

Update AUV after 12 months testing

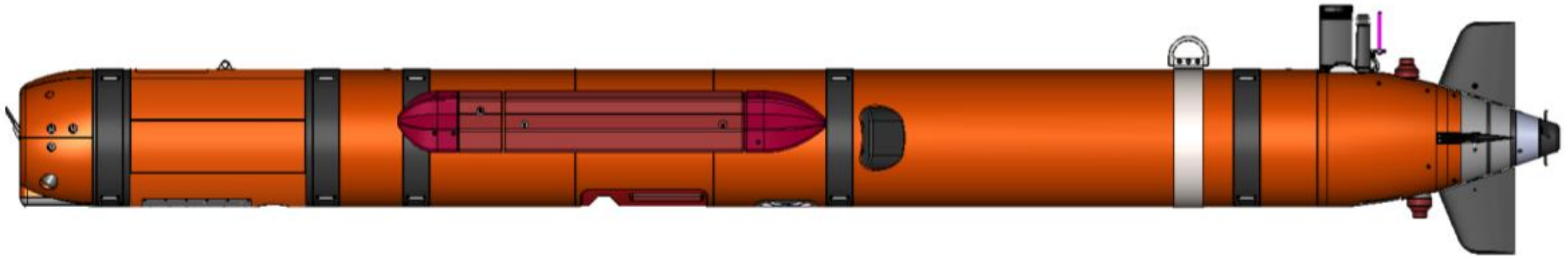


min+



AUV - Autonomous Underwater Vehicle

Munin+



Tekniske data

Length: 5.4 meter

Weight: 870 kg

Depth rating: 1500 meter

Survey speed: 3-4 knot

Battery capacity: 19.8 kWh, >24
hrs @ 3 knot

Charging time: 2 timer (0-90%)

Payload sensors

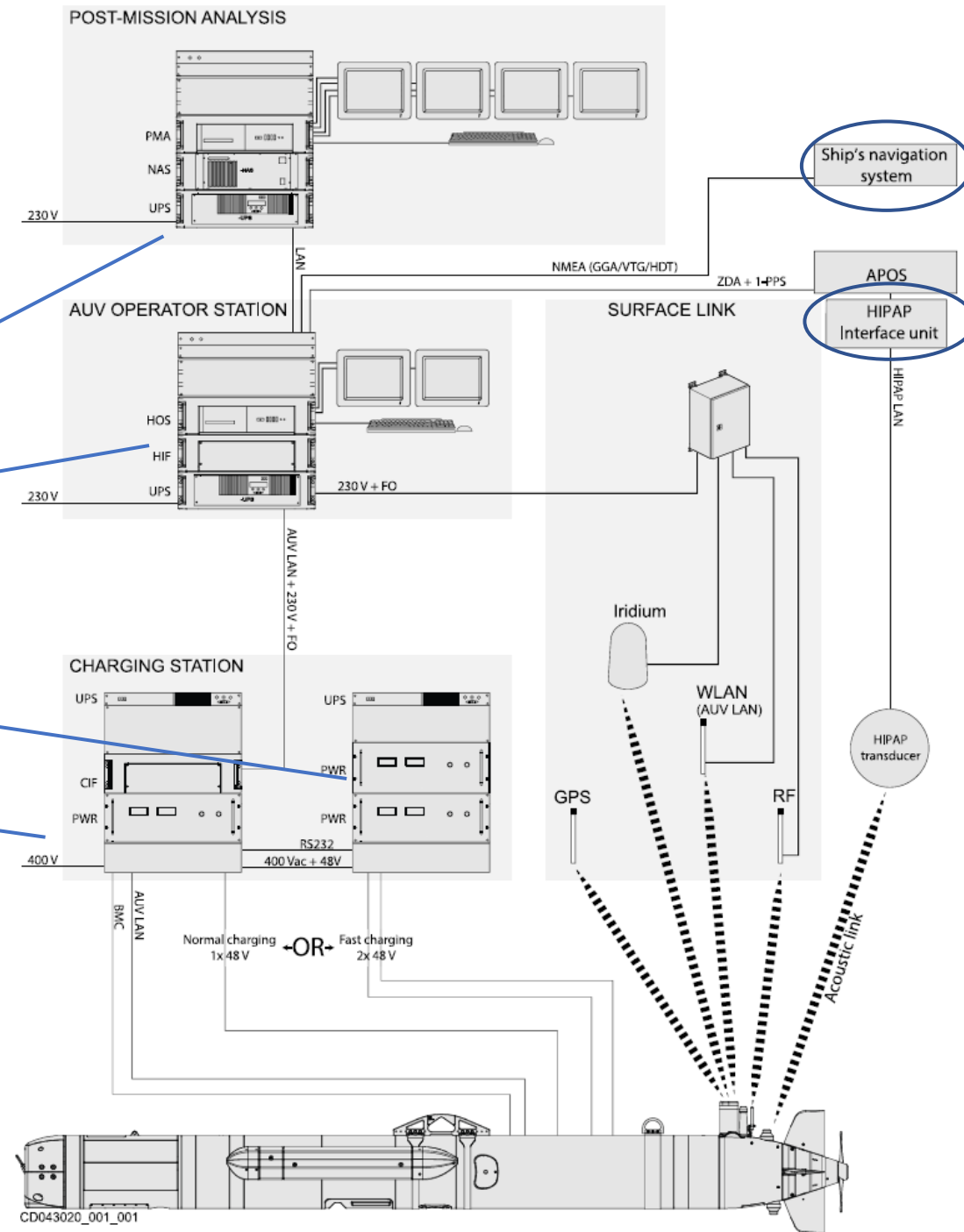
- EM2040M – multibeam
- HISAS 2040 – High
Interferometrisk Syntetisk
Aperture Sonar
- Edgetech Sub-Bottom Profier
(SBP)
- Cathx Ocean still picture camera



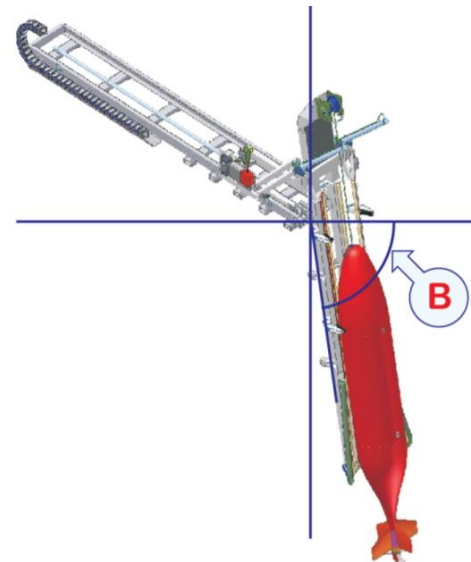
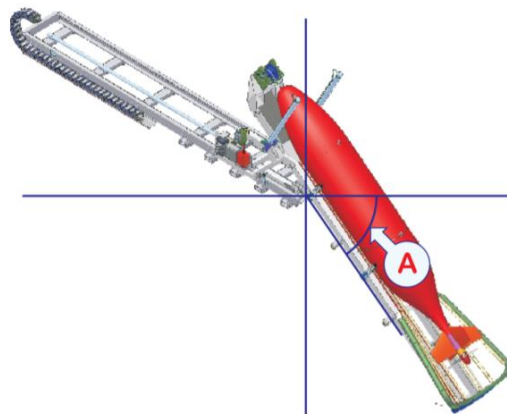
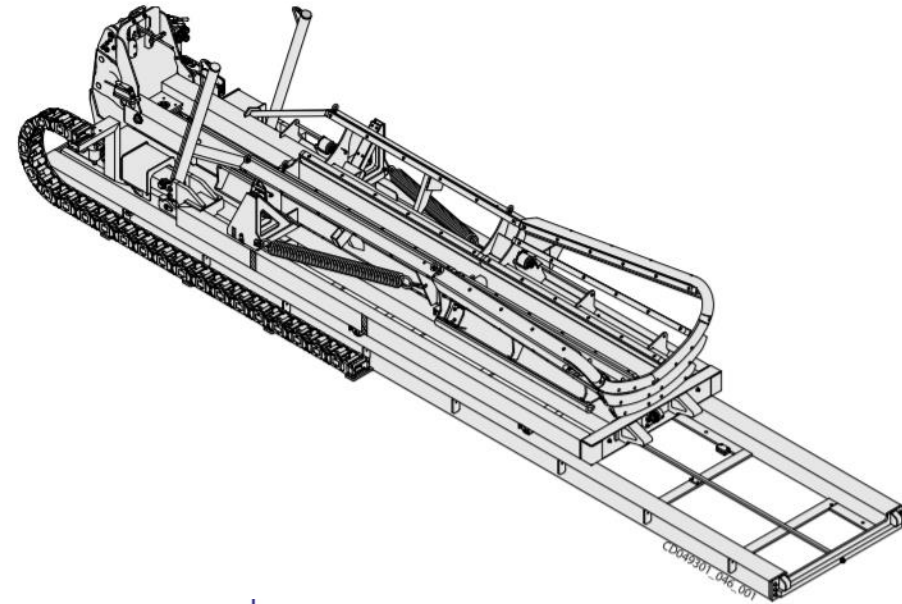
Munin+ Top side rack



Control container



Stinger for launch and recovery



Stinger launch/recovery



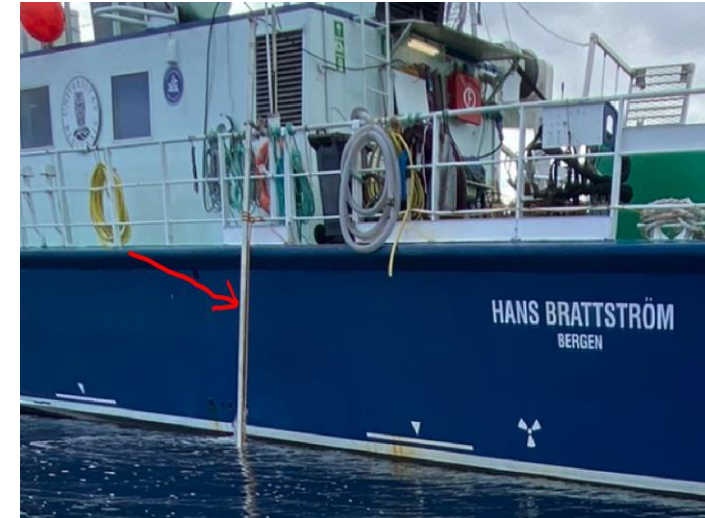
Kran launch/recovery

Use of crane require rel. good weather.



Status pr. June 2023

- 2 AUVs delivered autumn 2021.
- Since the hipap was not hull mounted we could not go with hipap out, because the rod would vibrate. Then the positions data sent to AUV would not be good.
- Problems with false bottom caused the craft to drop weights and go to surface when we did not have bottom detections with DVL. We also had problems getting the AUV to dive by itself when the sea was flat. The problem was when it was going to dive, it lost speed when there was no water on the propeller. To solve that we had to change how the AUV start diving.



Status pr. June 2023



- Pr. today we had 8 cruises. The last cruise was to about 1300m and worked fine.
- Still some problems with diving and balancing the weight when operation in the fjords with variations in salinity. When return to surface it sometimes stop at 1m and we loose connection with HIPAP and do not get radio contact due to antennas under water. We are working on tuning the weights for different salinity.
- Long delivery time on spareparts.
- To use the AUV on different vessels in our fleet has caused challenges with the various instruments connected. The performance is much more stable using the same vessel on several cruises.
- Recommend 3 AUV technicians pr. 12 hrs shift.

