eurotech
fire systems limited

Pulsor Product Catalogue

PULSOR

The Pulsor 4, is the new 4 loop analogue addressable fire alarm control panel from Eurotech Fire Systems. It is available in 1, 2, 3 or 4 loop versions.

The Pulsor 4 includes more advanced cause & effect programming, and also includes a larger LCD display (increased to 4 x 40 characters).

Custom PC software will allow programming data to be transferred to the control panel.

Features

- ✓ 1-4 loop, expandable by loop cards
- ✓ 20 zone LEDs
- ✓ 250 programmable zones
- ✓ Multi-language support (currently English & Spanish, 3 more languages TBC)
- ✓ Real Time Clock
- ✓ 3072 entry event log
- ✓ 20 character device text
- ✓ 20 character zone text
- ✓ Zone or Device Disablement
- ✓ 2 x conventional sounder circuits
- ✓ Aux 24V supply
- ✓ 1 x fire relay
- ✓ 1 x fault relay
- ✓ Outputs programmable by zones
- ✓ Can be configured via PC or via Panel.

Compatible Devices

The Pulsor 4 is compatible with all current Pulsor analouge addressable field devices, which includes:-

- ✓ Pulsor Analouge Addressable Optical Smoke Detector
- ✓ Pulsor Analouge Addressable Opto-Heat Detector
- ✓ Pulsor Analouge Addressable Rate of Rise Detector
- ✓ Addressable sounders / flashers Addressable beam detector
- ✓ Input / input-output interfaces
- ✓ Sounder control interface
- ✓ Zone monitor interface
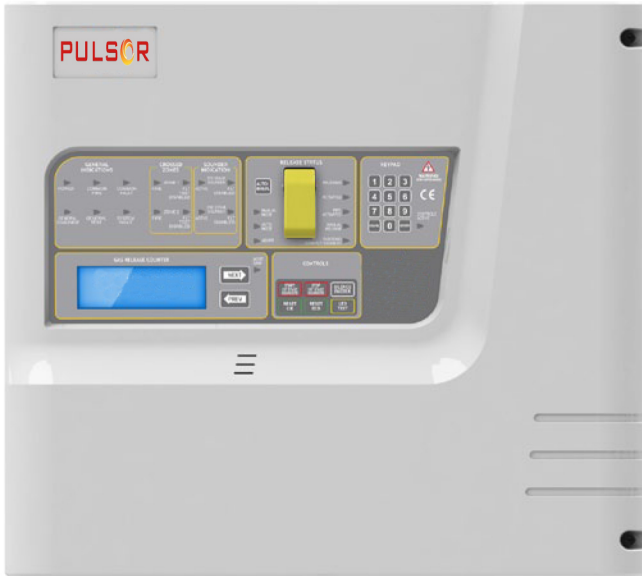- ✓ Remote LEDs
- ✓ Sounder bases

Features

✔ 4 0 character 4 line LCD display
✔ Up to 64 on a network (or a combination of panels and repeaters up to a max of 64)
✔ Onboard power supply/charger

Controls

✔ Buzzer Mute
✔ Start Sounders
✔ Stop Sounders
✔ Reset
✔ Menu Keys

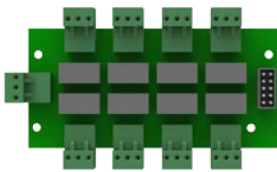| Model	EUR-REP-PLR
System Voltage	21 - 30 Vdc
Current	90 mA
Connection	RS485
Dimentions	375 x 335 x 125 mm

The PLR8 is the latest modern designed extinguishing panel from Eurotech fire Systems, fully complying with EN54 parts 2 & 4, and EN 12094 part 1.

Featuring a blue 4 x 20 LCD display with a list of extra features such as memory log of fire, fault and system events, adjustable flood times and countdown ofextinguishing sequence.

The panel is assembled in a very modernised enclosure and construction for ease of termination.

PLR-OER (37-097)

The PLR-OER output expansion relay board can be mounted inside the PLR8 to provide voltage-free changeover relay contacts for reset, mode, discharged, abort and additional 1st stage, 2nd stage output and extract fan output. One unit can be used.
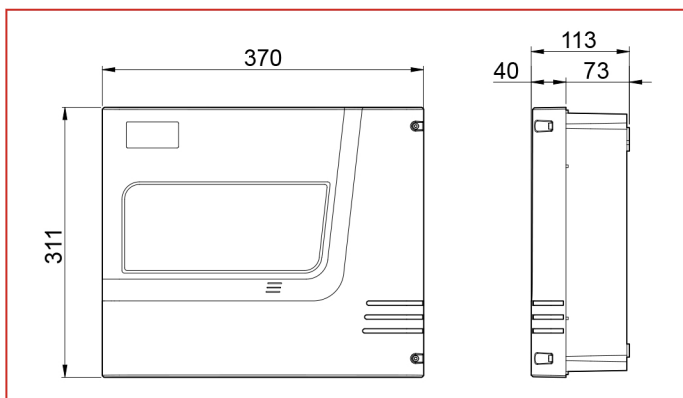
EX-RSI (37-098)

PLR-RSI is a remote status indicator connected to the PLR8 panel via RS485 output providing the following: auto/manual mode selection, manual release, first/ second stage alarm, gas discharged and abort.

Indications	
Power	✓
Fault	✓
1st Stage Alarm	✓
2nd Stage Alarm	✓
Gas Fired	✓
Bottle Monitoring	✓
Manual Release	✓
Abort	✓
Auto Mode	✓
Manual Mode	✓
Control	
Double Action Manual Release	✓

Technical Information

Model	PLR8
Part Number	37-096
Supply Voltage	230 AC +/- 10%
System Voltage	24 VDC (Nominal)
Detection Zones	
Zone Voltage	
Zone Capacity	32 Devices
No. of Detection Zones	2 - EOL (4.7k)
Line Monitoring for Open & Short Circuit	Yes
Max Cable Length per Zone	250m
Zone Quiescent Current	2mA max - EOL
Sounder Outputs	
No. of Sounder Circuits	3 (S1A, S1B for 1st Stage, S2 for 2nd Stage)
Sounder Output Rating	21-28 VDC, fused at 150mA per circuit
Max Cable Length	60m
Auxilliary Outputs	
No. of Auxilliary Outputs	5 (fault, 1st stage fire, 2nd stage fire, extract fan, gas fired output)
Relay Rating	(30V - 1 Amp)
Extinguishant Release Outputs	
Bottle Output	1.0 Amp - EOL 18K
5 Monitored Inputs	Manual release, low pressure, gas fired, auto input & abort
E.O.L Value	18K
General	
Battery Space	Up to 2 x 7.0 AH, 12V DC SLA batteries
IP Rating	IP32
Operating Temperature	-10 to 50°C
Box Dimensions (mm)	(W) 370 x (H) 311 x (D) 113

Indications	
4 x 20 LCD	✔
Power	✔
Common Fire	✔
Common Fault	✔
General Disablement	✔
General Test	✔
System Fault	✔
Zonal Fire	✔
Zonal Fault/Test/Disabled	✔
Alarm Active	✔
Alarm Fault/Test/Disabled	✔
Manual Mode	✔
Auto Mode	✔
Abort	✔
Released	✔
Activated	✔
Pre-activated	✔
Manual Release	✔
Flooding Zone Fault	✔
Controls Active	✔
More Data	✔
Control	
Double Action Manual Release	✔
Auto/Manual	✔
Next	✔
Prev	✔
Start 1st Stage Sounders	✔
Stop 1st Stage Sounders	✔
Silence Buzzer	✔
Reset	✔
Reset CIE	✔
LED Test	✔

370
113
40 73
311

The FEAOE-PLR is an analogue addressable Optical smoke detector that works to the Pulsor Addressable protocol, compatible with Pulsor alarm system control panels only.

The optical chamber consists of a removable plastic mesh, an IR LED & an IR receiver. These are arranged such that in normal conditions (clean air), no IR from the LED will reach the IR receiver.

Every second, the IR LED emits a burst of collimated infra red light. If there is any smoke in the chamber, it will scatter the IR, allowing it to reach the receiver. The amount of IR reaching the receiver is converted to an analogue smoke value, and sent digitally back to the fire alarm control panel as part of the detectors communication protocol.

The detector is supplied with a locking screw to prevent removal of the head by unauthorised personnel. The detector will return an analogue value of 55 counts with a smoke obscuration level of 2.4% obscuration per metre.

The Pulsor optical smoke detector is particularly suitable for detecting optically dense smoke, involving materials such as soft furnishings, PVC, plastic, foam, and similar materials which produce large visible small particles 0.5mm to 10 mm).

Model	FEAOE-PLR
CAPCITY PER LOOP	126
OPERATING VOLTAGE	17-28VDC
STANDBY CURRENT	340uA @ 24V
OPERATING TEMPERATURE	-20 to 60°C
MIN> CONTINUOUS TEMP.	0°C
RETURNS VALUE OF 55 AT	2.4% obscuration per metre
DETECTOR CLASS	Optical smoke
MAX. HUMIDITY	95%RH non condensing
MAX. WIND POWER	Not affected
ATMOSPHERIC PRESSURE	Not affected
IP RATING	43
COVERAGE	100m^2
STORAGE TEMPERATURE	-30°C to 80°C
ALARM CURRENT	2mA
SIZE: DIAMETER X HEIGHT (BASE)	100mm x 39mm (100 x 47)
WEIGHT (BASE)	100g (157g)

The FEAHE-PLR is an analogue addressable Heat detector that works to the Pulsor Addressable protocol.

The FEAHHE-PLR is an analogue addressable high temperature heat detector.

The measuring circuit is based on a single precision thermistor, whose characteristics change according to temperature in a defined manner.

This change in characteristics is converted to an analogue value, and sent digitally back to the fire alarm control panel.

On the FEAHE-PLR, the analogue reading is the temperature in Centigrade (°C), so an analogue value of 55 will be returned at 55°C.
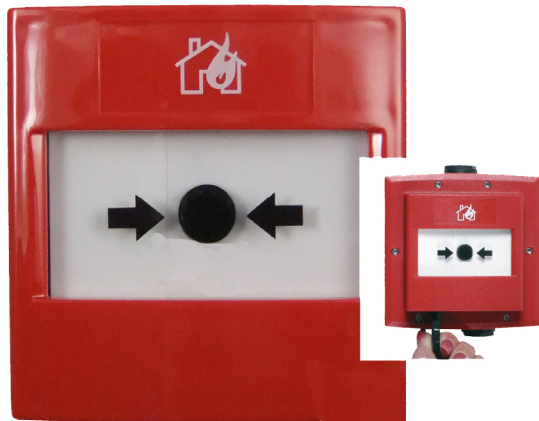
On the FEAHHE-PLR, the analogue reading changes by one count when the temperature rises by 2.17 °C, so the detector will return a value of 55 at 90 °C.

Visual Apperance is identical
until the detector head is removed.

The detectors can be supplied with a locking screw to prevent removal of the head by unauthorised personnel.

The Pulsor Heat Detector is particularly suitable for rooms where smoke detectors cannot be used due to a high level of smoke or steam, such as kitchens.

The Pulsor High Temperature Heat Detector is particularly suitable for environments with high ambient temperatures, such as boiler rooms & laundry drying rooms.

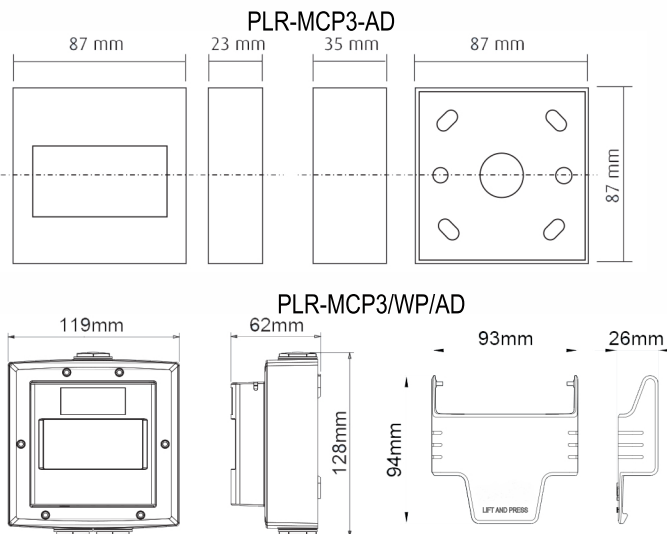| Model	FEAHE-PLR	FEAHHE-PLR
OPERATING VOLTAGE	17-28VDC	
STANDBY CURRENT	300uA @ 24V	
OPERATING TEMPERATURE	-20 to +50°C	-20 to + 80°C
MIN. CONTINUOUS TEMP.	0°C	
RETURNS VALUE OF 55 AT	55 °C	90 °C
DETECTOR CLASS	AS	CS
MAX. HUMIDITY	95%RH non condensing	
MAX. WIND SPEED	Not affected	
ATMOSPHERIC PRESSURE	Not affected	
IP RATING	43	
COVERAGE	50m²	
STORAGE TEMPERATURE	-30°C to 80°C	
ALARM CURRENT	2mA	
SIZE: DIAMETER X HEIGHT (BASE)	100mm x 39mm (100 x 47)	
WEIGHT (BASE)	100g (157g)	

The PLR-MCP3-AD and PLR-MCP3/WP/AD addressable call points are unique in that they mimic the feel of breaking glass whilst offering the user the benefits and environmental advantages of a re-settable operating element.

Addressing these call points is via an 8 way dip switch on the back of the call point.

A special Polycarbonate cover (   ) is available for extra protection against accidental activation and thus allowing the unit to operate as a double action call point. This must be ordered seperately.

PLR-MCP3-AD

87 mm 23 mm 35 mm 87 mm

87 mm

PLR-MCP3/WP/AD

119mm 62mm 93mm 26mm

128mm 94mm

LIFT AND PRESS

Features

✔ EN54-11 approved
✔ Waterproof tested to IP67 (ZT-CP3/WP/AD only)
✔ Glass appearance maintains operator deterrence
✔ Positive activation that mimics the feel of breaking glass
✔ Visible warning flag confirms activation
✔ Simple key to reset operating element (no broken glass)
✔ Complete functional test with every activation
✔ Available in two colours

Model	PLR-MCP3-AD	PLR-MCP3/WP/AD
Input Voltage	17-33V DC	
Element Type	Resettable	
Quiescent Current	450µA Maximum	
Alarm Current	2.3mA Maximum	
Operating Temperature	-20 degrees C to +60 degrees C	
Max Humidity	95%RH Non-Condensing	
IP Rating	IP32	IP67
Size (W x H x Dmm)	87 x 87 x 23	119 x 119 x 62

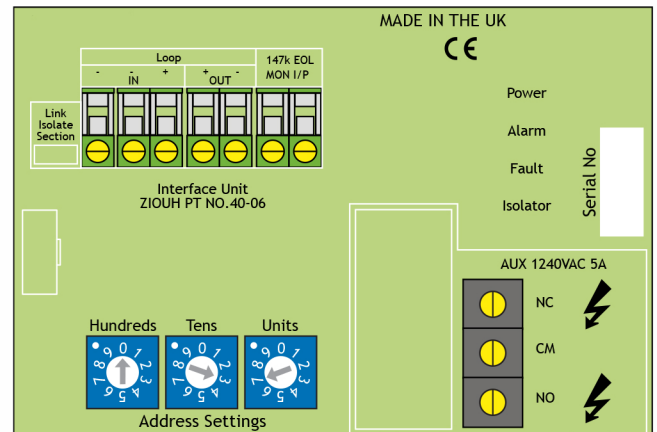| Order Code	Description
	Perspex Cover for CP3 Series Manual Call Point
	Flush Mount Bezel For Indoor CP3 Series Manual Call Points

The Pulsor addressable input output units (ZIOU-PLR & ZIOU/230-PLR) are used to interface external equipment to any Pulsor addressable fire alarm system.

It has a switch monitoring input with a 47K end of line resistor and a volt free SELV relay output. There are two versions available, one for switching low voltage (ZIOU-PLR) and the other for switching mains (ZIOU/230-PLR).

As with all addressable interfaces, the outputs are controlled by the panel to which they are connected. Consequently the interfaces will behave differently on different panels, i.e. some may allow the outputs to be programmed whilst others will have a default "preprogrammed" operation.

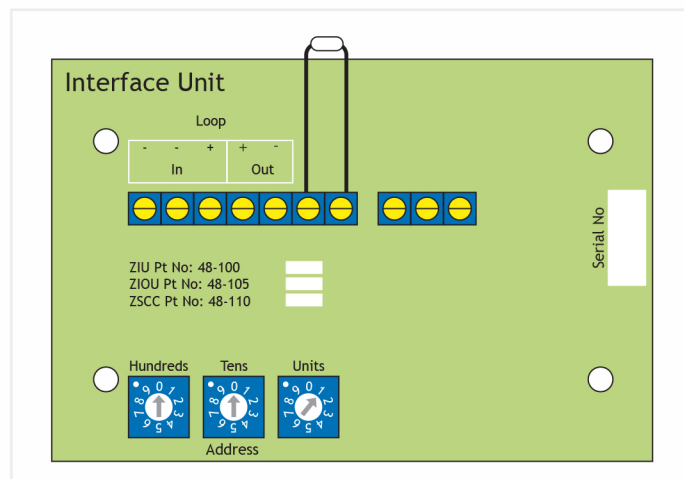| Model	ZIOU-PLR	ZIOU/230-PLR
Operating Voltage	17 – 33V DC	
Quiescent Current	900uA	
Alarm Current	10.6mA	
Fault Current	2.8mA	
Isolating Current	7.3mA	
Input End Of Line	47K	
Device Normal Resistance (Return Value 16)	10K to 75K	
Device Open CCT Fault Resistance (Return Value 4)	85K to open circuit	
Device Alarm Resistance (Return Value 64)	0K to 5K	
Relay Rating	1 Amp SELV Only	5 Amp 230V AC Resistive
Operating Temperature	0°C to 50°C	
Maximum Humidity	95% RH Non Condensing	
IP Rating	IP43	
Size, Width x Height x Depth	127 x 88 x 59mm	
Weight	220g	

The unit has a built in loop short circuit isolator to help keep the unit operational in the event of a problem on the addressable loop wiring.

It has 3 indication LEDs on the front of the unit. One for alarm, one for local fault and one for addressable loop fault (isolator active).

The Pulsor addressable input unit (ZIU-PLR) is used to interface external equipment which has a volt free normally open relay output to any Pulsor addressable fire alarm system. The input is monitored with a 47K end of line resistor.
The unit has a built in loop short circuit isolator to help keep the unit operational in the event of a problem on the addressable loop wiring.
The unit has internal LED indications for loop isolator active, fault on input and alarm (panel controlled).
During the system set-up, the led can be removed from this box to allow these LEDs to be viewed.

Model	ZIU-PLR
Operating Voltage	17 – 33V DC
Quiescent Current	900uA
Alarm Current	2.9mA
Fault Current	2.8mA
Isolating Current	7.3mA
Input End Of Line	47K Resistor
Device Normal Resistance (Return Value 16)	10K to 75K
Device Open CCT Fault Resistance (Return Value 4)	85K to open circuit
Device Alarm Resistance (Return Value 64)	0K to 5K
Operating Temperature	0ºC to 50ºC
Maximum Humidity	95% RH Non Condensing
IP Rating	IP 43
Size, Width x Height x Depth	127 x 88 x 57mm
Weight	220g

Interface Unit

Loop

- - +   + -
In   Out

ZIU Pt No: 48-100
ZIOU Pt No: 48-105
ZSCC Pt No: 48-110

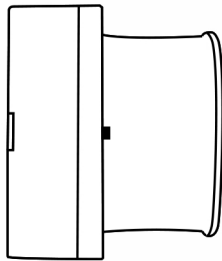Serial No
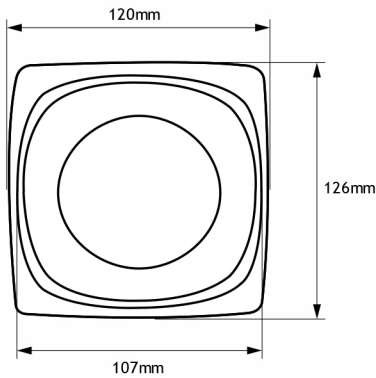
Hundreds   Tens   Units

Address

The Pulsor Maxitone addressable sounder is a large horn sounder suitable for many applications. It can be used on any panel using the Pulsor Addressable Protocol.

It is available as a sounder only in red or white, or as a combined sounder flasher in transparent red. It is suitable for indoor & outdoor use.

It has a large back-box with knockout cable entries, which has plenty of room for fitting the cables.

It has an internal 8 way dip switch for setting the device address, and a sound output of 94 dBA @ 1m.

Both units have a built in short circuit isolator to provide system integrity in the event of cable damage.

120mm
126mm
107mm

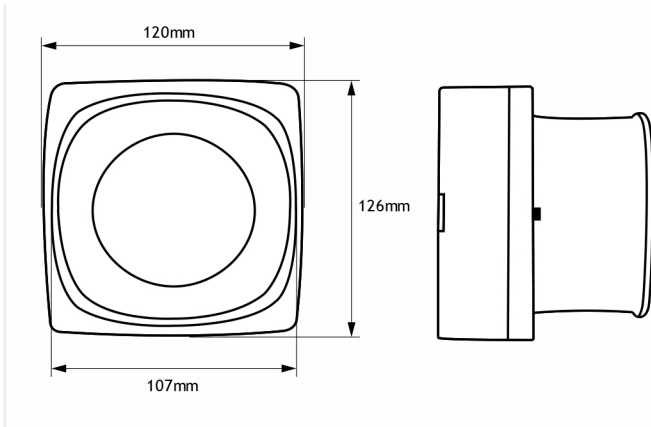| Model	PLR-ZAMT/R	PLR-ZAMT/W
Colour	Red	White
Supply Voltage	17-33V	
Standby Current	0.6mA	0.6mA
Active Current	12mA	12mA
Sound Output	94dB	94dB
Number of Tones	2 (Controlled by FACP)	
Flasher	N/A	N/A
Operating Temp.	0°C to 50°C	
Max. Humidity	95% RH N/C	
IP Rating	IP 65	
Size	124 x 129 x 100 mm	
Weight	200g	

PULSOR

The Pulsor Maxitone addressable sounder is a large horn sounder suitable for many applications. It can be used on any panel using the Pulsor Addressable Protocol.

It is available as a sounder only in red or white, or as a combined sounder flasher in transparent red. It is suitable for indoor & outdoor use.

It has a large back-box with knockout cable entries, which has plenty of room for fitting the cables.

It has an internal 8 way dip switch for setting the device address, and a sound output of 94 dBA @ 1m.

Both units have a built in short circuit isolator to provide system integrity in the event of cable damage.

120mm
126mm
107mm

Model	PLR-ZAMTF/R
Part No.	42-
Colour	Red
Supply Voltage	17-33V
Standby Current	0.6mA
Active Current	15mA
Sound Output	94dB
Number of Tones	2 (Controlled by FACP)
Flasher	Red LED - 2Hz
Operating Temp.	0°C to 50°C
Max. Humidity	95% RH N/C
IP Rating	IP 65
Size	124 x 129 x 100 mm
Weight	200g

The Securetone addressable sounder has a low profile design which makes it ideal for locations where sounders are required to be unobtrusive. It is designed to work with the complete range of Pulsor addressable control panels.

The sounder is supplied configured to it's maximum volume. However there is a potentiometer which may be used to adjust the sound level if required.

An 8 way DIL switch is used to set the address, where switch 8 is the shadow operative switch. When in the position ON, the sounder will behave normally. When in the OFF position, the sounder will listen to commands without answering to the panel. This allows multiple sounders to be configured at the same address to allow for synchronised sounder operation.

Features

✓ Complies fully to EN-54 part 3
✓ 85 dB @ 1 metre
✓ Low current consumption
✓ Loop isolation option
✓ Compatible with all Zeta addressable panels
✓ DIP switch address setting
✓ Option to function as shadow sounder

Model	PLR-ZAST/R	PLR-ZAST/W
Sound Output	85 dB @ 1 metre	
Alarm Tone	Intermittent Tone - 800-970Hz (0.5s each) Pulsed Tone - 970Hz (0.5s on, 0.5s off)	
Maximum Sounders Per Loop	64	
Short Circuit Isolator	No	
Operating Voltage	17-30V DC	
Quiescent Current	0.9 mA	
Alarm Current	5.5 mA	
Maximum Cable Size	2.5mm^2	
Operating Temperature	0°C to 40°C	
Maximum Humidity	95% RH Non Condensing	
IP Protection Rating	IP43	
Material	Red ABS Plastic	White ABS Plastic
Size, Diameter x Height	100mm x 37.5mm	
Weight	120g	