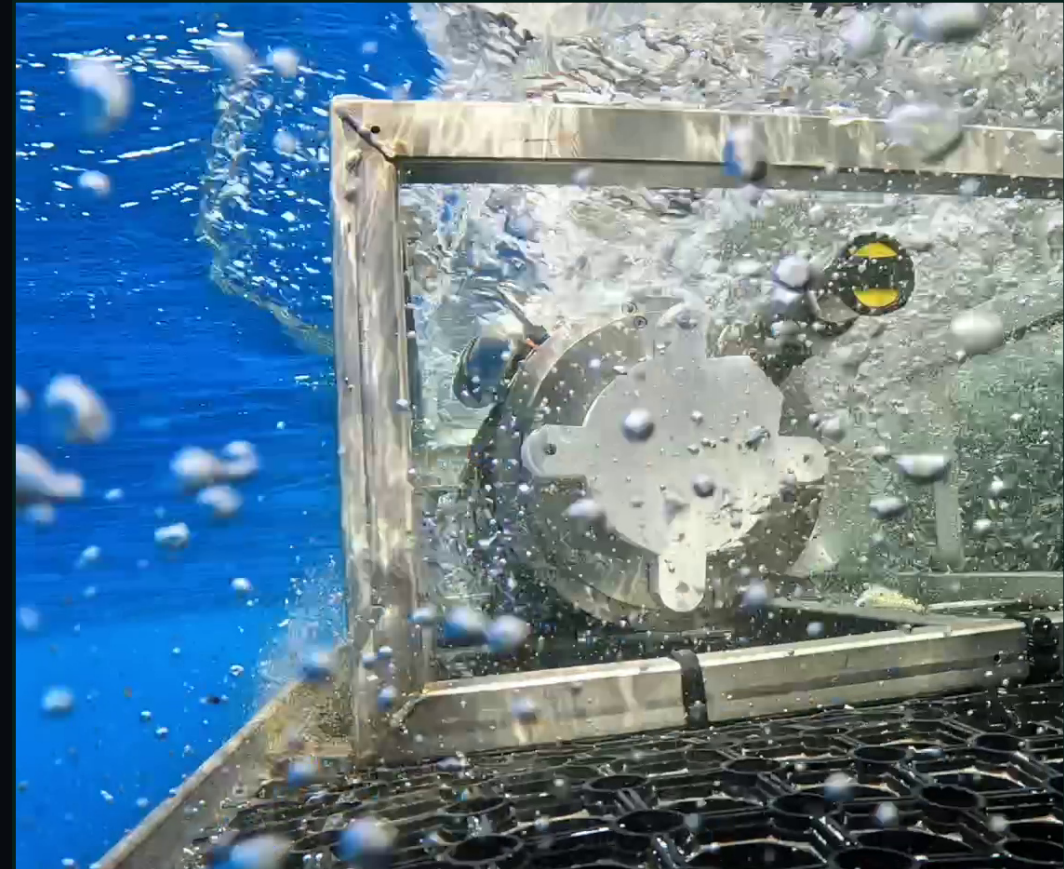


FAST LARGE-SCALE DISSOLVED GAS MAPPING

CH_4 $\delta^{13}\text{C}-\text{CH}_4$ N_2O

- Water column profiling in minutes
- Kilometer-scale surveys in hours
- Thermogenic / biogenic source attribution



30-second
response time

In situ isotopy
 $\delta^{13}\text{C}-\text{CH}_4$ ratio



PERFORMANCE & SPECIFICATIONS

Two very fast instruments for complementary applications – **SUBO-XL** for trace detection and isotopic analysis, **SUBO-LIGHT** for wide dynamic range. Both based on Membrane Inlet Laser Spectrometry (MILS), combining membrane gas extraction and laser spectroscopy for fast in situ detection.

COMMON SPECIFICATIONS

30 seconds
RESPONSE TIME

1 Hz
MEAS. FREQUENCY

1,000 m
DEPTH RATING

-2 to 35 °C
WATER TEMPERATURE

10 hours
BATTERY AUTONOMY

STANDALONE/REMOTE
OPERATION

INSTRUMENT CONFIGURATIONS

SUBO-XL

FAST · TRACE DETECTION · ISOTOPIC ANALYSIS

CH₄ **δ¹³C-CH₄** **C₂H₆**

CH₄ + N₂O configuration available on request

RANGE

CH₄
0–1,000 ppm (1.4 µM)

C₂H₆
0–400 ppm (0.7 µM)

LOD

CH₄
0.03 ppm (0.05 nM)

C₂H₆
0.1 ppm (0.2 nM)

ACCURACY

± 5% CH₄/C₂H₆
± 6‰ δ¹³C at 5°C (CH₄ range: 2–1,000 ppm)

L 900 mm · ø 190 mm

3 kg in water · 27 kg in air

SUBO-LIGHT

AVAILABLE 2027

FAST · WIDE DYNAMIC RANGE · SINGLE OR DUAL GAS

CH₄ **N₂O**

CO₂ or NH₃ configurations available on request

RANGE

CH₄
0–30 %

N₂O
0–0.3 %

LOD

CH₄
0.5 ppm

N₂O
0.1 ppm

ACCURACY

± 5% CH₄/N₂O

L 660 mm · ø 190 mm

3 kg in water · 21 kg in air