

## **MARINE FIRE DETECTION** Product Brochure

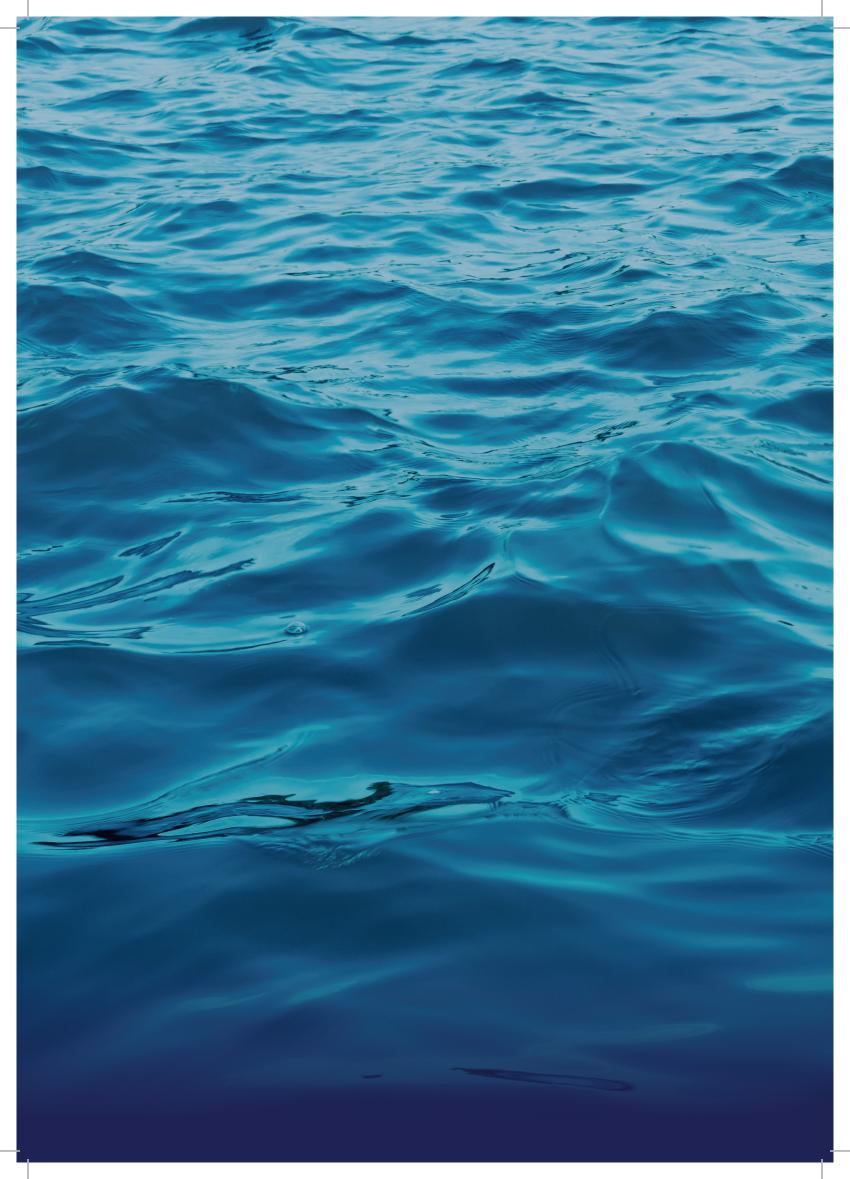












## LGM Partner Big Blue Ocean Clean Up To Clean Our Seas

In 2020 LGM made a choice; to review all aspects of our business and reduce our carbon footprint.

But why stop there? Like so many, we have become increasingly concerned about the levels of pollution and waste within our precious oceans and seas. So we decided to take some positive action.

Big Blue Ocean Clean Up is a non-profit organisation committed to ending ocean pollution. To date, they have removed 2 million kg of rubbish from our oceans.

Further to their extensive cleaning projects they are also investing in providing free educational resources, researching ocean pollution for policy change and supporting the development of innovative technologies to help reduce ocean pollution.

LGM is delighted therefore to announce our corporate partnership with Big Blue Ocean Clean Up. LGM's support will enable Big Blue Ocean Clean Up to continue its devoted work and help remove even more rubbish from our seas.

To understand more about Big Blue Ocean Clean Up visit www.bigblueoceancleanup.org/







#### Marine and offshore

## About us

Formed in 1988, we are proud to be an independent service orientated company. *LGM Products* has an enduring commitment to customer service excellence and product quality combined with high standards of **safety** and business **ethics**.

## **Marine Range**

LGM Products has been providing marine fire detection and audio visual signalling equipment globally for over **35 years**. Our extensive range provides fire detection systems solutions, fire extinguishing systems and marine approved alarm signaling devices. Our products carry marine approvals that include MED, LR, ABS, DNV, KR, UK-MER, CCS and BV, ensuring the safety of your **marine investment**.

### What we do

From our base in the UK, we are committed to supplying the marine industry and supplying the industry **FAST**! We keep addressable, conventional and extinguishing fire control panels in stock alongside the associated detectors and alarm signaling devices. Allowing our clients to turn around jobs quicker and keeping the vessels operational; **saving crucial downtime**. With our extensive range of fully approved marine fire detection systems delivered from stock; why don't you make *LGM* your preferred marine fire detection supplier?



Audio visual signalling



Fire detection



area

#### Marine and offshore Addressable Fire Panels



### **FireFinder Marine** Multi-Loop Addressable Fire Control Panel

FireFinder Marine is an Intelligent Analogue Addressable Fire Alarm Control Panel that is available in 1 to 4 loop panel options.

The FireFinder Marine is suitable for small to medium sized vessels

and is compatible with Apollo Discovery Marine Detectors.

Powerful and flexible programming is achieved via AMPAC's configuration tool, ConfigManager Plus, which includes many pre-engineered programming functions. Simple system programming is easily achieved via the front panel.

FireFinder Plus is configurable as a peer-to-peer network up to 99 panels/nodes with a maximum of 250 Loops.





#### Marine and offshore Addressable Fire Panels

FireFinder Marine

### FireFinder Marine Network Repeater

Connected to the FireFinder Marine high integrity network, the Repeater is designed to remotely display the fire alarm control system status allowing the interrogation of all system alarms, faults and disablements.

Abilities include: "Evacuate", "Reset", "Disable / Enable of Zones and/or Devices", "Override programmed Delays" and "Silence and re-sound of alarms" during an emergency condition.



- LCD display with event log
- Optional flush mount enclosure
- Multiple repeaters on single system possible

### **FireFinder Marine** Marine Network Interface Board

The Network Interface Board allows up to 99 FireFinder Marine panels to be networked together.

The network is capable of withstanding an open or short circuit fault without the loss of communications to any panels. The network operates as a peer-to-peer network, with all device state changes shared over the network.



- Enables multiple panels and repeaters to be networked
- Fault tolerant network connection
- Easy installation with 2-wire connections



#### Marine and offshore Addressable Fire Panels

FireFinder Marine

### **FireFinder Marine** 8-Zone Conventional Board

The 8 Zone Conventional Board has been designed to interface with AMPAC's range of fire alarm control panels. The board supports 8 conventional zones and connects to the fire panel via the internal dedicated RS485 communications port.



- Each zone accommodates up to 40 Apollo Marine Orbis conventional detectors
- Can be programmed to function in one of the following modes:
  - Normal (latching)
  - Non-latching/Self Reset

### **FireFinder Marine** Universal High Level Interface Board

The High Level Interface (HLI) Expander Board provides the ability for the FireFinder Marine fire panel to interface to a range of systems using common

Individual events such as fire or pre-alarms, can be configured to be passed to the various external systems for reporting and indication.

communication protocols.



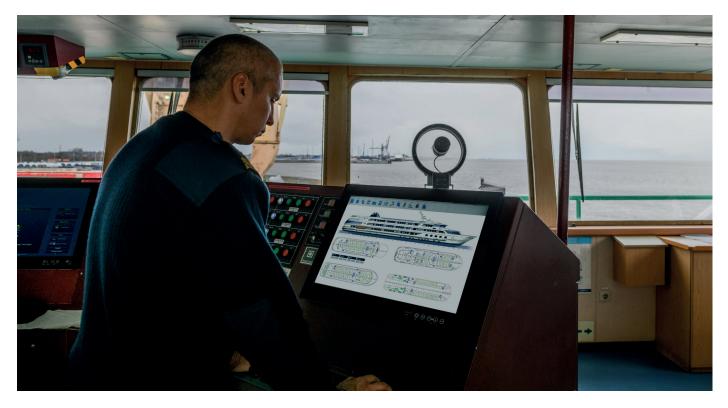
- Voyage Data Recorder (VDR) interfacing - converts system status, alarms and events to NMEA 0183 Standard compliant strings
- SmartView Graphical Event management system interface
- Modbus output



FireFinder Marine

## **FireFinder Marine**

SmartView Graphical Repeater package



Smartview is an innovative new graphics package that allows you to access, control and maintain your intelligent addressable fire detection system from a single touch screen monitor. The Smartview package will display detector locations across the ships layout and give you the ability to fully operate your fire alarm system from a user friendly interface. It also enables remote access and multiple user accessibility giving you complete control across your vessel. Designed to work with single or networked Firefinder Marine panels, the Smartview package enables you to remove the need to access the physical panel and allows a clean and more aesthetically pleasing finish on a ships bridge.

- Simple graphical navigation enables the rapid location of events
- Easy to operate user interface
- Historical event logs all activity
- Zone and device text are displayed from the panel
- Event response action text
- Assignable user log-in permissions
- Extensible architecture





#### Discovery Marine Optical Smoke Detector

- IP44
- Unaffected by wind or atmospheric pressure
- Suitable for bedrooms, escape routes
- Approved by Lloyd's Register, DNV, ABS, MCA, BV, MED

#### Discovery Marine Multisensor Detector

• IP44

- Approved by Lloyd's Register, DNV, ABS, MCA, BV, MED
- Optical smoke and thermistor temperature sensors
- High immunity to false alarms

#### Discovery Marine Heat Detector

- IP54
- Rate-of-rise/static
- Ideal in dirty/smoky environments
- Approved by Lloyd's Register, DNV,
- ABS, MCA, BV, MED

#### Discovery Marine Addressable Mounting Base

- XPERT Addressing
- One way fit
- Locking feature

- Stainless steel contacts
- Approved by DNV, ABS and MED











#### XP95 IS Optical Smoke Detector

- IP23D
- 'Light scatter' optical detection
- Intrinsically safe (suitable for zone 0)
- XP95 IS Heat Detector
- IP23D
- Rate of rise/static
- Intrinsically safe (suitable for zone 0)
- Approved by Lloyd's Register, DNV, ABS, MCA, BV, MED

• Approved by Lloyd's Register, DNV,

ABS, MCA, BV, MED

#### XP95 IS Addressable Mounting Base

- XPERT Addressing
- One way fit
- Locking feature Stainless
  steel contacts
- Approved by DNV, ABS and MED









### **Apollo** Discovery Marine Addressable Call Point

The Discovery Marine Manual Call Point has been approved for use in indoor marine applications such as cruise liners. When operated, the manual call point interrupts the polling cycle for a fast response.



- MED approval
- IP24D
- 17-28Vdc
- -20°c to +60°c
- Two-wire supply
- Polycarbonate/ABS
- Flush or surface mounted

### **Apollo** Discovery Marine Waterproof Manual Call Point

The Discovery Marine Waterproof Manual Call Point has been designed for use outdoors and in places where moisture can occur. It is compliant with EN54-11 and can be used with the Discovery Marine range.





#### Marine and offshore Extinguishing Control Panel



### Nano Marine Extinguishing Control Panel

The NANO Extinguishing Panel has been developed and intended for the activation of modular extinguishing systems.

The NANO is small and compact and can therefore secure locations where a standard fire/extinguishing panel is not applicable or unsuitable.

The operation is simple, straightforward, and designed in accordance with EN54-2 for fire alarm and alarm systems, EN12094-1 for fixed fire suppression systems. Due to its construction, the NANO is resistant to vibrations and shocks and is therefore very suitable for the protection of engine compartments of ships and machine areas.

The NANO is equipped with a double fire extinguisher activation technique, intended for the activation of electrically activated fire extinguishers or the activation of a so-called solenoid.

By achieving the DNV certification the NANO panel is a first of its kind in being approved for marine use.



- DNV-CG 0339-2021 type approval
- Double 24vdc power supply connection
- Compact size
- Event log
- Double action activation



#### Marine and offshore Extinguishing Control Panel



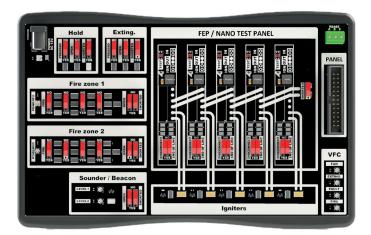
### Nano ETB Extinguishing Release Board

The ETB is specially developed for the Nano Extinguishing release panel and aerosol extinguishers. This terminal connection board is equipped with built-in security electronics, which ensures that all igniters of the extinguishing units are actually activated. Together with an end line switch, this option turns the Nano extinguishing release panel system into a complete and reliable fire detection and extinguishing system. The ETB generator terminal board unit is available in a built-in 35 mm DIN rail version.



### Nano FTM Functional Test Module

The FTM test module is specifically developed for testing the Nano system. The nano FTM is easy to operate and is designed to test the system and the programming in a simple manner. By periodically maintaining, checking and testing the Nano system, the possibility of hidden errors, defects and incorrect programming is prevented. This is done by systematically checking the functionality of the Nano and FTM system. Partly to check whether the entered programming and the functions, alarms, controls and alerts function properly, but also to check the systems in an easy and reliable manner for any system malfunctions that may be present.







These panels have been designed to minimise labour costs by providing ample space for tasks such as wiring and changing batteries. Simple colour coded buttons give the user confidence in correctly managing their fire alarm system and the one person walk tests will help reduce the cost of maintaining the system. A host of configuration and programming options are provided, including; programmable inputs & outputs, false alarm management, muster alarm and programmable output delays.

### **Esento Marine** 2-4 Zone



- 2 or 4 zones
- Inputs for sounder ringing & pulsing
- Fire & fault relays
- 2 monitored sounder circuits
- Earth fault monitoring
- One person walk test

- Integral 1.25 Amp switch mode PSU
- Space for up to 3.2Ah batteries
- False alarm management modes
- Muster alarm
- 12 month warranty





Marine and offshore Conventional Fire Panels



### **Esento Marine** 8-12 Zone



- 8 12 zones
- Integral 2.5 Amp switch mode PSU
- Space for up to 7Ah batteries
- Programmable inputs
- Programmable relays & outputs
- Up to 6 monitored sounders
- Modular expansion zone

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- 3 false alarm management modes
- Muster alarm
- Zonal programming
- Programmable output delays
- Supports up to 8 repeater panels
- 12 month warranty



#### Marine and offshore Conventional Fire Panels



### **Esento Marine** 12-Way Repeater Panel

The Esento Marine repeater panel has the same intuitive controls and indications as the main control panel but mounted in a smaller cabinet. The repeaters are fully functional with 'Silence', 'Resound' and 'Reset' controls, as well as 'Disable' and 'Test Mode' functions. It is also possible to disable the controls for each or all repeater panels to make them passive (indication only). Up to 8 repeater panels can be supported on a Esento 8-12 zone system.



- 12 zonal fire & fault indications
- Class change & pulsing inputs
- Programmable outputs
- Fully functional or passive
- Test mode & disablement functions
- Integral 1A switch mode PSU



Conventional Fire Panels



### Esento Marine Network Comms Card

This comms card simply plugs in on top of the main circuit board of the control panel to allow up to 8 control panels to be networked. In addition to the control panels up to 8 repeater panels or remote display units can also be added to the network.

- Network up to 8 control panels
- Up to 8 additional repeater panels on the network
- Card includes 6 programmable switch -ve outputs



### Esento Marine VDR Card

Esento Marine VDR allows the connection between the conventional fire detection system and the ships voyage data recorder. This simple plug-in card is easy to connect and provides data in accordance with IEC 61162-1 Ed.3

 Data Output: RS485, ASCII characters, BAUD rate: 4800, data bits 8 (D7=0), parity 0, stop bits 1

• Designed to: IEC 61162-1 Ed.3





apollo

## Orbis Marine Optical Smoke

- Wide voltage range (8.5 33Vdc)
- Optical smoke detector
- IP23D

- 4 second sampling frequency
- Approved to MED, DNV, KRS, LR, CCS, BV and ABS

#### Orbis Marine Multisensor Detector

- Wide voltage range (8.5 33Vdc)
- Thermistor and optical smoke detector
- IP23D

- 4 second sampling frequency
- Approved to MED, DNV, KRS, LR, CCS, BV and ABS

#### Orbis Marine Heat Detector

- Wide voltage range (8.5 33Vdc)
- Heat detector (thermistor)
- IP23D
- 4 second sampling frequency
- Approved to MED, DNV, KRS, LR, CCS, BV and ABS
- Wide temperature range available



- Compact UV Flame Detector
- Base Mounted
- Sensitive to UV spectrum for early detection

• Approved by CCS, ABS and MED









PARTNER

#### Time Saver Marine Base

- Grouped terminals to make wiring easy
- Detector locking mechanism
- Decrease installation time
- Approved to MED, DNV, KRS, LR, CCS, BV and ABS

#### Time Saver Marine Relay Base

- Grouped terminals to make wiring easy
- Detector locking mechanism
- Decrease installation time

#### Series 65 Marine Base

- For use with Series 65 Marine UV flame detector
- Easy installation
- Approved by CCS, ABS and MED

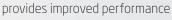
#### Apollo Deckhead Mounting Box

- Compatible with all Apollo marine bases
- Protects against water ingress and

- Relay output
- Approved to MED, DNV, KRS, LR, CCS, BV and ABS







• Ideal for bulkhead fixing





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#### Orbis IS Optical Smoke

- 14 28Vdc
- Optical smoke detector
- IP23D

- 4 second sampling frequency
- Approved to ATEX, IECEX, MED, DNV, KRS, LR, CCS, BV and ABS

#### Orbis IS Multisensor Detector

- 14 28Vdc
- Thermistor and optical smoke detector
- 4 second sampling rate
- Approved to ATEX, IECEX, MED, DNV, KRS, LR, CCS, BV and ABS

• IP23D

#### Orbis IS Heat Detector

- 14 28Vdc
- Heat detector (thermistor)
- IP23D

- 4 second sampling rate
- Approved to ATEX, IECEX, MED, DNV, KRS, LR, CCS, BV and ABS



#### Orbis IS Time Saver Base

- Grouped terminals to make wiring easy
- Detector locking mechanism
- Decrease installation time
- Approved to ATEX, IECEX, MED, DNV, KRS, LR, CCS, BV and ABS



#### SOC-E3NM Marine Approved Photoelectric Smoke Detector

- Wide voltage range (9.5 30Vdc)
- Removable chamber
- Remote indicator output
- MED and DNV approved

Remote indicator output

MED and DNV approved

#### DCD-AE3M Combined Heat Detector (fixed temp & rate or rise 60°C)

- Wide voltage range (9.5 30Vdc)
- Rate of rise heat detector
- 60°C heat sensing element

#### DCD-CE3M Combined Heat Detector (fixed temp & rate or rise 90°C)

- Wide voltage range (9.5 30Vdc)
- Rate of rise heat detector
- 90°C heat sensing element

#### DRD-EM Marine IR Flame Detector

- Up to 25m range
- Single IR technology
- Fits standard MED base

• Remote indicator output

• MED and DNV approved

- Remote indicator output
- MED and DNV approved

#### YBN-R/6-M Marine Approved Standard Base

- Accepts 2.5mm cables
- Electronics free
- Small 8mm profile
- MED and DNV approved
- Integral remote indicator output





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#### SOC-E-IS Intrinsically Safe Smoke Detector

- ATEX Classification to: Ex ia IIC T5 Ga (-20°C  $\leq$  Ta  $\leq$  +55°C)
- Removable, high performance chamber

#### DCD-1E-IS Intrinsically Safe Heat Detector

- Rate of rise heat detector
- 60°c fixed temperature element
- Suitable for category 1
- ATEX Classification to II 1G EEx ia IIC
  - T5 Tamb=55C

• Remote indicator output

• MED and DNV approved

• MED and DNV approved

#### YBN-R/4(IS) Intrinsically Safe Detector Base

- Accepts 1 to 2.5mm cables
- Electronics free
- Small 8mm profile
- MED and DNV approved
- Dedicated cable screen terminal
- MBB2 Deckhead Mounting Box
- Compatible with both Apollo and Hochiki bases
- 4 cable entry holes suitable for cable glands (2 glands supplied)
- Ivory or white colours available
- Provides moisture and dust resistant fixing
- Ideal for bulkhead fixing

- Approved by LR and DNV GL

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Conventional Fire Detection

### **Apollo** 55100-021MAR Indoor Call Point



Installation time and ultimately cost, are of paramount importance to any fire or security installer. The MCP range directly reflects this need by providing a unique 'plug and play' concept designed specifically to reduce installation time.



- IP24D
- Up to 30Vdc
- -10°c to +55°c
- Two-wire supply
- ABS
- Flush or surface mounted

### **Apollo** 55100-022MAR Weather Resistant Call Point

The outdoor WCP is an IP67 sealed manual call point product. The enhanced environmental protection allows the unit to be installed in many external environments where water and dirt are likely to be present, making it a true waterproof and outdoor product.



- IP67
- Up to 30Vdc
- -25°c to +70°c
- Two-wire supply
- ABS
- Flush or surface mounted



Flame and Gas Detectors



### **FGD** UV/IR Flame Detector

The FlameSpec-UV-IR flame detector provides ultra-fast response, high performance and reliable detection of a large variety of fires including hydrocarbon fires (visible and nonvisible), as well as Hydrogen fires.

The detector addresses slow growing fires as well as fast eruptions of fire using improved UV IR technology.

FGD

The detector operates in all weather and light conditions.

- ATEX
- IECEX
- MED
- FM
- SIL2

### **FGD** Triple IR Flame Detector

FlameSpec-IR3–HD is the next generation of the IR3 flame detector. It is being introduced to further enhance the protection and safety for these high risk and high value industries.

The FlameSpec-IR3-HD Triple IR (IR3) flame detector will detect fires and explosions extremely fast, thus allowing preventative action to be initiated even more rapidly and minimizing the consequences!

- ATEX
- IECEX
- MED
- FM
- SIL2



#### Marine and offshore Flame and Gas Detectors



### **Crowcon** SMART S-MS MED Gas Detector

The SMART S-MS MED is designed specifically for use in marine environments and is certified by the Lloyd's Register in accordance with MED/3.54 Regulation.

The device is SIL2 certified and has options for both catalytic and infrared sensors for the detection of flammable gases. Housed in an aluminum die cast painted enclosure, it is UV and chemically resistant, making it suitable for harsh marine environments

It has 4-20mA analogue output, alongside alarm relays and serial RS485 output meaning it can be easily fitted to any system.





# Marine and offshore Audio/Visual Alarm Equipment



#### VTB

- 99dB(A)
- 1Hz LED
- 32 tones, 2 stage alarm
- IP21C(shallow)/IP33C(deep)
- 24Vdc
- Lens: amber/red
- MED approved



### VTG

- 102dB(A)
- 32 tone, 2 stage alarm
- IP21C(shallow) or IP33C(deep)
- 24Vdc
- Red or white
- MED approved



#### SONFL1X

- 100dB(A)
- 1Hz Xenon strobe
- 10 tones, 2 stage alarm
- IP66
- 12Vdc/24Vdc/115Vac/230Vac
- MED and DNV approved





# Marine and offshore Audio/Visual Alarm Equipment



#### AL105NX

- 113dB(A)
- 1Hz Xenon strobe
- 64 tones, 4 stage alarm
- IP66

- 24Vdc/28Vdc
- /24Vac/115Vac/230Vac
- MED and DNV approved

- AL112NX
- 120dB(A)
- 1Hz Xenon strobe
- 64 tones, 4 stage alarm
- IP66

- 12Vdc/24Vdc/48Vdc /24Vac/115Vac/230Vac
- MED and DNV approved



### AL121X

- 124 db(A)
- 1Hz Xenon beacon
- 64 tones, 4 stage alarm
- IP66

- 12Vdc/24vdc/48vdc /115Vac/230Vac
- MED and DNV approved





# Marine and offshore Audio/Visual Alarm Equipment



#### SONF1

- 100dB(A)
- 10 tones, 2 stage alarm
- IP66

- 24Vdc
- Red, white or grey
- MED and DNV approved



### A105N

- 113dB(A)
- 64 tones, 4 stage alarm
- IP66

- 24Vdc/48Vdc/115Vac/230Vac
- MED and DNV approved



### A112N

- 120dB(A)
- 64 tones, 4 stage alarm
- IP66

- 24Vdc/48Vdc/115Vac/230Vac
- MED and DNV approved





Audio/Visual Alarm Equipment / Hazardous Area Sounder Beacons



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#### A121

- 124 db(A)
- 64 tones, 4 stage alarm
- IP66

#### BEXS110D

- 110dB(A)
- 32 tones, 3 stage alarm
- IP66 & 67 (third party tested)

- 12Vdc/24vdc/48vdc
  /115Vac/230Vac
- MED and DNV approved
- 24Vdc
- Explosion proof
- MED and DNV approved

#### D1XS1F Explosion Proof Sounder Beacon

- 64 Alarm tones
- 4 stages
- 24VDC, 100-240VAC,
- IECEX, ATEX, UL, SIL1 and SIL2 approved
- EN54, MED, DNV



#### D1XB2X05 Explosion Proof Beacon

- 5 Joule Beacon
- 7 Lens colours
- 24VDC, 100-240VAC
- IECEX, ATEX, UL, SIL1 and SIL2 approved
- EN54, MED, DNV





Audio/Visual Alarm Equipment



#### YL50 Hi Vis Sounder Beacon

- 112 db (A) / 1 m
- IP66
- High Brightness LED Beacon
- 32 selectable tones meeting international regulations
- Flame retardant ABS enclosure
- Stainless steel fixings

#### YL80 Hi Vis Sounder Beacon

- 116 dB(A)@1m
- IP66
- High Brightness LED Beacon
- 32 selectable tones meeting international regulations
- Flame retardant ABS enclosure

- 2 stage alarm
- Independently selectable second stage
- Lens available in eight colours
- Low current consumption
- Stainless steel fixings
- 2 stage alarm
- Independently selectable second stage
- Lens available in eight colours

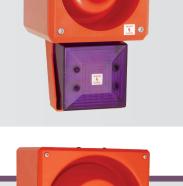
### YL80 Super Hi Vis Sounder Beacon

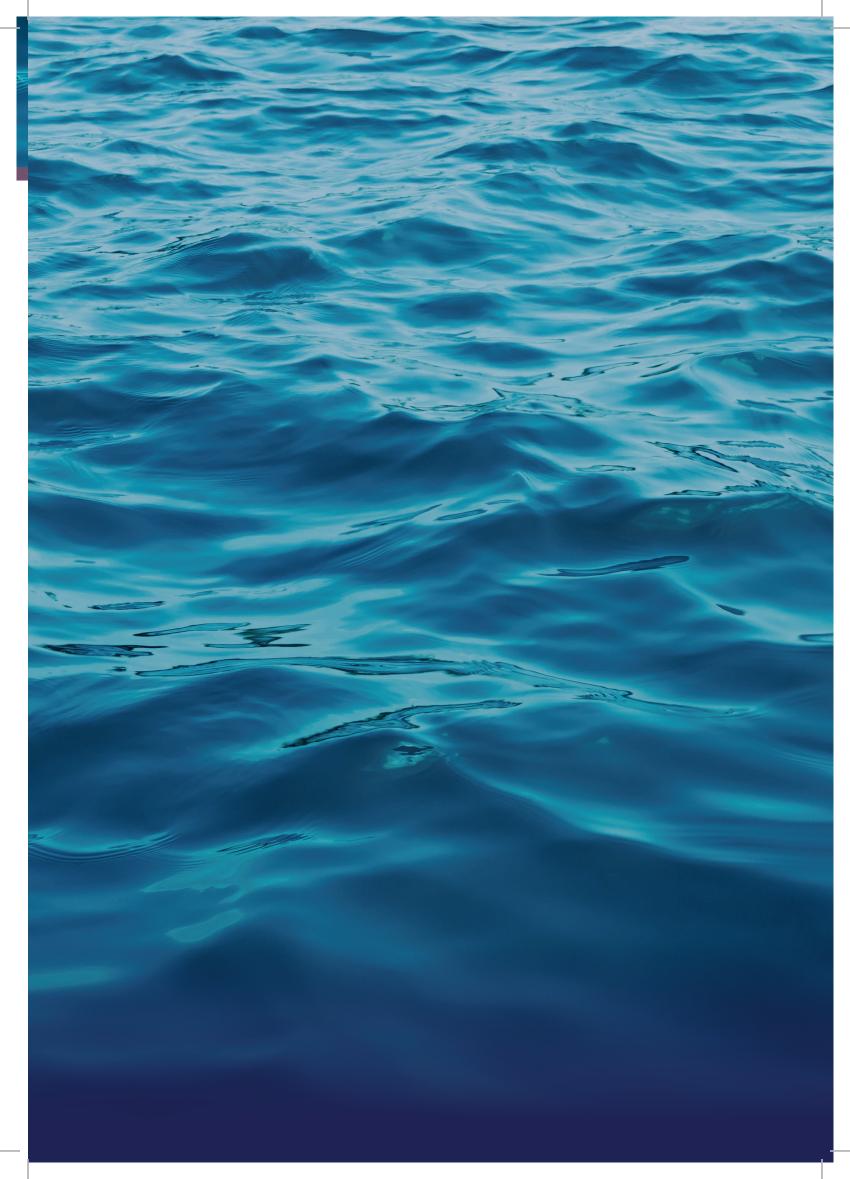
- 120 db (A) @ 1 m
- IP66
- High Brightness LED Beacon
- 32 selectable tones meeting international regulations
- Stainless steel fixings

- 2 stage alarm
- Independently selectable second stage
- Lens available in eight different colours









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