

XR1403

The integrated CBRN XR mask



PATENT PENDING

In an era of evolving threats, preparedness is paramount. **Traditional training methods** for Chemical, Biological, Radiological, and Nuclear (CBRN) response have limitations. They are often costly, logistically complex, and carry inherent risks. **Our XR modules revolutionize how we prepare first responders and specialized teams.**

WHY XR1403

is the future of CBRN training

The system is designed to provide immersive training experiences in hazardous environments, while maintaining the physical structure and operational realism of a true CBRN mask. It ensures both tactical immersion and realistic physiological engagement, significantly enhancing training efficacy while preserving safety and comfort.



TECHNICAL SPECIFICATIONS



Mask Platform

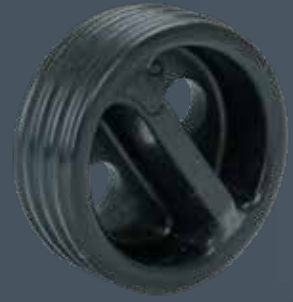
Base model: SGE400/3 full-face CBRN mask

Face seal: Medical-grade silicone, size ML (SM on request)

Filter ports: 3×NATO 40mm DIN (live filters compatible)

Strapping: 6-point NBR head harness+neck retention strap

Internal airflow: 2 one-way valves, original oronasal cup



NG-9 plug

Breathing Simulation

- NG-9 inlet plug with calibrated apertures delivers realistic breathing resistance without compromising comfort.
- Swap the plug for live filters when desired.

VR Integration

Headset: MetaQuest3 (other headsets on request)

Mount: Custom, light-tight frame embedded in visor

Detachment: Magnetic quick-release system (3–4kg pull)

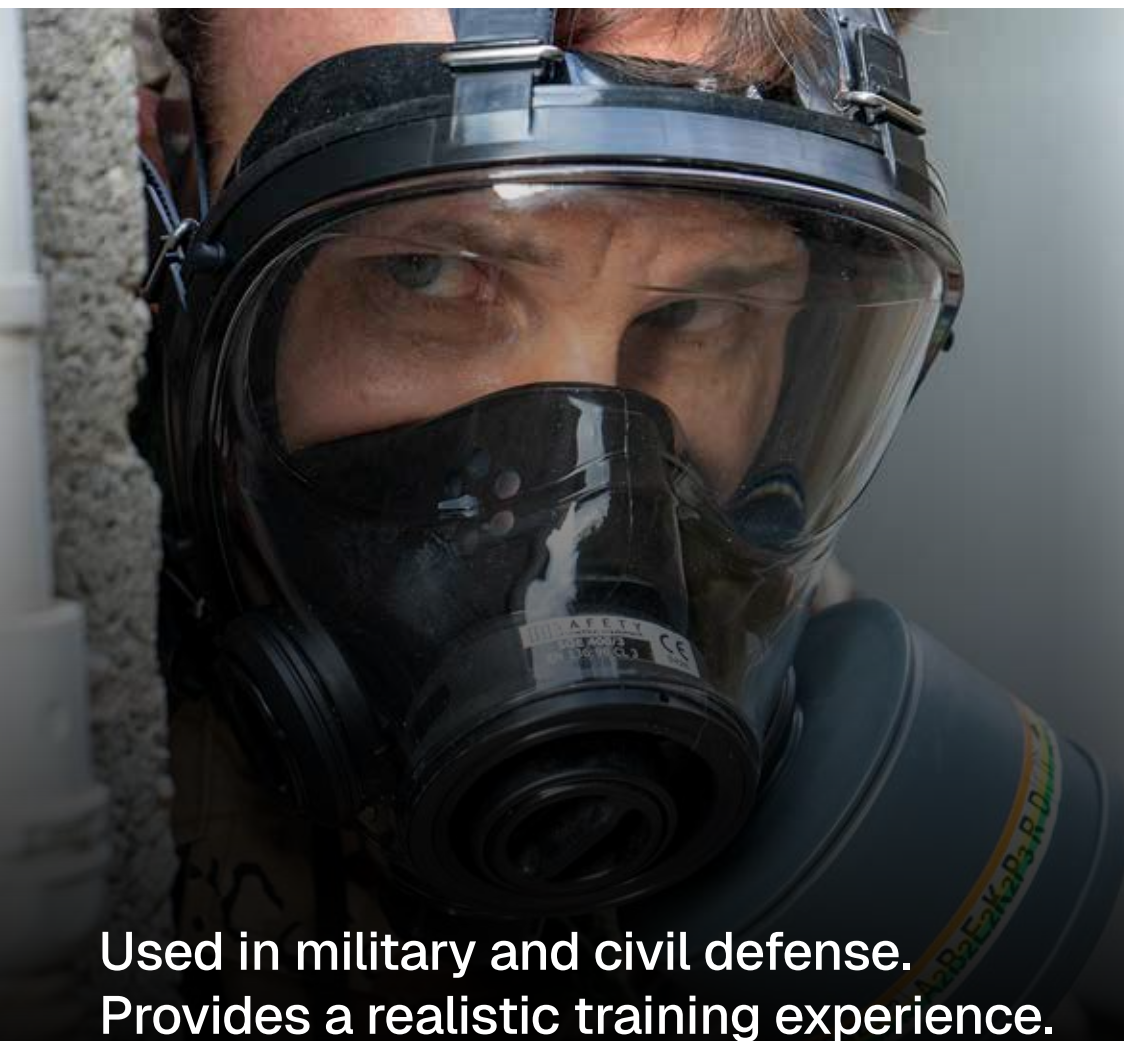


Authentic form & feel

The XR1403 system is based on the globally recognized SGE 400/3 platform.



- Soft silicone face seal for long-lasting comfort
- Soft silicone closure system with 6 straps
- Air circulation system to prevent fogging



Used in military and civil defense.
Provides a realistic training experience.



Seamless XR Integration



Custom magnetic mount allows for quick, secure attachment/detachment of the Meta Quest 3 = ability to enter and exit the simulation seemingly. The VR headset is not permanently modified in any way.

WHAT'S INCLUDED



Storage Case

High-impact resistant storage case with custom foam layout for shock absorption



Mask & VR

Mask with integrated frame (pre-mounted)



Accessories

Disassembled VR headset components

- original head strap
- outer frame
- hand controllers



Plug

NG-9 plug for breathing simulation







SAFETY DISCLAIMER

Training tool only - not PPE

The mask has been specifically modified to accommodate the XR visor and **must not be considered a certified PPE.**

It offers no protection against chemical agents or harmful substances and must never be used in environments with actual risk.

Training tool only – not PPE.

XR TRAINING ECOSYSTEM

The XR1403 mask is part of a wider XR training ecosystem developed to cover different operational needs – from individual procedural training to full-scale immersive exercises.

Our four systems provide scalable, flexible, and highly realistic training opportunities:

1

Standalone VR Training Tool

- **Runs directly on the headset (no PC required).**
- **Simple, portable, designed for both single-user and multiplayer sessions.**
- **Pre-loaded scenarios such as:**
 1. Underground Clandestine Laboratory – A reconnaissance mission in a chemical facility revealing a hidden lab.
 2. Decontamination Module – Practice complex life-saving decontamination procedures in a safe, repeatable environment.
 3. VHP Decontamination Module – digital replica of a VHP module for decontamination of electronic devices
- **Integrated evaluation checklists for performance review.**

INCLUDED!



SCENARIO 1.

Underground Clandestine Laboratory

Our flagship scenario immerses a Exploitation and Reconnaissance Team into a high-stakes investigation. What begins as a routine inspection of a legal chemical production facility quickly unravels to reveal a sophisticated, clandestine laboratory hidden in the basement.

SCENARIO 2.

Decontamination Module

Complementing our reconnaissance scenario, this module focuses on one of the most critical and difficult phases of any CBRN operation: decontamination. This simulation allows teams to practice complex, life-saving procedures in a controlled, repeatable virtual setting.

SCENARIO 3.

VHP Decontamination Module

Digital replica of a VHP module for decontamination of electronic devices

2

Immersive Large-Scale XR Training (ADVANCED TRAINING SCENARIOS)

- Indoor & outdoor training over a Mixed Reality large area of ~1 km².
- Supports up to 20 trainees simultaneously.
- Real-time Outdoor GPS Tracking/Indoor tracking of participants.
- Trainer can adjust scenario live (e.g., inject wind, rain, contamination).
- Different scenarios, chemical, biological and nuclear for test and train first responders approach.
- Suitable for both procedural drills and experiential “free-play” training.
- Weather condition simulator and extensive CBRN asset library.
- Instructor station to set-up scenario and to monitor users activities
- Advanced avatars interactions

3

Horizontal Assets

- XR1403 Integrated Mask – First operational CBRN mask adapted to XR training.
- XR Training Vehicle – Mobile unit to launch, monitor, and evaluate sessions in the field.

AI in XR Training

AI applications embedded in our XR systems add a new level of realism and efficiency:

- AI-powered NPCs – Human-like responses and non-linear interactions.
- Behavioral analysis – Monitor decision-making and task performance.
- Automated evaluation – Trainers focus on coaching while AI manages performance data.

TRAIN SMARTER. PROTECT BETTER.

Our XR ecosystem provides:

- Safe and repeatable training without exposure to real threats.
- Scalable solutions from individual drills to full-scale immersive exercises.
- Cost reduction compared to traditional training logistics.
- European technology, validated in NATO DIANA Test Centres.







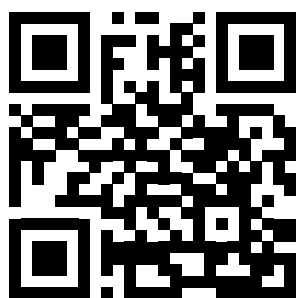
CONTACT US

for more information and demo requests

info@oceanreefgroup.com



XR1403 Landing page



Safety protection equipment





TRAIN SMARTER,
PROTECT BETTER.