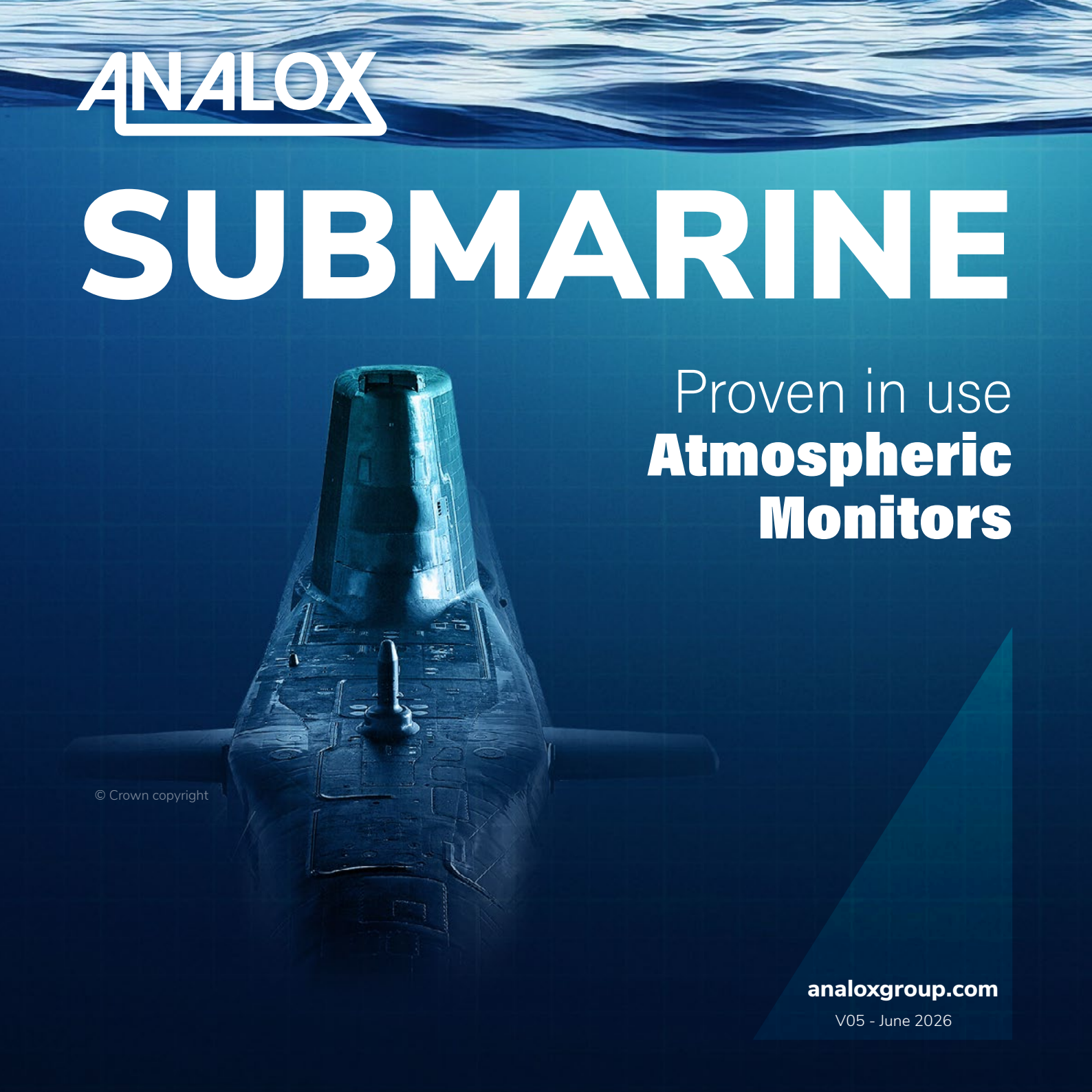


The background of the entire page is a deep blue color with a subtle grid pattern. At the top, there is a horizontal band of lighter blue, wavy lines representing the surface of the water. Below this, a submarine is shown from a top-down perspective, moving towards the viewer. The submarine's conning tower and various deck structures are visible. The overall tone is professional and technological.

ANALOX

SUBMARINE

Proven in use
**Atmospheric
Monitors**

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analoxgroup.com

V05 - June 2026

ATMOSPHERE MONITORING
FOR THE MOST
CHALLENGING ENVIRONMENT...

THE
DEEP

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OUR VALUES



Teamwork



**Commitment
to Excellence**



**Customer
Focus**



Pride



Integrity



Bold

WHY CHOOSE US?

We are **DEDICATED** to you: your safety, your process, your application.

We love a **CHALLENGE** and will develop a **SOLUTION** just for you.

We are **PROUD** to fly the flag for **SME's** in the defence sector.

Click [here](#) to read our recent announcement where Analox Group has been awarded a contract with the **UK Ministry of Defence (MOD)** for the manufacture and in service support of **submarine atmosphere monitoring systems**.

THE STANDARD IN THE INTERNATIONAL SUBMARINE COMMUNITY

For more than 40 years, Analox has provided quality gas detection solutions used in dozens of diverse industries worldwide.

In 1997, the Analox Group entered the highly specialised world of submarine gas monitoring and analysis. Since that time, the company has earned recognition for its **submarine, primary and secondary analysers**, and become the **standard in DISSUB monitoring**.

All Analox products are designed for use within the submarine environment, such as **atmospheric monitoring systems** for routine monitoring of the submarine atmosphere, **submarine escape and rescue**, and the **deployment and recovery of special forces** from the submarine.

We combine our expertise in gas sensing techniques and hyperbaric monitoring, with our knowledge of the complexities of the submarine environment, to design, and deliver a product that meets expectations and the varying requirements of the platform.

A large submarine is visible on the water, with its conning tower and various antennas and sensors on top. The scene is set against a cloudy sky and the water's surface is visible in the foreground. A large, semi-transparent dark rectangle is overlaid on the center of the image, containing a quote in white italicized text.

‘Speaking to people in Analox you sense the passion and pride and where you have a proud workforce you have a good company. Analox have a good name in the submarine community - good service, reliable products and easy to work with.’

Jos Bogaert

ANALOX TECHNOLOGY AT WORK ABOVE & BELOW THE SURFACE

In the high-tech world of today's submarines, whether a boat is nuclear-powered or diesel propelled, the Analox team **understands the complexities of the closed atmosphere**, combined with the **changes in pressure, temperature and humidity**, and is committed to using the company's experience and expertise to remain the first choice for gas monitoring for the world's submarine nations.

Analox submarine atmosphere monitoring solutions include:

- **AA - Central Atmosphere Monitoring System** - designed primarily for nuclear boats, the unit is capable of monitoring up to 30 gases from various locations around the boat.
- **DAMS - Distributed Atmosphere Monitoring System** - designed primarily for diesel boats and AIP (air independent propulsion), this modular system consists of a central display connected to discrete sensor modules located around the boat in the areas where the gas hazard occurs.
- **Stand alone fixed monitors such as COSAMS** (Carbon Monoxide Atmosphere Monitoring System) - designed for routine monitoring of CO in the submarine atmosphere without suffering cross sensitivity to other gases like hydrogen.
- **Portable Analysers** - ideal for confined space entry or as emergency back-up monitors to the primary monitoring system.

*‘We appreciate
Analox’s ability and
willingness to respond
to our requirements.
The service
Analox provides is
commendable.’*

Babcock Canada



OUR CAPABILITIES & PARTNERS

Analox has been working shoulder to shoulder with the military community for over 20 years and we are proud to work with, and supply, systems to numerous Navies and Prime Contractors globally.

Our experience and capabilities range from;

- Specification of suitable sensing techniques using our network of technology partners
- Consultation to support the design specification process
- Bespoke design solutions
- Safety critical designs to IEC 61508
- Information assurance (IA)
- Commercial off the shelf (COTS) products
- Onsite engineering support
- Training
- Through life support solutions

Each Analox customer works with a dedicated account manager to support their requirements.



*‘MSubs continue to
work with Analox as
we get what we want,
when we want it and
Analox are always
there to support us’*

MSubs



OUR CAPABILITIES & PARTNERS

THIS IS WHAT WE DO...

Whole boat
Primary &
Secondary
Atmosphere
Monitoring

Emergency
Atmosphere
Monitoring:
DISSUB,
Damage
Control

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Gas Monitoring for
Dedicated Ship Systems:
Decompression
Chambers, Breathing Air,
Confined Space Entry



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Hyperbaric
Atmosphere
Monitoring System
for Submersibles

ATMOSPHERE
MONITORING
FOR THE MOST
**CHALLENGING
ENVIRONMENT**

THIS IS WHAT WE DO

SUBMARINE ATMOSPHERE MONITORING

Your proven partner through life, by design

Analox has extensive knowledge in providing submarine atmosphere monitoring systems. Offering a 'cradle to grave' service; from inception to disposal, our capabilities span the specification of requirements, product design (including safety critical designs to IEC61508), through manufacturing, installation, commissioning and training. All systems are designed with a flexible system architecture ensuring your specific technical requirements, now and in the future, are achieved.

Supporting you in;

- Selecting the most appropriate, proven sensing techniques
- Designing for safety
- Designing for minimal on board maintenance ensuring submariners can concentrate on their primary roles

“

The word '**Improvement**' was mentioned several times in all areas of your business, that is very encouraging. It is clear that you are a good organisation with a **high quality way of working which is rarely seen in smaller companies.**

”

- Customer during an audit of Analox

CASE STUDY

Analox worked with the Royal Norwegian Navy to supply a carbon monoxide gas monitoring system for six Ula Class diesel electric submarines. Carbon monoxide (CO) detection is problematic on submarines due to the presence of hydrogen. Analox developed a new system

using an accurate infrared gas filter correlation (GFC) CO sensor which is not cross sensitive to hydrogen. The team developed, manufactured, installed and commissioned the system. Since the development, other nations now have the **COSAMS** unit fitted.



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Courtesy of BAE

Courtesy of BAE



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SUBMARINE ATMOSPHERE MONITORING

AA

Centralised Atmosphere Analyser

The AA comprises of 3 main gas sensing modules; SIL2 O₂ monitor, a functionally safe oxygen (O₂) monitor, mass spectrometer and FTIR spectrometer, which offer the following benefits:

- Ideal for monitoring low (ppm) concentrations of trace gases
- Can be programmed to look at new gas species as they become of interest through the boat's operational life
- Has potential to identify unknown pollutants in the atmosphere by doing a mass scan

The AA is capable of measuring up to 30 gases from up to 20 compartments via sample lines ensuring crew safety.

Life support gases which are monitored include oxygen (O₂), carbon dioxide (CO₂) and carbon monoxide (CO).

Fire gases which are monitored include hydrogen cyanide (HCN) and nitrogen oxide (NO).

Post analysis of data logs can identify new gas species in the submarine environment.

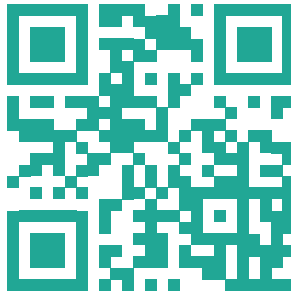
Features

- Measures up to 30 gases continuously
- Sample gas from 20 compartments (via sample lines)
- A number of AA analysers can be connected together to provide measurements from a greater number of compartments
- Each measurement is datalogged so records can be maintained for the boats life



ATMOSPHERE ANALYSER

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DAMS

Distributed Atmosphere Monitoring System

Today's modern submarine fleets feature some of the most complex technology in the world.

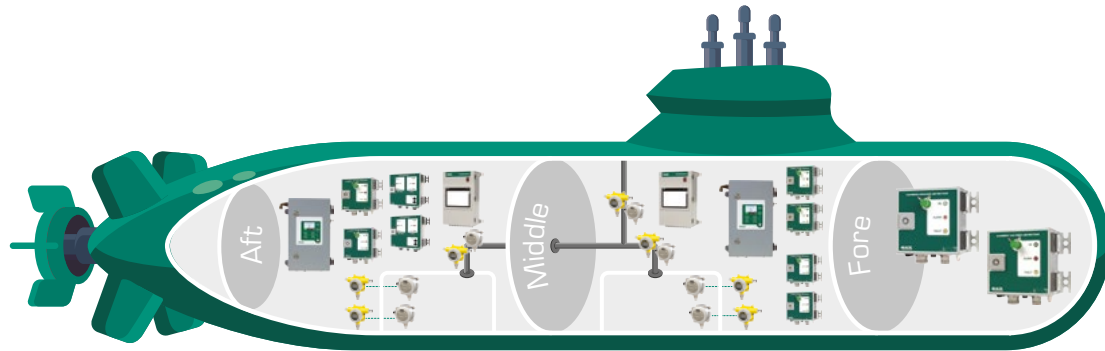
Whether the boat is a nuclear powered attack submarine, a diesel-electric submarine or a special mission submarine or submersible, all require **continuous, reliable atmosphere monitoring** to ensure the safety of the submariners on board.

The Analox team of engineers and highly-trained analytical specialists understand the challenges created by fluctuating atmospheric conditions on board submarines, along with the various dangers different gases present. It is a unique challenge – how to effectively monitor multiple gases in multiple locations aboard a boat more than 197 ft (60m long). **This is what DAMS was created to do.**

Each state-of-the-art DAMS unit is flexible, robust and fully configurable. It can monitor up to six gases simultaneously from one centralised PLC (programmable logic controller) panel.

The modular design of the DAMS incorporates multiple testing technologies including gas filter correlation (GFC) to monitor carbon monoxide (CO), electrochemical for depleted or enriched oxygen (O₂), NDIR for carbon dioxide (CO₂) and refrigerants (R134a) and Catalytic Bead technology to test for hydrogen (H₂).

Example 3 compartment Submarine



PLC Central Display

Programmable Logic Controller

Centrally located PLC user interface linked to discrete gas sensors or sensor modules located around the boat. Used for system operation, alarming and data transfer.



COSAMS+

Carbon Monoxide Submarine Atmosphere Monitoring System

Real-time continuous monitoring of carbon monoxide in living accommodation and machinery spaces on submarines.



Single Diffused Sensor

These sensors are available as O₂ & CO₂. Notification LED show alarm and fault state.



Single/Dual Pumped Sensor

Sensors available as O₂, CO₂ & Refrigerant. They can also come as a combination of 2 gases (e.g. O₂ & CO₂). Notification LED show alarm and fault state.



Hydrogen Sensor

Available as a stand alone detector or as a split sensor/transmitter. It has a built in display for alarm and fault notifications.

Discover a Submarine Atmosphere Monitor with NO LIMITS

Each DAMS monitor is ideally suited for conventionally powered diesel/electric powered submarines or air independent propulsion (AIP) designs.

In response to highly precise military standards and requirements, **DAMS is simple to customise and install**. Each unit is user maintainable, and has delivered the proven accuracy and reliability demanded by the submarine community.

The modular design of DAMS allows for upgrades and changes to the system as the boat's operational requirements change throughout the product's operational life.

Each DAMS system can be **calibrated by just one person** and is extremely easy to maintain, reducing and often eliminating disruptions to normal operations.

Additional Features

The DAMS uses a modular architecture to accommodate customisation to fulfil the gas detection needs of individual boats, features include:

- Optional submarine PMS (platform management system) integration
- Customised user interface
- Data logging
- Visual alarms with alarm location
- Password protection
- Choice of gas sensing modules: oxygen (O₂), carbon dioxide (CO₂), carbon monoxide (CO), hydrogen (H₂) and refrigerants
- Local visual alarms with optional display & relays
- Pressure and temperature corrected to prevent spurious alarms
- User maintainable
- MIL-STD-461F compliant

Sensor Module Solutions

Gas	Danger	Source	Solution	Technology
CO	Toxic	Kitchen, machinery, crew exhalation	CO Module: 0 to 200ppm	GFC
H ₂	Fire explosion	Batteries	H ₂ Module: 0 to 100% LEL or 0 to 4% vol	Catalytic bead
O ₂ (depleted)	Asphyxiation	Refrigerants, crew consumption	O ₂ Module: 0 to 25% Option to display in mBar (0 to 1000mBar O ₂)	Electrochemical
O ₂ (enriched)	Fire explosion	O ₂ candles LOX plant	O ₂ Module: 0 to 25% Option to display in mBar (0 to 1000mBar O ₂)	Electrochemical
CO ₂	Toxic	Crew exhalation	CO ₂ Module: 0 to 5% Option to display in mBar (0 to 50mBar CO ₂)	NDIR
Refrigerant	Asphyxiation	Water chiller, refrigeration system	R134a Module: 0 to 1000ppm	NDIR

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COSAMS

Carbon Monoxide Submarine Atmosphere Monitoring System

Carbon monoxide (CO) can be generated aboard a submarine from both routine and emergency operations such as cooking, exhaust from diesel engines, the use of chlorate candles, or even an onboard fire incident. **You cannot smell, taste or see CO**, so it is vital for the safety of all submariners onboard that **accurate and continual monitoring of CO takes place**.

CO monitoring in the submarine environment requires a different kind of technology than that used in off-the-shelf carbon monoxide detectors.

Standard electrochemical sensors are extremely cross-sensitive to hydrogen, making them unsuitable for use in the submarine environment. Hydrogen can be present on submarines due to the batteries being used. This “cross-sensitivity” can result in false readings of CO.

Analog's solution for routine CO monitoring of the submarine atmosphere is the **COSAMS unit (Carbon Monoxide Submarine Atmosphere Monitoring System)** which uses an **infra-red measuring technique**, which ensures it is not cross sensitive to hydrogen.

Product Overview

COSAMS offers continuous, real-time monitoring of CO in the living accommodation and machinery spaces. The maximum permissible concentrations (MPCs) of CO allowed on submarines vary from nation to nation and with the type of boat.

A typical continuous exposure level would be between 15 to 25ppm, with higher limits (up to 175ppm) in emergency situations, e.g. 60 minute and 24 hour limits, and it's **these limits that define the measuring range for the COSAMS unit**.

CO is measured with an infra-red (IR) sensor using a gas filter correlation (GFC) technique. This sensor is ideal for use where accurate low-level measurements are required, or **where background gases have the potential to interfere with the measurement.**

CO absorbs infra-red light at $4.66\mu\text{m}$ of the electromagnetic spectrum. A narrow band-pass optical filter is fitted between the IR source and detector to only allow light at $4.66\mu\text{m}$ to reach the detector. The more gas present the more light is absorbed and the lower the signal reaching the detector. **Water vapour also absorbs IR light at $4.66\mu\text{m}$ so this effect must be eliminated.**

The gas filter wheel contains a reference filter and a measuring filter by looking at the relative IR absorption of the system when the reference filter is present in the optical path versus when the measuring filter is present, **it is possible to reject IR absorption from sources other than CO.**

This technique allows the sensor to effectively ignore the presence of water and make accurate CO measurements in high humidity environments, **such as those found on a submarine.**

Analox apply our **unique pressure and temperature correction technology** to the IR sensor to ensure the COSAMS unit will **provide an accurate reading of CO in the submarine environment,** particularly during submarine snorkelling.



System Specification

Mechanical	
Nominal cabinet dimensions (exc mounting lugs) (H, W, D)	479mm x 280mm x 176 mm 18.8 x 11 x 6.9 inches
Nominal cabinet dimensions (inc mounting lugs) (H, W, D)	479mm x 360mm x 200 mm 18.8 x 14.1 x 7.8 inches
Cabinet weight	11.6 kg / 25.5lb
Cabinet material	Aluminium

Electrical	
Electrical supply	115 V AC 60 Hz
Max power consumption	90 W
Fuse rating (F1, F2)	20 mm, 2.5A anti-surge
Signal output	4-20 mA
EMC compliance	MIL-STD-461F
ESD compliance	EN 61000-4-2

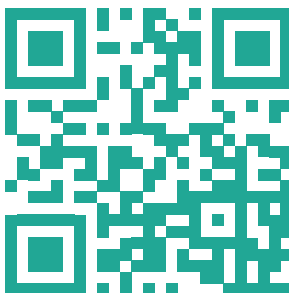
Performance	
CO measuring range	0 to 200 ppm
Repeatability, measured at RTP	± (1 ppm CO + 1 display count)
Accuracy across normal operating environmental envelope	±5% full scale (equivalent to ±10 ppm)
Zero drift	±1 ppm CO/day
Cross-sensitivity to hydrogen	2% vol H2 < 1 ppm CO
Cross-sensitivity to CO2	5% vol CO2 < 1 ppm CO
Response time	T90 <60s

Environmental	
Operating temperature range	0°C to 45°C / 32°F to 113°F
Storage temperature	-40°C to 70°C / -40°F to 158°F
Operating pressure range	800 to 1400 hPa
Extended pressure range	600 to 800 hPa (Degraded performance over this pressure range)
Storage/transport pressure range	300 to 1400 hPa
Operating humidity range	0 to 80 % RH
Extended humidity range (up to 1 hour)	80 to 100 % RH
Storage humidity range	0 to 80 % RH (temporary max. 100 % RH)
Max. roll angle	15° (constant), 45° (temporary)
Max. pitch angle	10° (constant), 30° (temporary)
Shock	Tested at 22g, 20ms (half sine) without shock isolation
Vibration	NATO STANAG 4138

Additional Features

- Uses a GFC infra-red sensing technique ensuring the system is not sensitive to hydrogen or water vapour
- Built-in auto-zero function ensures sensor stability
- Real-time monitoring ensures rapid response to CO issues as they occur
- 90 days data-logging allows records to be stored and used should they ever be needed
- Easy to maintain allowing you to be more self-sufficient whilst minimising downtime
- Designed specifically for the submarine environment so it is able to cope with the demands of the environment in terms of electromagnetic compatibility (EMC), shock and temperature

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SUB ASPIDA

Analox Sub Aspida Multi-Gas Analyser

Portable monitors may be used as an emergency backup to a main atmosphere monitoring system or for specific uses such as confined space entry. **The Analox Sub Aspida is designed with this in mind.**

The Sub Aspida is a compact, portable analyser that offers both **partial pressure oxygen (O₂) and carbon dioxide (CO₂) monitoring** over the submarine operating pressure range. It was designed with pressure-corrected sensor units and as a result, users can have complete confidence in the unit's output, giving accurate readings over a pressure range of 700-1200 MB, **without giving false alarms.**

Sub Aspida units are also used inside a variety of submarine rescue vehicles (SRVs) where they are also used as a backup to monitor the atmosphere in the pilot compartment. Should a power failure occur, the Sub Aspida has the option to be powered using AA batteries. It provides a reliable backup safety monitoring system that also complies with the rules around SRVs and life support stores, with emergency monitoring being **needed for a minimum of three days.**

Additional Features

- It is the only portable monitor to be pressure corrected ensuring no false readings are given
- It is compact in size (127 x 44 x 90mm LxDxW)
- The CO₂ sensor only needs calibrating every 12 months
- It has both audio-visual and vibration alarms
- It is designed to be maintained by the customer



SUB ASPIDA

System Specification

System Specification	
Operating temperature	0°C to +50°C
Operating pressure	700 to 1200 mbara
Humidity Range	0 to 99% RH
Display	High-visibility, Organic Light Emitting Diode (OLED) display
Alarm horn	95dB @ 30cm
LED indicators	Green - OK Amber - Fault Red - Alarm
Internal data log	1 log every 30 seconds for at least 7 days of continuous use
Batteries	2 x NiMH 2100mAh AA batteries (or suitable AA type batteries)
Battery discharge time	12 hours under normal operation (Passive atmospheric monitoring, minimal user interaction, no alarms)
Battery lifespan	2 years
Battery charge time	4.5 hours (from flat)
Charge power supply rating	9 V DC - 0.55A, DC jack 5.5x12.0x2.1mm centre +ve
Calibration adapter max flow	0.5 l/min
Electronics warranty	2 years
IP rating	IP65
Dimensions (W, H, D)	90mm x 127mm x 44mm / 3.5 x 5 x 1.7 inches
Weight	335g/11.8oz O2 350g/12.3oz CO2 335g/11.8oz

Sensor Specification

	CO2 Sensor	O2 Sensor
Sensor Type	Analox infrared MIR	Electrochemical
Range	0.01 to 50.0 mbar ppCO2 (0.01 to 5% at 1000 mbara)	0.1 to 2000.0 mbar ppO2 (0.1 to 100% O2 at 1000 mbara)
Accuracy (At standard temperature and pressure):	±(1% of full scale + 2% of reading)	±1% of full scale <i>(For best performance, calibrate the Sub Aspida while on battery power only.)</i>
Response time:	T90 <60 seconds	T90 <30 seconds
Sensor life span:	5 years	1 year (expected)

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SUBMARINE ESCAPE & RESCUE

Delivering reliable information to allow you to make trusted decisions

For over 20 years, Analox has worked with the **Submarine Escape and Rescue** community ensuring our analysers meet and exceed NATO standards for submarines with an escape capability. These decision making tools provide critical information on the state of the atmosphere and are simple to operate, whilst providing vital information to the senior survivor during a **DISSUB incident**.

We are dedicated to working with you to ensure our products are designed to work in the most hostile environments. Using proven hyperbaric sensing technology, simple effective design and minimal on board maintenance ensures submariners can concentrate on their primary mission. For rescue systems Analox provides a range of hyperbaric monitoring systems for use within the submarine rescue vehicle (SRV), or surface decompression chambers, in addition to solutions for the support infrastructure.

“

The Sub MkIIP is a good piece of equipment, especially as it monitors partial pressure.

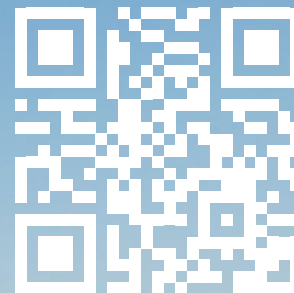
”

- Francis, Naval Group

CASE STUDY

In the early 1990's Analox produced its first hyperbaric continuous real-time analyser for submarine escape and rescue - the EIR15P. This unit was supplied to the Royal Navy for British Submarine escape compartments.

In 2000, the unit was replaced by the Sub MkIIP and then in 2021 we launched the **Sub Mk3P**. This is the only continuous analyser to meet ANEP/MNEP requirements. Nations utilising the Sub MkIIP include; UK, Canada, USA, Australia, Brazil, Netherlands, France and many more.



SUBMARINE ESCAPE & RESCUE



SUB MK3P

Vital Decision Making Aid During a DISSUB Situation

Launched in 2021, the **Sub Mk3P is the next generation of the widely successful Sub MkIIIP DISSUB decision-making tool** that is currently being used to keep submariners safe aboard dozens of submarine fleets deployed around the world. Like the Sub MkIIIP, the Sub Mk3P monitors the partial pressure of oxygen (O₂) and carbon dioxide (CO₂), it also measures the depth/pressure, battery life and elapsed time - **key factors to know in an emergency situation.**

Portable and lightweight, the Sub Mk3P monitor provides crucial information to the senior survivor about the state of the atmosphere inside the submarine during a time of crisis. This information helps that officer make one of the most challenging decisions any submariner ever has to make – attempt to escape the submarine or wait for rescue forces. The intuitive, life-saving Sub Mk3P decision-making tool is the only continuous gas monitor currently available that meets the NATO STANAG 1476:2014 standards (ANEP/MNEP 85 & 86 (2014)).

The unit is fully user maintainable meaning that maintenance staff can now perform routine service procedures along with sensor updates or replacement in the dockyard. **This greatly reduces costs and downtime.**

The Analox standards and testing process confirms each unit has undergone an extensive manufacturing and testing process prior to installation. This ensures accuracy and **reliability at all times.**

The Sub Mk3P was designed with extensive input from submariners. The unit comes in a highly recognisable international orange housing which makes the Sub Mk3P very easy to identify in the case of an emergency.



SUB MK3P

Additional Features

- Proven hyperbaric sensing capability
- Fully user maintainable, maintenance staff can now perform routine service procedures, sensor updates or replacement while the submarine is still at the dockyard, greatly reducing costs and downtime
- Enhanced digital display units have been upgraded to allow for individual customization and better readability for O₂, CO₂, pressure, temperature and humidity measurements at depth
- Automatic back lighting helps ensure readability even in low light and no-light conditions
- The battery compartment has been updated making it easier than ever for replacement and servicing
- Portable and lightweight making it easy to use around the submarine
- Data logging and real time data output capability, using MODBUS RTU over RS485 digital communications, allowing for easy incorporation into your existing platform management system, such as JANUS

Add-ons

- 24V DC (9-36V DC) external power cable
- MODBUS RTU comms cable
- 1 year service kit
- 5 year service kit
- Return to factory servicing agreements

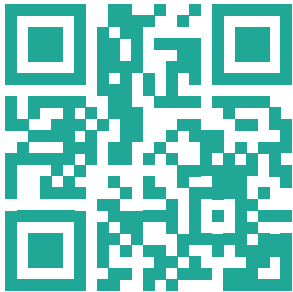
Click [here](#) to watch our video on the differences between the Sub MkIIP and the new Sub Mk3P.

System Specification

System Specification	
Battery power	4 x 'D' alkaline cells (Hyperbaric)
External power	24V dc (9-36V dc), <0.5A
Backup batteries	2 x LR43 alkaline manganese cells
Displays	6 x 4 character LCD, with symbols and LED back lights.
Operating temperature	-5 to 50°C
Storage temperature	-5 to 50°C
Operating pressure	0.7 to 10barA
Operating humidity	0 to 100%RH (Non-condensing)
Standards/compliance	NATO STANAG 1476:2014 ANEP/MNEP 85 & 86 (2014) DEF STAN 59-411:2014 (EMC) IACs E10:2014 (MarED) type tested IP65 (In operation) IP67 (In storage) CE marked (RoHS)
Dimensions (W, H, D)	240mm x 198mm x 127mm
Weight	2kg with batteries installed

SUB MK3P

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SUB MKIIIF

Atmosphere Monitoring System

The Sub Mk3P shares its technological heritage with a fixed analyser unit, the Analox Sub MkIIIF, which is used to monitor the atmosphere in submarine rescue vehicles and **surface decompression chambers.**

The Sub MkIIIF measures not only the levels of partial pressure oxygen (O₂) and partial pressure carbon dioxide (CO₂) but also the pressure, temperature and relative humidity of the environment.

The Sub MkIIIF control panel is mounted at atmospheric pressure in the pilot compartment or the chamber and it may be connected to up to three remote sensor modules (REMs) installed inside the hyperbaric/pressurised compartment.

One REM is designed to measure O₂, CO₂ and pressure, a second REM allows for measurements of temperature and relative humidity. These two units share many features and are intended to complement each other in a single-source monitoring solution for escape and rescue.

Additional Features

- Illuminated display providing an easy to read screen
- Can connect to 3 REM units allowing for a greater degree of flexibility
- Audio and visual alarms ensuring you are notified of a potential issue

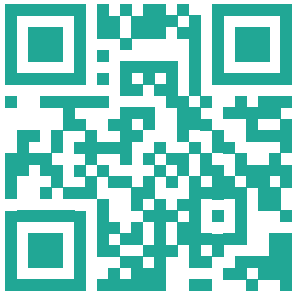


System Specification

System Specification	
Range CO2	0 to 20.00 mBar, 0 to 100.0 mBar
Range O2	0 to 1500 mBar pO2, 0 to 3000 mBar pO2
Range depth	0.50 to 10.00 BarA, 0.50 to 60.00 BarA
Range temperature	0 to +50°C
Range humidity	0 to 100% RH
Operating temp	0 to +50°C
Power options	12 to 30 VDC 110 to 230VAC (option)
Outputs	8 x 4 to 20mA channels Voltage outputs (0 to 10V) (option)
Alarms	1 alarm indicator for gas / environment alarms 1 fault indicator for communications, calibration and general system faults
Dimensions (W, H, D)	Operator Console: 260mm x 160mm x 90mm Sensor Modules 90mm x 140mm x 55mm
Data output	Real time data output on serial port for logging or display on external system

SUB MKIIF

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CUSTOM DESIGN SOLUTIONS

It's been said that no two submarines are exactly the same. Each individual boat has its own unique gas monitoring needs in order to achieve **efficient, effective and safe operations**.

While the entire Analox submarine line provides effective solutions to submarine needs, occasionally there are unique and specialised requirements that arise. To address this, **Analox has a complete custom design and development team available**.

The dedicated Analox team will **guide you through the consultation process**, and take the time to fully understand your needs, challenges and your application.

From there, we will compile a detailed proposal outlining our product suggestions, including **schematics, drawings, technical specifications, pricing and timescales for your approval**.

Your project manager will be on hand throughout the process to answer any questions or concerns and will provide you with regular updates, photos, videos and technical information.

As part of the custom build service Analox also offers:

- Factory acceptance tests (FAT)
- Commissioning
- Sea acceptance tests (SAT)
- User/operator training
- Maintenance training
- Through-life support packages

A submarine is shown on the surface of the ocean, moving from left to right. The submarine's conning tower and various masts are visible. The water is dark with white foam from the wake. The sky is overcast. A large, semi-transparent dark grey rectangle is overlaid on the left side of the image, containing white text. On the right side, the text 'CUSTOM DESIGN SOLUTIONS' is written vertically in white. The BAE Systems logo is on the right side of the quote box. The background image is a photograph of a submarine on the water.

*‘We need products
on time and of high
quality. I have
confidence in Analox
and trust that they will
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Paul Bellis-Jones
BAE Systems Marine

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