DC
LOOP CURRENT - QUIESCENT ( $I_0$ )	3.2 mA
LOOP CURRENT - ALARM	$I_0 + 0.9$ mA for each I/P in alarm
LOOP CURRENT - SHORT-CIRCUIT	$I_0 + 0.9$ mA for each I/P in short-circuit
LOOP CURRENT - OPEN CIRCUIT	$I_0 + 0.5$ mA for each I/P in open circuit
EXT. SUPPLY CURRENT @ 24 V DC	5 mA Quiescent - 21 mA Max.
END OF LINE RESISTOR (E.O.L.)	22 K Ohm
INPUT - SHORT CIRCUIT	Short Circuit < 2.2 K Ohms
INPUT - OPEN CIRCUIT	Open Circuit > 47 K Ohms
INPUT - OK - NO ALARM OR FAULT	8.2 K Ohms < OK < 47 K Ohms
INPUT - FIRE	2.2 K Ohms < FIRE < 8.2 K Ohms
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	150 (W) x 90 (L) x 32 (H) mm
WEIGHT	220 g inc. packaging
<b>ORDER CODE</b>	
CCPI	CONVENTIONAL CONTROL PANEL INTERFACE





# INPUT

## Addressable Input Module

The Addressable Input Module is a fully monitored device which permits the interfacing of third party equipment with the Fire Alarm Control panel using normally open dry contact connections. The Green LED will pulse every time the unit is polled by the panel and the Red LED will be ON whenever there is an alarm condition at the module's input.

The connection to the input is monitored for Fault (open or short circuit) and Alarm conditions. The interface is used to monitor the contacts of an external system which must be interfaced to the Fire Alarm System, for example a Flow Switch in a sprinkler system to indicate if the sprinklers have been activated or extinguishant level monitoring in Gas Extinguishing systems etc.

An 8 way DIL switch is provided to configure the module's address. This value can be set in the range 1 to 125.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 17 V to 30 V DC
LOOP CURRENT - QUIESCENT	I/P: OK 0.46 mA - FLT OC 0.33 mA - FLT SC 0.79 mA
LOOP CURRENT - ALARM LED ILLUMINATED	2.0 mA
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
ENCLOSURE / MATERIAL	White or Red / ABS
DIMENSIONS	100 (D) x 48 (H) mm
WEIGHT - MODULE	22 g
WEIGHT - BOXED	123 g
ORDER CODE	
INPUT	ADDRESSABLE INPUT MODULE



# IO-ISO

## Addressable Input/ Output Module

The Addressable Input/ Output Module is a fully monitored device which permits the interfacing of third party equipment with the Fire Alarm Control panel using normally open dry contact connections while also providing a changeover output relay to control ancillary equipment. The Green LED will pulse every time the unit is polled by the panel. The Yellow LED will be ON whenever there is a fault condition in the module and finally the Red LED will be ON when there is an alarm condition at the module's input.

The connection to the input is monitored for Fault (open or short circuit) and Alarm conditions. The output relay can be powered from the detection loop (default) or optionally by an external 24 V DC supply. Relay operation is confirmed by an onboard Yellow LED. The interface is used to monitor the contacts of an external system which must be interfaced to the Fire Alarm System, for example a Flow Switch in a sprinkler system to indicate if the sprinklers have been activated or extinguishant level monitoring in Gas Extinguishing Systems etc.

The output relay can be programmed to close fire doors, activate smoke removal systems etc. The factory default setting is for the relay to receive its operating power from the loop. When in this operating mode the on board 2-way DIL switch has both switches in the ON position. If the relay output is to be powered by an external supply, then both switches should be in the OFF position. In this case the coil of the relay output is completely isolated from the loop.

An 8 -way DIL switch is provided to configure the module's address. This value can be set in the range 1 to 125.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 17 V to 30 V DC
LOOP CURRENT - QUIESCENT	I/P OK 0.46 mA - FLT OC 0.33 mA - FLT SC 0.79 mA
LOOP CURRENT - ALARM LED ILLUMINATED	2.0 mA +9.8 mA with Relay Active
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
ENCLOSURE / MATERIAL	White or Red / ABS
DIMENSIONS	100 (D) x 48 (H) mm
WEIGHT - MODULE	29 g
WEIGHT - BOXED	134 g
ORDER CODE	
IO-ISO	ADDRESSABLE INPUT/ OUTPUT MODULE



# ZMU

## Addressable Zone Monitoring Unit

The ZMU is a fully monitored interface module, which is used to connect a number of current limited conventional detectors to the Global Fire Addressable control panel via the detection loop. These detectors are then seen as one address at the addressable control panel.

The module can be either powered from the Loop or an external power supply. The detector line can be monitored by a bipolar electrolytic capacitor. This will reduce considerably the quiescent current load on the loop. Alternatively a resistor can be used as an end of line device. Three LEDs are provided in order to monitor the operational status of the module.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 20 V to 30 V DC
LOOP CURRENT - LOOP POWERED	1.8 mA (Quiescent) - 3.2 mA (Zone OC) 25 mA (FIRE) - 38 mA (Zone Short-Circuit)
LOOP CURRENT - EXTERNAL SUPPLY	0.5 mA
CURRENT - EXTERNAL SUPPLY	4.5 mA (Quiescent) - 4.5 mA (Zone OC) @ 28 V DC nominal 29 mA (FIRE) - 44 mA (Zone Short-Circuit) @ 28V DC nominal
MAX. CONVENTIONAL DEVICES/ ZONE	32
MAX. NO. OF MODULES/ LOOP	32
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
ENCLOSURE / MATERIAL	White or Red / ABS
DIMENSIONS	100 (D) x 48 (H) mm
WEIGHT - MODULE	19 g
WEIGHT - BOXED	109 g
ORDER CODE	
ZMU	ADDRESSABLE ZONE MONITORING UNIT



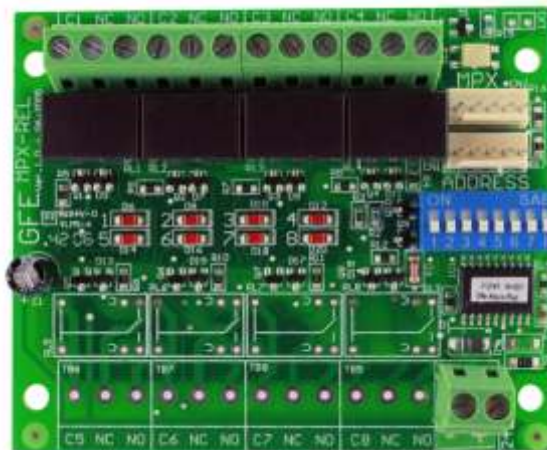
## GFE-AD-ISO

### Standalone Loop Isolator

The GFE-AD-ISO has been designed to provide protection against short circuit faults on a GFE JUNIOR or JUNO NET Analogue Addressable systems. The isolator protects the loop in the event of a short circuit by disconnecting the section of the loop where the short circuit has occurred. When the fault has been rectified, the isolating circuitry reconnects the affected part of the system.

The GFE-AD-ISO is delivered in a white round junction box with knockouts that permit easy cable entry. Two Yellow LED indicators are provided to indicate on which side of the loop there is a short circuit (Loop In and Loop Out). This facilitates easy localisation of the fault as it is not necessary to look for two isolators to confirm the location of the affected section. The GFE-AD-ISO is polarity sensitive and can be damaged if connected with reverse polarity. Please be sure to note the polarity indicated at the wiring terminals. Up to 32 devices may be fitted between each isolator (EN54). Under Normal conditions the GFE-AD-ISO provides a low resistance of 0.3 Ohms in either direction. When a short circuit condition is detected the isolator switches to the open state thereby isolating the Loop "IN" and Loop "OUT" lines. The isolated section is tested every 3 seconds with a voltage pulse and is automatically reconnected when the load resistance is greater than 175 Ohms.

TECHNICAL SPECIFICATIONS	
LOOP OPERATING VOLTAGE	17 V to 40 V
LOOP CURRENT - QUIESCENT	0.15 mA @ 28 V DC nominal
LOOP CURRENT - ISOLATED LED ON	6.2 mA @ 28 V DC nominal
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
ENCLOSURE / MATERIAL	White or Red / ABS
DIMENSIONS	100 (D) x 48 (H) mm
WEIGHT - MODULE	119 g
WEIGHT - BOXED	155 g
ORDER CODE	
GFE-AD-ISO	STANDALONE LOOP ISOLATOR



## J-NET-MPX-REL

### Junior and Juno Net Multiplexed Zone Relay Outputs

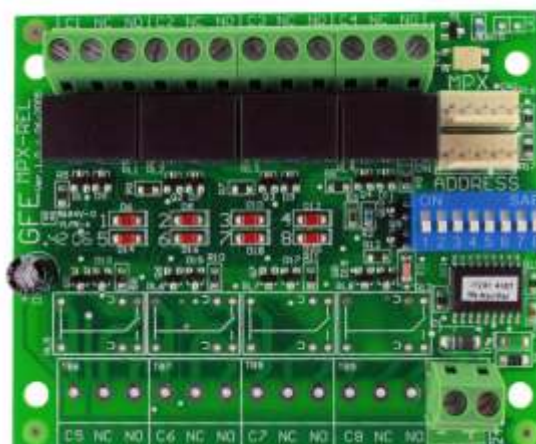
Interface card which provides indication of a zone in Fire/ Fault condition via a voltage free, change-over relay contact for each zone in any of GFE's Analogue Addressable Fire Detection Panels. There is also a LED indication of Fire/ Fault condition for each individual zone. The Red LED indicator will be ON when the relay is active. These relay outputs are not monitored.

This module operates in three different modes:

- ▶ **8 Zone Blocks** - Indication of Fire for each zone in the range 1 to 384
- ▶ **4 Zone Blocks** - Indication of Fire and Fault for each zone in the range 1 to 256
- ▶ **System Status** - Each relay output is assigned to a specific System Status indication:  
Fire, Fault, Pre-Alarm, Test, Disabled, Sounders ON, Auxiliary Outputs and Sounders Disabled

The module requires an external 24 V DC supply and connection to either a JUNO NET or JUNIOR Panel is via a 5 way flat cable fitted with polarised connectors. Two of these connectors are provided to enable connection of more than 1 module.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	28 V DC nominal
CURRENT - QUIESCENT	7 mA - No relays active
CURRENT - ZONES IN ALARM	7 mA + 15 mA per active relay
ZONE SELECTION	DIL Switch
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	88 (L) x 72.5 (W) x 18 (H) mm
WEIGHT	4 zone - 60 g / 8 zone - 95 g
ORDER CODE	
J-NET-MPX-REL	JUNIOR AND JUNO NET MULTIPLEXED 8 ZONE RELAY BOARD



## GFE-MPX-REL

### Orion Multiplexed Zone Relay Outputs

Interface card which provides an individual zone in alarm indication via a voltage free change-over relay contact for each zone in an ORION conventional panel. There are 2 versions: 4 and 8 zones and they are always used for indication of Alarm/ Fire conditions.

There is also a LED indication of Alarm condition for each individual zone. The Red LED indicator will be ON when the relay is active. These relay outputs are not monitored.

The DIL switch allows one relay output for a particular zone in the range 1 to 8 to be programmed as delayed and this is achieved using the first three switches (1 to 3). The delay time will be provided in the range between 0-10 minutes using the next four positions (4-7) on the DIL switch. The module requires an external 24 V DC supply. Connection to the ORION PCB board is via a 5 way flat cable fitted with Molex type polarised connectors.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	28 V DC nominal
CURRENT - QUIESCENT	7 mA - No relays active
CURRENT - ZONES IN ALARM	7 mA + 15 mA per active relay
TIMER	15 settings from 0 to 10 minutes
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	88 (L) x 72.5 (W) x 18 (H) mm
WEIGHT	4 zone - 60 g / 8 zone - 95 g
<b>ORDER CODE</b>	
GFE-MPX-REL-4	ORION MULTIPLEXED 4 ZONE RELAY BOARD
GFE-MPX-REL-8	ORION MULTIPLEXED 8 ZONE RELAY BOARD



## GFE-ADLI

### Orion Analogue Loop Interface

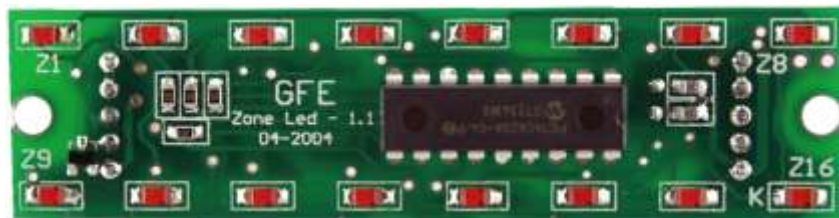
The GFE-ADLI is used as an interface between an ORION conventional panel and any of GFE's analogue addressable systems. It allows the addressable panel to monitor and control the status of the conventional unit.

An 8 way DIL switch and a pluggable jumper are provided, which will be used for setting the module's address and the reporting mode. The module will transmit to the analogue addressable panel the status of the ORION Conventional Panel both in terms of Fire and Fault conditions and only one address will be occupied per module. The module is reported by the addressable system as a Zone Monitoring Unit. The unit is also equipped with 3 LEDS that will provide an optical indication of the module's status, namely: Polling Rate (GREEN), Faults (YELLOW) and Fire (RED).

Finally, this unit allows the ORION panel to be controlled remotely from any of GFE's analogue addressable panels allowing the user to Silence/ Resound Alarms (EVACUATION) and RESET when the pluggable jumper is fitted to the 2-way header provided on the module's PCB board. If the same jumper is removed, the remote RESET operation is disabled and although the Addressable panel will be able to activate the SOUNDER circuits on the ORION panel, the SILENCE ALARMS will be disabled remotely and hence only available locally.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 17 to 30 V DC
SUPPLY CURRENT	1.2 mA (quiescent) - 3 mA (Alarm or Fault)
SOFTWARE & HARDWARE COMPATIBILITY	ORION Conventional Panel-version 1.5 and above JUNIOR and JUNO NET panels (all versions)
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	100.3 (L) x 35 (W) x 18 (H) mm
WEIGHT	20 g
ORDER CODE	
GFE-ADLI	ORION ANALOGUE LOOP INTERFACE





# MPX-LED

## Multiplexed Zone LED Board

An interface card that provides a LED indication of a Fire/ Fault condition for each individual zone. The Red LED indicator will be ON when the zone is in Fire condition. Can be used with any of GFE's addressable panels.

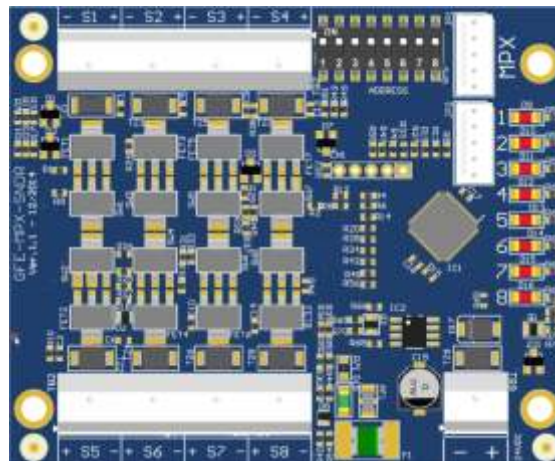
This module operates in three different modes:

- ▶ **16 Zone Blocks** - Indication of Fire for each zone in the range 1 to 384
- ▶ **8 Zone Blocks** - Indication of Fire and Fault for each zone in the range 1 to 384
- ▶ **System Status** - Each LED output is assigned to a specific System Status indication:  
Fire, Fault, Pre-Alarm, Test, Disabled, Sounders ON, Auxiliary Outputs and Sounders Disabled

The module requires a connection to either JUNO NET or JUNIOR Panels via a 5 way flat cable fitted with polarised connectors. And it should be connected to the MPX output of either panel.

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	5 V DC nominal
CURRENT - QUIESCENT	2 mA - No LEDs active
CURRENT - ZONES IN ALARM	60 mA - Max Current during LAMP TEST @ 5 V DC
ZONE SELECTION	Solder Links
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	78.5 (L) x 20.5 (W) x 16 (H) mm
WEIGHT	10 g
<b>ORDER CODE</b>	
<b>MPX-LED</b>	JUNIOR AND JUNO NET MULTIPLEXED 16 ZONE LED BOARD



## GFE-MPX-SNDR

### ORION Multiplexed Zone Sounder Circuit Outputs

**Interface card that provides an individual zone in alarm indication via a monitored sounder output for each zone in an ORION Conventional Panel. There are 2 versions: 4 and 8 zone and they are always used for indication of ALARM/ FIRE conditions.**

There is also a LED indication of ALARM condition for each individual zone. The LED RED indicator will be ON when the sounder circuit is active. These sounder outputs are individually monitored for both open and short circuit.

The d.i.l switch allows one sounder output for a particular zone in the range 1 to 8 to be programmed as delayed and this is achieved using the first three switches (1 to 3) and the delay time will be provided in the range between 0-10 minutes using the next four switch positions (4-7) on the d.i.l. Switch.

The module requires an external 24 V DC supply. Connection to the Orion PCB board is via a 5 way flat cable fitted with Molex type polarised connectors.

#### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	28 V DC nominal
CURRENT - QUIESCENT	7 mA - No Sounder Circuit active
CURRENT - ZONES IN ALARM	7 mA + Total Sounder Current Output
TIMER	15 settings from 0 to 10 minutes
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	88 (L) x 72.5 (W) x 18 (H) mm
WEIGHT	4 zone - 60 g / 8 zone - 95 g

#### ORDER CODE

<b>GFE-MPX-SNDR-4</b>	ORION MULTIPLEXED 4 ZONE SOUNDER CIRCUIT BOARD
<b>GFE-MPX-SNDR-8</b>	ORION MULTIPLEXED 8 ZONE SOUNDER CIRCUIT BOARD



# MAM

## Manually Addressed Module

**The MAM allows the connection and addressing of Conventional Detectors, Call Points, Micro Input, Micro Output and Conventional Sounder/ Beacon.**

With its small physical size and convenient 8 way DIL switch for address setting and configuration, the MAM provides the facility to upgrade all the components of a conventional system to a full addressable system, making it an ideal solution for retrofitting installations. The MAM is fully compatible with all our standard addressable modules, addressable sounders, addressable manual call points and GFE detectors facilitating extensions to existing systems.

To assist easy identification the MAM is supplied in 3 coloured plastic housings:

- ▶ **Red** - Manual Call Point interface/ Micro Input Module
- ▶ **Yellow** - Micro Output Module/ Loop Sounder/ Beacon Controller
- ▶ **White** - Smoke/ Heat Detector interface.

Device type selection is by means of switch 8 on the DIL. Additionally the MAM-LSC can be set as a sounder or beacon driver using switch 7. In Sounder mode the output is removed when a Silence Alarm signal is received from the control panel. In Beacon mode the output remains active until the system is reset.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 17 V to 30 V DC
LOOP CURRENT - QUIESCENT	1.1 mA
LOOP CURRENT - ALARM	12 mA
ADDRESS RANGE	1-125 (Detectors, MCP, I/O) 94-125 (Sounder/ Beacons)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	48 (L) x 24 (W) x 12 (H) mm
WEIGHT	18 g
ORDER CODE	
<b>MAM-RED</b>	MANUALLY ADDRESSED MODULE FOR CALL POINT OR INPUT
<b>MAM-WHITE</b>	MANUALLY ADDRESSED MODULE FOR SMOKE OR HEAT DETECTOR
<b>MAM-YELLOW</b>	MANUALLY ADDRESSED MODULE FOR LSC OR OUTPUT



# ELOTECNIQ

## HMO Local Fire Alarm Controller

GFE's ELOTECNIQ Controller is a module which can be best described as a miniature, loop powered, fully monitored, Single Zone Fire Detection Panel. The unit is analogue addressable and it can only be interfaced to Global Fire Equipment's range of Analogue Addressable Fire Control Panels. ELOTECNIQ operates in conjunction with the main panel, providing local early warning for fire alarms in housing of multiple occupation such as apartments, aparthotels and student residencies. The device is fully monitored for removal, loop open/ short circuits. It complies fully with BS5839 part 6. All devices used in the system are analogue addressable including detectors, manual call points and sounders.

During an alarm condition the user is allowed to press the silence button within a time period which is programmable up to a maximum of 10 minutes. The total amount of times the unit can be silenced after receiving a new alarm is also programmable and by default is set to 4. This feature will prevent unnecessary evacuations from a building caused by a false alarm. The safety of the building's tenants is never compromised. The alarm counter will be reset if no new alarm conditions are received within a time period of 30 minutes. This time is also programmable up to a maximum of 1 hour.

A maximum of 30 of these controllers can be fitted per loop. Each device will occupy 2 consecutive addresses. The device is loop powered and no external supply is required.

Five distinct voice messages are provided to identify different states of the local system. The unit can be programmed to operate in 6 different languages.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop: 20 to 30 V DC
CURRENT - QUIESCENT	1.0 mA
CURRENT - LOCAL VOICE SOUNDER ON	26 mA peak
MESSAGES	6 Languages - Normal, Disabled, Evacuate, Ventilate and Smoke Detected
OPERATING TEMPERATURE	-10°C to 50°C
MAX. HUMIDITY	95% RH Non-Condensing
DIMENSIONS	175 (L) x 84 (W) x 36 (H) mm
WEIGHT	150 g
ORDER CODE	
ELOTECNIQ	ELOTECNIQ - HMO CONTROLLER SET WITH VOICE MESSAGES



# INTERFACES



# J-NET-INT-485

## RS485 Data Loop Interface

The J-NET-INT-485 interface module allows GFE's range of panels to be interfaced to repeaters and/or sub-panels using a 4-core data communication cable suitable for RS422/RS485 data transmission using a common data communication loop in a ring topology. These units can also use a double-redundant data communication loop for extra security and reliability when used in conjunction with a JUNO NET or JUNIOR main panel by creating a bi-directional communication flow.

When the JUNO NET is unable to communicate with a repeater or sub-panel due to a cut cable or short circuit, it will try to establish communication via the 2nd loop. A communication fault will be signalled by the JUNO NET main panel when communication is lost with any sub-panels or repeater panel equipped with a loop card. Please note that the Junior panel, in all its versions, can only be interfaced with JUNIOR MINI-REP and JUNIOR-REP.

This interface can be used in parallel with other similar modules using other interface technologies such as Fibre Optics or TCP/IP, providing the installer with the tools to interface and create a network of panels, repeaters and sub-panels using mixed data communication technologies, catering for the most demanding applications and networking requirements.

Each panel, repeater and sub-panel will require one of these interface modules. The maximum distance between two nodes is 1.2 Kms including the return path to the main panel.

Custom made versions of these modules can be produced for connection to GFE's proprietary MPX protocol to connect LEDs, mimic displays, relays and conventional sounder circuits to GFE's extensive range of conventional and analogue addressable panels.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	28 V DC nominal - range 17 to 30 V DC
SUPPLY CURRENT	14 mA
SOFTWARE & HARDWARE COMPATIBILITY	JUNO NET Panel & Repeater - Sub-Panel JUNIOR Panel V 2,3 and 4, Mini-Rep, Junior Repeaters ORION Conventional Panel (version 1.5) and Orion Repeaters
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	135.0 (L) x 35.5 (W) x 18 (H) mm
WEIGHT	47 g
ORDER CODE	
J-NET-INT-485	RS422/RS485 DATA LOOP INTERFACE



## J-NET-INT-FO

### Fibre Optics Data Loop Interface

The J-NET-INT-FO interface modules allow GFE's range of panels to be interfaced to repeaters and/or sub-panels using Fibre Optic cable using a common data communication loop in a ring topology. These units also use a double-redundant data communication loop for extra security and reliability.

These interfaces can be used in parallel with other similar modules using other interface technologies such as RS485 and TCP/IP, providing the installer with the tools to interface and create a network of panels, repeaters and sub-panels using mixed data communication technologies, catering for the most demanding applications and networking requirements.

Each panel, repeater and sub-panel will require one of these interface modules. The maximum fiber length between panels is 2500m

Fibre Optic cables to be used in conjunction with these modules should be multi-mode 62.5/125um and terminated using the industry standard ST connectors.

Custom made versions of these modules can be produced for connection to GFE's proprietary MPX protocol to connect LEDs, mimic displays, relays and conventional sounder circuits to GFE's extensive range of conventional and analogue addressable panels.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	28 V DC nominal - range 17 to 30 V DC
SUPPLY CURRENT	15 mA
CONNECTOR TYPE (FO)	ST Connectors
FIBRE OPTICS CABLE	Multi-mode 62.5 / 125 um
SOFTWARE & HARDWARE COMPATIBILITY	JUNO NET Panel & Repeater - Sub-Panel JUNIOR Panel V 2,3 and 4, Mini-Rep, Junior Repeaters ORION Conventional Panel (version 1.5) and Orion Repeaters
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	135 (L) x 35.6 (W) x 20 (H) mm
WEIGHT	32 g
ORDER CODE	
J-NET-INT-FO	FIBRE OPTICS DATA LOOP INTERFACE





# J-NET-INT-TCP/IP

## TCP/IP Data Loop Interface

Global Fire Equipment produces a range of interfaces that allow its range of panels, both conventional and analogue addressable panels to communicate with repeaters and sub-panels.

Four different interfacing technologies are available, namely:

- ▶ RS232 (ORION Conventional Panel only)
- ▶ RS485
- ▶ Fibre Optics
- ▶ TCP/IP

The J-NET-INT-TCP/IP interface is used when connecting any of GFE's range of Fire Detection panels to Repeaters or Sub-Panel, using TCP/IP protocol within a Local Area Network (LAN). Please note that sub-panels can only be interfaced to JUNO NET panels.

Both 10/100 Mbps speeds are supported by this device and communication rate is automatically set depending on the type of network to which the device is connected.

Interface is easily configured using LAN communications using Telnet. Alternatively the interface can also be configured using terminal emulation software via the serial port provided in the form of a D-Type 9 pin miniature connector.

Two Red LEDs on the interface board will assist the user when monitoring the system communication status.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	28 V DC nominal
SUPPLY CURRENT	45 mA
NETWORK	10 / 100 Mbit Ethernet - Auto-Sensing
CONFIGURATION	Network - Telnet Serial Port / Terminal Emulator
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	120 (L) x 35.2 (W) x 18.4 (H) mm
WEIGHT	40 g
ORDER CODE	
J-NET-INT-TCP/P	DATA LOOP TCP/IP INTERFACE



# ORION-INT-RS232

## Orion Repeater Interface

The ORION-INT-RS232 interface module allows GFE's ORION Conventional Panels to be interfaced to ORION MINI-REPS and ORION REPS using a 4-core data communication cable suitable for serial data transmission.

This interface is compatible with the following panels and repeaters:

- ▶ ORION Conventional Panel 2, 4 and 8 zones - version 1.5 and above
- ▶ ORION REP and ORION MINI-REP

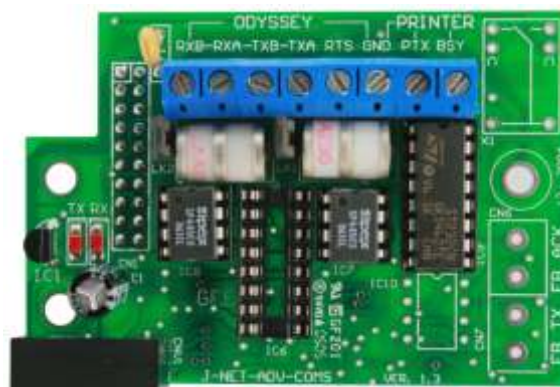
The maximum distance between panel and repeater is 100 m.

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	28 V DC nominal - range 17 to 30 V DC
SUPPLY CURRENT	5 mA
SOFTWARE & HARDWARE COMPATIBILITY	ORION Conventional Panel-version 1.5 and above ORION MINI-REP and ORION REP
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	100.3 (L) x 35 (W) x 18 (H) mm
WEIGHT	20 g

### ORDER CODE

<b>ORION-INT-RS232</b>	ORION RS232 REPEATER INTERFACE
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# J-NET-ADV-COMS-485

## JUNO NET - ODYSSEY RS232/RS485 Interface

Global Fire Equipment produces a range of interfaces that allow the JUNO NET Analogue Addressable Fire Detection Panel to be interfaced to GFE's graphical monitoring software ODYSSEY.

Four different interfacing technologies are available, namely:

- ▶ RS232
- ▶ RS485
- ▶ Fibre Optics
- ▶ TCP/IP

The J-NET-ADV-COMS-485 is used when connecting a JUNO NET Main Panel to GFE's ODYSSEY software, BMS or MODBUS using either RS232 or RS485. This interface is also used when an external serial printer is linked to the panel. In either case the QUART chip has to be fitted on the JUNO NET Main Board.

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	28 V DC nominal
SUPPLY CURRENT	14 mA
SOFTWARE & HARDWARE COMPATIBILITY	JUNO NET Main Panel all versions
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	74.3 (L) x 51.1 (W) x 24 (H) mm
WEIGHT	36 g

### ORDER CODE

<b>J-NET-ADV-COMS-485</b>	JUNO NET - ODYSSEY RS485 INTERFACE
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# J-NET-ADV-COMS-FO

## Juno Net - ODYSSEY Fibre Optics Interface

Global Fire Equipment produces a range of interfaces that allow the JUNO NET Analogue Addressable Fire Detection Panel to be interfaced to GFE's graphical monitoring software ODYSSEY.

Four different interfacing technologies are available, namely:

- ▶ RS232
- ▶ RS485
- ▶ Fibre Optics
- ▶ TCP/IP

The J-NET-ADV-COMS-FO is used when connecting JUNO NET Main Panels (maximum of 64 panels) to GFE's ODYSSEY software, BMS or MODBUS using a fibre optic link. In this case the QUART chip has to be fitted on the Panel's Main Board. Double channel multi-mode 62.5/125 optical fibre should be used. Fibre terminations used with this type of interface are industry standard ST connectors.

### TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE	28 V DC nominal
SUPPLY CURRENT	15 mA
CONNECTOR TYPE (FO)	ST Connectors
FIBRE OPTICS CABLE	Multi-mode 62.5/125 um
SOFTWARE & HARDWARE COMPATIBILITY	JUNO NET Main Panel all versions
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	74.3 (L) x 51.1 (W) x 24 (H) mm
WEIGHT	30 g

### ORDER CODE

J-NET-ADV-COMS-FO	JUNO NET - ODYSSEY FIBRE OPTICS INTERFACE
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# J-NET-ADV-COMS-TCP/IP

## Juno Net - ODYSSEY TCP/IP Interface

Global Fire Equipment produces a range of interfaces that allow the JUNO NET Analogue Addressable Fire Detection Panel to be interfaced to GFE's graphical monitoring software ODYSSEY.

Four different interfacing technologies are available, namely:

- ▶ RS232
- ▶ RS485
- ▶ Fibre Optics
- ▶ TCP/IP

The J-NET-ADV-COMS-TCP/IP interface is used when connecting JUNO NET Main Panel's (maximum of 64) to GFE's ODYSSEY software, BMS or MODBUS using TCP/IP protocol within a Local Area Network (LAN).

Both 10/100 Mbps speeds are supported by this device and the communication rate is automatically set depending on the type of network to which the device is connected. JUNO NET panels linked to ODYSSEY, BMS or MODBUS, will also need to be equipped with a QUAD-UART chip (GFE ref. J-NET-QUART).

This interface is easily configured using LAN communications with provided software, Internet browser or Telnet. Alternatively the interface can also be configured using terminal emulation software via the serial port provided in the form of a D-Type 9 pin miniature connector. Two Red LEDs on the interface board will assist the user when monitoring the system communication status.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	28 V DC nominal
SUPPLY CURRENT	45 mA
NETWORK	10 / 100 Mbit Ethernet - Auto-Sensing
CONFIGURATION	Network (Internet Browser, Telnet, Device Installer) Serial Port / Terminal Emulator
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	74.3 (L) x 51.1 (W) x 24 (H) mm
WEIGHT	40 g
ORDER CODE	
J-NET-ADV-COMS-TCP/P	JUNO NET - ODYSSEY TCP/IP INTERFACE



# GFE-NET-PRINTER

## External Line Thermal Printer

The GFE-NET-PRINTER is an external thermal line printer which is used to obtain a hardcopy of all recorded events from a JUNIOR or JUNO NET panel. The GFE-NET-PRINTER can be connected either via the JUNO NET panel's printer output or alternatively via the data loop using RS232, RS485, Fiber Optics or TCP/IP J-NET-INT interfaces. Junior panels can only be connected via the data loop.

All recorded events are referenced by date and hour and saved in the panel's NVRAM (non-volatile memory).

**Note:** When connecting GFE-NET-PRINTER to the JUNO NET panel via the panel's printer output, the J-NET QUART chip is required to be inserted in the appropriate IC socket located on the panel's main PCB board. For more details please refer to the panel's installation manual. This type of connection is not available for the JUNIOR panel.

### Key Features

- ▶ Easy installation and maintenance
- ▶ Sleek low-profile housing
- ▶ SMD circuit board design. High quality and reliability guaranteed
- ▶ Remote installation anywhere across the building

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	20 to 30 V DC
SUPPLY VOLTAGE with PSU 0.5 fitted	230 +10% - 15% V AC / 50 Hz
SUPPLY CURRENT	Standby: 43mA max. / Printing: 500 mA max.
INTERFACE RS232	J-NET-ADV-COMMS-485 (1200, 8, N, 1)
DATA LOOP INTERFACES	J-NET-INT-485 or J-NET-INT-FO or J-NET-INT-TCP/IP (38400, 8, E, 1)
CONNECTIONS	5 way molex (flat cable provided)
PAPER	57.5+/-0.5 mm (with) Max. diameter 36 mm (aprox. 12 metres)
MAX. CABLE SIZE	2.5 mm <sup>2</sup>
MAX. R. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	256 (L) x 194 (W) x75 (H) mm
WEIGHT	633g - 1.0 Kg inc. PSU 0.5
ORDER CODE	
GFE-NET-PRINTER	NETWORK PRINTER WITH PLASTIC ENCLOSURE
PSU 0.5	0.5 AMP POWER SUPPLY - BOARD ONLY



## J-NET-IP

### Juno Net Internal Printer

This 40 column internally mounted thermal printer provides a hardcopy of the JUNO NET panel log containing all relevant events occurring in the system.

All events are date and time stamped and are backed by a 2000 events deep rolling log kept in the panel's non-volatile memory.

**Note:** in order for the printer to work properly it is necessary that the J-NET-QUART chip be installed on the JUNO NET Panel Main Board. Please refer to the panel's installation manual for full details.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	5 V DC nominal - Does not require external supply
CURRENT CONSUMPTION	50 mA - standby / 250 mA - printing @ 25°C
INTERFACE	TTL logic levels @ 1200 baud, 8 data bits, 1 stop bit, no parity Hardware handshake - Printer Busy Signal
CONNECTOR TYPE	5-way straight polarised Molex type connector Flat cable assembly provided with mechanism
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	145 (W) x 45 (D) x 65 (H) mm
WEIGHT	121 g Printer Assembly - 208 g inc. paper roll
ORDER CODE	
J-NET-IP	JUNO NET - INTERNAL THERMAL PRINTER - 40 COLUMN

## J-NET-QUART

### Juno Net QUART



The J-NET-QUART chip should be installed on the JUNO NET Panel Main Board when panel is fitted with an internal and/or external printer and when panel is connected to GFE's graphical software package ODYSSEY, 3rd party BMS systems or MODBUS via one of GFE's J-NET-ADV-COMS interface boards.

ORDER CODE	
J-NET-QUART	JUNO NET QUART IC (QUAD-UART)





# DOOR HOLDERS





# GFE-DHA-ISOLATOR

## Addressable Magnetic Door Holder

The unit is a loop powered addressable magnetic door release. It does not require external supply as it is directly powered from the loop. Activation of the unit is achieved using cause and effect programming as used for I/O units.

If power is removed or communication with the panel is lost, the unit will release automatically after approximately 20 seconds.

A built in loop isolator is provided. When a short condition exists in either side of the loop connections, a Yellow LED will be turned ON. Its operation will be reset after fault condition is removed.

Module is fitted with 3 status leds. The Green LED will flash every time the device is polled by the addressable panel. The Red LED when ON indicates that the door release has been activated. This LED is OFF after panel power up or reset. Finally the Yellow LED will indicate a fault in the module. The activation of the module can be achieved as part of the cause and effect programming of the panel and it operates in the same way as an I/O unit. This unit should normally be assigned to either a specific device or zone. Up to a maximum of 20 of these units can be fitted on a particular loop.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	Loop Powered - 17 V DC to 30 V DC1-125
ADDRESS RANGE	800 uA (650 uA module + 150 uA isolator) / 7 mA
LOOP CURRENT - QUIESCENT / CHARGING	60 mOhms
ISOLATOR - LOOP LINE RESISTANCE	25 s / 20 s
CHARGE UP TIME / FAIL SAFE RELEASE TIME (1)	Push Button - Normally Open
MANUAL RELEASE	2.5 mm <sup>2</sup>
MAX. CABLE SIZE	95% RH Non-Condensing
MAX. HUMIDITY	0°C to 50°C
OPERATING TEMPERATURE	200 N
MAGNET HOLDING FORCE	112.5 (H) x 84.2 (W) x 46.8 (D) mm
DIMENSIONS (MAGNET)	55 (H) x 55 (W) x 50 (D) mm
DIMENSIONS (KEEPER)WEIGHT	139 g (keeper); 580 g (magnet w/ module); 746 g (complete boxed)
ORDER CODE	
GFE-DHA-ISOLATOR	ADDRESSABLE MAGNETIC DOOR HOLDER

1) Fail Safe Release Time is defined as the time taken to release door after removal of loop power or loss of communication with control panel is detected.



## GFE-DHC

### Conventional Magnetic Door Retainer

**Conventional magnetic door retainer GFE-DHC, is the correct choice for increased magnetic force requirements or conventional system integration.**

This module requires one addressable output module and 24V DC supply to be fully integrated into our addressable systems.

Regarding conventional system integration, zone activation is achieved through our GFE-MPX-REL module or conventional panel Fire relay for general activation.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	24 V DC
POWER	1.6 W
MAGNETIC FORCE	400 N
DIMENSIONS (MAGNET)	112.5 (H) x 84.2 (W) x 46.8 (D) mm
DIMENSIONS (KEEPER)	55 (H) x 55 (W) x 50 (D) mm
WEIGHT	139 g (keeper); 580 g (magnet w/ module); 746 g (complete boxed)
ORDER CODE	
GFE-DHC	CONVENTIONAL MAGNETIC DOOR RETAINER



# POWER SUPPLY UNITS



# GFE-BCM-3

## PSU with Battery Charger Module

This unit is a fully EN54-4 compliant PSU incorporating a battery charger that can be used with all of GFE's addressable and conventional panels. It will monitor all fault conditions including: charger fault, charger voltage level, input voltage supply fault and supply removal. It is supplied boxed in an ABS plastic enclosure, including a 28 V DC @ 1.7 or 2.4 Amp PSU.

### Key Features

- ▶ Battery Charger Monitored
- ▶ Fault Relay Output
- ▶ Low Battery Voltage Shutdown
- ▶ Reverse Polarity Protection
- ▶ Battery Charger Current Regulated
- ▶ LED indicators: AC ON, Battery & Charger Fault
- ▶ Boxed Unit inc. PSU and Battery Compartment
- ▶ Fully Compliant with EN54-4

TECHNICAL SPECIFICATIONS	
SUPPLY INPUT	230 V AC (+10% -15%) - Monitored
SUPPLY OUTPUT	1.7 A OR 2.4 A @ 28 V DC nominal
BATTERY CHARGER - CURRENT O/P	1 A max.
BATTERY TYPE	Max. 2 x 12 V 7 AH - Lead Acid VRLA
BATTERY FUSE	3 A
FAULT RELAY	Changeover-30 V DC 1 A Resistive
DIMENSIONS	242 (W) x 404 (H) x 107 (D) mm
WEIGHT	1.7 Kg - 7 Kg inc. 2 x 7 AH Bat.
OPERATING TEMPERATURE	-10°C to 50°C
HUMIDITY / PROTECTION	Max. 95% no condensation / IP21
ORDER CODE	
GFE-BCM-3 (1.7 A)	BATTERY CHARGER MODULE - 28 V DC 1.7 A PSU - BOXED
GFE-BCM-3 (2.4 A)	BATTERY CHARGER MODULE - 28 V DC 2.4 A PSU - BOXED



# GFE-BCM-3-IO

## Battery Charger Module with Loop Interface

This unit is a fully EN54-4 compliant PSU incorporating a battery charger that can be used with all of GFE's addressable fire detection panels. It will monitor all fault conditions including: charger fault, charger voltage level, input voltage supply fault and supply removal. It is supplied boxed in an ABS plastic enclosure, including a 28 VDC @ 1.7 or 2.4 Amp PSU.

### Key Features

- ▶ Battery Charger Monitored by Addressable Panel
- ▶ Fault Relay Output
- ▶ Relay O/P Remotely Controlled by Addressable Panel
- ▶ Low Battery Voltage Shutdown
- ▶ Reverse Polarity Protection
- ▶ Battery Charger Current Regulated
- ▶ LED indicators: AC ON, Battery & Charger Fault
- ▶ Boxed Unit inc. PSU and Battery Compartment
- ▶ Fully Compliant with EN54-4

TECHNICAL SPECIFICATIONS	
SUPPLY INPUT	230 V AC (+10% -15%) - Monitored
SUPPLY OUTPUT	1.7 A OR 2.4 A @ 28 V DC nominal
BATTERY CHARGER - CURRENT O/P	1 A max.
BATTERY TYPE	Max. 2 x 12 V 7 AH - Lead Acid VRLA
BATTERY FUSE	3 A
I/O UNIT - LOOP CURRENT	1.7 mA Quiescent - 2.4 mA Fault
FAULT RELAY	Changeover - 30 V DC 1 A Resistive
I/O CONTROLLED RELAY	Changeover - 240 V AC 10 A Resistive
DIMENSIONS	242 (W) x 404 (H) x 107 (D) mm
WEIGHT	1.7 Kg - 7 Kg inc. 2 x 7 AH Bat.
OPERATING TEMPERATURE	-10°C to 50°
HUMIDITY / PROTECTION	Max. 95% no condensation - IP21
ORDER CODE	
GFE-BCM-3-I/O (1.7 A)	BATTERY CHARGER MODULE - I/O INCLUDED - 28 V DC 1.7 A PSU - BOXED
GFE-BCM-3-I/O (2.4 A)	BATTERY CHARGER MODULE - I/O INCLUDED - 28 V DC 2.4 A PSU - BOXED



## GFE-BCM-5 / GFE-BCM-10 (BOXED)

### Battery Charger Module with Input/Output

This unit is a fully EN54-4 compliant PSU incorporating a battery charger that can be used with all of GFE's addressable fire detection panels. It will monitor all fault conditions including: charger fault, charger voltage level, input voltage supply fault and supply removal. It is supplied boxed in an Aluminium enclosure, including a 28 VDC @ 5.6 A or 11.7 A PSU.

#### Key Features

- ▶ Battery Charger Monitored by Addressable Panel
- ▶ Fault Relay Output
- ▶ Relay O/P Remotely Controlled by Addressable Panel
- ▶ Low Battery Voltage Shutdown
- ▶ Reverse Polarity Protection
- ▶ Battery Charger Current Regulated
- ▶ LED indicators: AC ON, Battery & Charger Fault
- ▶ Boxed Unit inc. PSU and Battery Compartment
- ▶ Fully Compliant with EN54-4

#### TECHNICAL SPECIFICATIONS

SUPPLY INPUT	230 +10% -15% V AC - Monitored
SUPPLY OUTPUT	5.6 A or 11.7 A @ 28 V DC nominal
BATTERY CHARGER - CURRENT O/P	4 A max.
BATTERY TYPE	Max. 2 x 12 V 12 AH - Lead Acid VRLA
BATTERY FUSE	5 A / 10 A
I/O UNIT - LOOP CURRENT	1.4 mA Quiescent - 1.8 mA Fault
FAULT RELAY	Changeover - 30 V DC 1 A Resistive
I/O CONTROLLED RELAY	Changeover - 240 V AC 10 A Resistive
DIMENSIONS	375 (H) x 345 (W) x 139 (D) mm
WEIGHT	3.5 Kg - 11.5 Kg inc 2 x 12 AH Bat. / 4Kg - 12 Kg inc 2 x 12 AH Bat.
OPERATING TEMPERATURE	-10°C to +50°C
HUMIDITY / PROTECTION	Max. 95% no condensation / IP21
<b>ORDER CODE</b>	
<b>GFE-BCM-5-BOXED</b>	BOXED 5 AMP BATTERY CHARGER MODULE WITH I/O
<b>GFE-BCM-10-BOXED</b>	BOXED 10 AMP BATTERY CHARGER MODULE WITH I/O



# GFE-BCM-10

## Battery Charger Module with Loop Interface

This unit is a fully EN54-4 compliant battery charger which also incorporates, a loop interface that can be used with all of GFE's addressable panels. It will monitor all fault conditions including: charger fault, charger voltage level, input voltage supply fault and supply removal. It is supplied as a standalone module. This unit has a 10 A current rating and is supplied complete with heat dissipation.

### Key Features

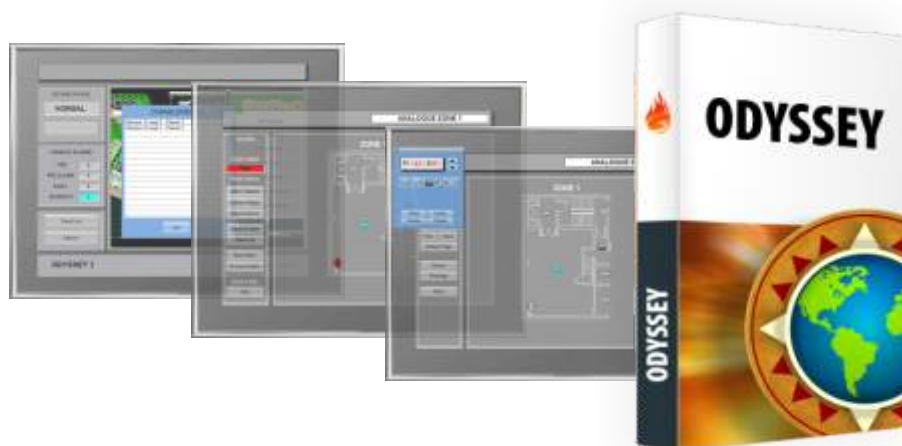
- ▶ Battery Charger Monitored by Addressable Panel
- ▶ Fault Relay Output
- ▶ Relay O/P Remotely Controlled by Panel
- ▶ Low Battery Voltage Shutdown
- ▶ Reverse Polarity Protection
- ▶ Battery Charger Current Regulated
- ▶ LED indicators: AC ON, Battery & Charger Fault
- ▶ Fully Compliant with EN54-4

TECHNICAL SPECIFICATIONS	
SUPPLY INPUT	28.5 V DC - Monitored
SUPPLY OUTPUT	10 A max. @ 28 V DC nominal
BATTERY CHARGER - CURRENT O/P	4 A max.
BATTERY TYPE	N/A
BATTERY FUSE	10A
I/O UNIT - LOOP CURRENT	1.7 mA Quiescent - 2.4 mA Fault
FAULT RELAY	Changeover - 30 V DC 1A Resistive
I/O CONTROLLED RELAY	Changeover - 240 V AC 10 A Resistive
DIMENSIONS	131 (W) x 81 (W) x 41 (H) mm
WEIGHT	225 g
OPERATING TEMPERATURE	-10°C to 50°C
HUMIDITY / PROTECTION	N/A
ORDER CODE	
GFE-BCM-10	BATTERY CHARGER MODULE- INCLUDING CHASSIS



**SOFTWARE**





# ODYSSEY

## A Graphics Interface for the 21<sup>st</sup> Century

The ODYSSEY Graphics Display and Alarm Management System allows the connection of up to 64 JUNO NET or JUNIOR fire alarm panels to a PC. Each panel can be displayed on the screen as if the operator were standing in front of it and can be fully controlled from the computer.

ODYSSEY is simple to set up and to operate. Programming is password protected. Once in programming mode, each panel in the system can be enabled, and drawings can easily be imported from a graphics program such as Autocad®.

Detectors and Call Points etc. are then added graphically via the built-in interface. There are no complicated tables to set up. Device descriptions are received directly from the JUNO NET or JUNIOR control panels.

In the event of an alarm or fault, the location of the incident will be displayed on the computer screen, with three levels of zoom available to the operator. The individual device can be viewed and interrogated, and if necessary disabled.

A printer can be connected to the computer to record all alarm, fault and programming activities on the system. Whether or not a printer is connected, a log is kept of all events. This log can be periodically downloaded and printed if required. Other utilities are provided, such as a list of emergency phone numbers, and an operator notepad.

If a second computer is required at another location, this can be connected as a slave via an Ethernet network to the main computer. For longer distances, Fibre Optic cabling can be used. TCP/IP communications can also be used to allow remote access. ODYSSEY is available in several language versions.

### TECHNICAL SPECIFICATIONS

HARDWARE	PC - CPU Speed 500 MHz minimum
OPERATING SYSTEM	XP, Vista and Windows 7
MEMORY USAGE	10 Mb (approx.) hard disk space, 256 Mb RAM
DOWNLOAD LINK	<a href="http://www.globalfire.pt/en/dw/Software/Odyssey_20">www.globalfire.pt/en/dw/Software/Odyssey_20</a>
<b>ORDER CODE</b>	
ODYSSEY	ODYSSEY SOFTWARE

# ODYSSEY

## Hardware Accessories

### RS422/485



Used at the PC to convert RS485 signal levels to RS232 when connecting JUNO NET panels to ODYSSEY using this interconnection technology. The unit is port powered and hence no external power is required.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	12 V DC nominal - Does not require external supply
CURRENT CONSUMPTION	3 mA + transmission load current
COMMUNICATIONS SETTINGS	Half Duplex - 4 wire 9600 baud - 8 data bits - 1 stop bit - no parity
PROTECTION CATEGORY	IP44
CONNECTOR TYPE	RS232 side DB9 Female - RS485 side DB9 Female
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	78 (L) x 43 (W) x 20 (H) mm
WEIGHT	40 g
ORDER CODE	
RS422/485 CONVERTER	RS232 TO RS422/485 CONVERTER - MODEL 4WSD9R

# ODYSSEY

## Hardware Accessories

### FOSTC



Used at the PC to convert Fiber Optic signal levels to RS232 when connecting JUNO NET panels to ODYSSEY using this interconnection technology. The unit requires an external supply of 12 V DC.

TECHNICAL SPECIFICATIONS	
SUPPLY VOLTAGE	External Supply - 12 V DC
CURRENT CONSUMPTION	140 mA max.
CONNECTOR TYPE (FO)	ST Connectors
FIBRE OPTICS CABLE	Multi-mode 62.5/125 um
COMMUNICATIONS SETTINGS	9600 baud - 8 data bits - 1 stop bit - no parity
PROTECTION CATEGORY	IP44
MAX. HUMIDITY	95% RH Non-Condensing
OPERATING TEMPERATURE	-10°C to 50°C
DIMENSIONS	110 (L) x 59 (W) x 25 (H) mm
WEIGHT	70 g
ORDER CODE	
FOSTC	RS232 TO FIBRE OPTICS CONVERTER

# GFE CONNECTOR

## Configuration Software

[www.globalfire.pt/en/pd/Software/Configuration\\_45/94/GFE-CONNECTOR](http://www.globalfire.pt/en/pd/Software/Configuration_45/94/GFE-CONNECTOR)

The GFE CONNECTOR configuration software enables the programming of our range of addressable panels. This tool has additional functions such as, online mode that lists the loop population of an addressable system, advanced firmware upgrade functions and log file backup.

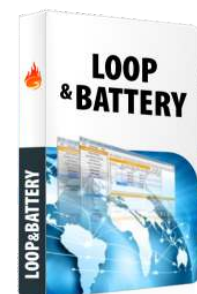


# LOOP & BATTERY

## Configuration Software

[www.globalfire.pt/en/pd/Software/Configuration\\_45/91/LOOP-&-BATTERY](http://www.globalfire.pt/en/pd/Software/Configuration_45/91/LOOP-&-BATTERY)

As stated by its name, this software makes the calculations of battery requirements according to standby and alarm backup time requirements. It also lets you know if the cable length and cross-section is adequate to a specific loop population.



# VOX LOADER

## Configuration Software

[www.globalfire.pt/en/pd/Software/Configuration\\_45/128/VOX-LOADER](http://www.globalfire.pt/en/pd/Software/Configuration_45/128/VOX-LOADER)

The software VOX LOADER allows the voice message configuration and download to the VOX range of signaling devices. The communication with the device is accomplished via a seamless USB connection. It will also detect automatically if the connected device is addressable or conventional.



# GSM LOADER

## Configuration Software

[www.globalfire.pt/en/pd/Software/Configuration\\_45/157/GSM-LOADER](http://www.globalfire.pt/en/pd/Software/Configuration_45/157/GSM-LOADER)

GSM LOADER software enables GFE-GSM-INT module configuration and download via its USB connection. It's also possible to retrieve module's event log data. A clean user interface requires only a few steps to input all necessary parameters. It can be downloaded directly from our website.



## PRODUCTS LIST

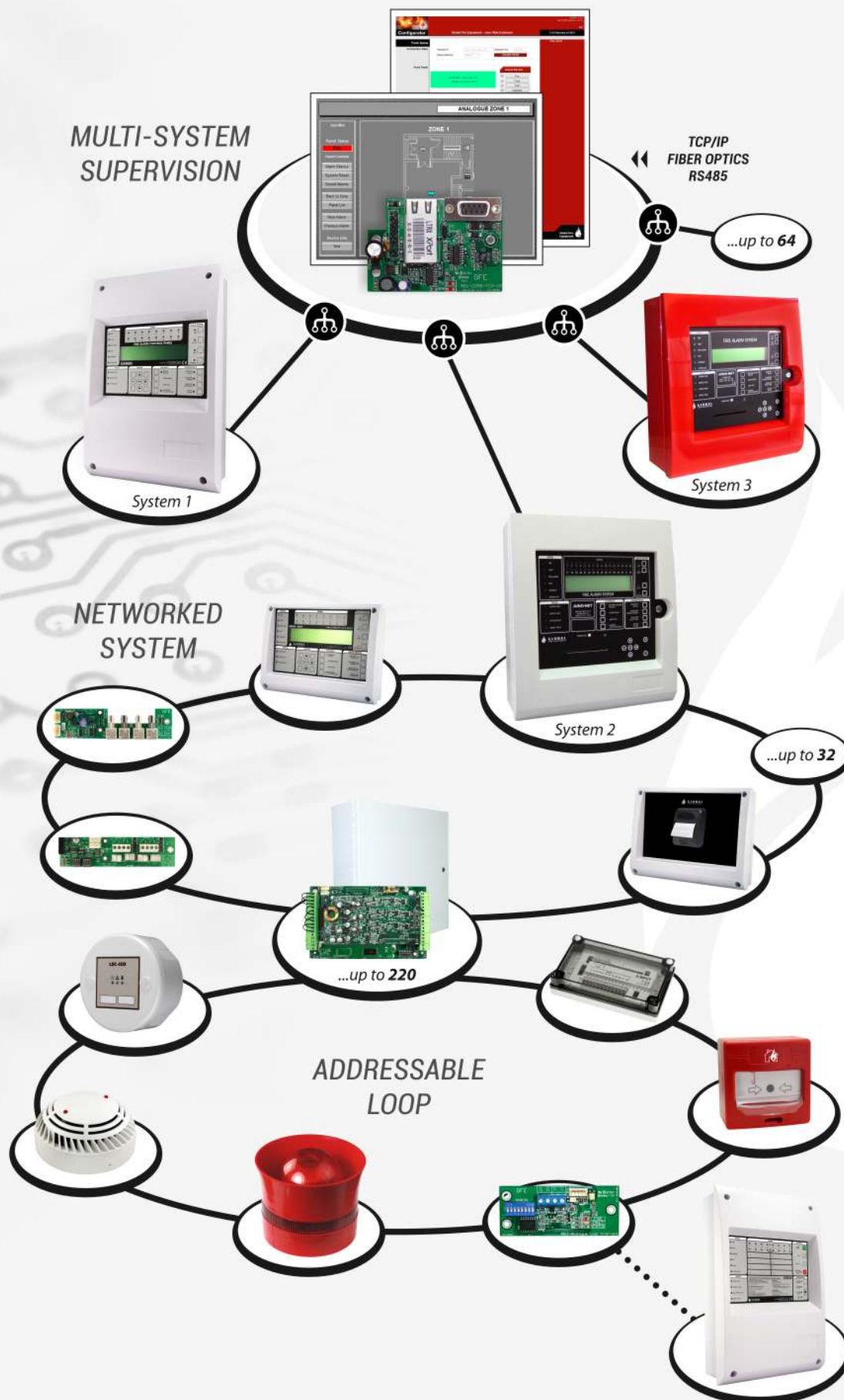
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# SYSTEM OVERVIEW







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