

HiCAP Lander

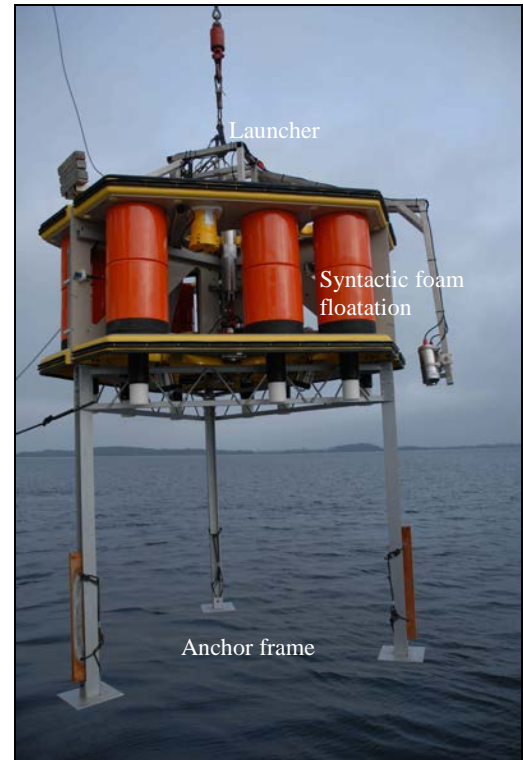
The HiCAP Lander (High Capacity and Payload) is part of the modular multidisciplinary sea-floor observatory MoLab and was designed and manufactured as Masterlander for the GEOMAR in Kiel.

MoLab is an integrated system of different instruments that are able to measure biological, physical, chemical or geological parameters over a time of several months and a range of several square meters at the sea floor.

With 5,4m² base area and a height of 3,60m (with anchor frame) the HiCAP Lander is utmost suitable for operations with much need of space.

A further distinctive feature of the HiCAP Lander is the robust syntactic foam floatation instead of glass spheres rather fragile. This has the advantage of easier handling and also riskless operation of ROVs and AUVs in direct proximity to the Lander.

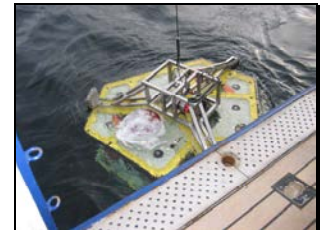
You can vary quantity and size of the floatation units in a broad range. The maximum payload is at 400kg (in water) in depths of up to 6000m and more.



Deployment is effected with the Launcher.

Ballasted through the anchor weight the Lander descends to the sea floor.

For recovery an integrated releaser separates the anchor frame from the main segment.



Two other redundant systems are also available for the release: a second equal releaser or a manual release to be operated by a ROV.

For transport purposes you can demount the HiCAP Lander in three segments of the same size that suit for storage in containers.



K.U.M. Umwelt- und Meerestechnik Kiel GmbH

Wischhofstr. 1-3, Geb. 15, 24148 Kiel – Germany
Sitz der Gesellschaft / Registered Office: Kiel
Amtsgericht Kiel / Local Court Kiel, HRB 4773
Steuernummer / Tax No.: 20 291 07200

Geschäftsführer / General Manager: Thomas Kumbier – Uwe Arndt
USt-IdNr. / VAT No.: DE 812362272
Bankverbindung / Bank details: Förde Sparkasse
IBAN: DE39 2105 0170 0012 0028 20 – BIC: NOLADE21KIE

HiCAP Lander

Technical Data

Operation depth:	6000m
Base area:	5,4m ²
Height with anchor frame:	3,60m
Total weight with Launcher:	appr. 2t
Max. Payload:	400kg (in water)
Material:	GFK and PP Anchor frame: steel
Flootation:	Syntactic foam; quantity and sizes variable
Localization:	Radio beacon and flasher
Instruments / examples:	Sediment Trap CTD System ADCP Acoustic Doppler Current Profiler Remote Transducer / Modem Telemetry Camera...



Bottom view