The titanium frame **LOBSTER (Longterm OBS for Tsunami and Earthquake Research)** is a Broadband-OBS-System.
It is the instrument carrier for broadband seismometer, recorder, releaser and batteries each in a titanium pressure tube as well as for float units made of syntactic foam, hydrophone, flasher, radio beacon and signal flag.

Due to the utmost simple design of the OBS-System it is easy to handle and offers multiple modification potentialities. The single components are quickly mounted / demounted; this also save space during transport and storing.

**LOBSTER** is available in two versions: for operation in up to 6000m depth (LOBSTER-6000, orange) and for up to 7300m depth (LOBSTER-ultra-deep, yellow).

Anchor and float are asymmetrically designed: the OBS ascends to the water surface in upright position whereas it descends to the seafloor and stays there for data recording in horizontal position.

LOBSTER-6000 can be deployed for a long or short period. In the latter case both battery tube and the 4 smallest external float disks are taken away. You only have to install shorter titanium bars for the float units – this is quickly done!

Features:
* modular system: easy and quick mounting, demounting, adjustment + float units can be added or removed acc. to requirements
* stabiliy and shock resistance ensured through syntactic foam and shock protection
* pressure tubes and frame are made from high quality titanium (less weight + corrosion resistance)
* due to the flat design important noise reduction at the seafloor even if the current is strong
* simplified handling on deck and deployment with the crane due to the titanium hook
* system modifications at will
OBS-System LOBSTER

Technical Data

Size / longterm / 6000m:
length: 1650mm (2800mm with flag)
width: 1300mm
height: 720mm

Size / short term / 6000m & 7300m:
length: 1650mm (2800mm mit Fahne)
width: 1070mm
height: 720mm

Weight / longterm:
LOBSTER-frame equipped for 14 months with 1 pressure tube (without anchor)
weight / air: ~300kg; weight / water: ~-30kg
LOBSTER-frame equipped for 36 months with 2 pressure tubes (without anchor)
weight / air: ~335kg; weight / water: ~-30kg

Frame:
titanium, flexible

Operation depth:
6000m / 7300m

Power supply:
Alkaline- or Lithium- battery packs
ex. 260 days operation with 228 Alkaline-cells
36 months operation with 228 Lithium-cells

Recorder:
Seismic Datalogger „6D6“

Releaser:
K/MT 562 KUMQuat, titanium

Hydrophone:
HTI-04-PCA/ULF

Seismometer:
Broadband Seismometer Nanometrics „Trillium Compact“
in titanium pressure tube

Positioning:
radio beacon, flasher, signal flag

Anchor:
steel anchor

Float / Longterm / 6000m:
8 disks syntactic foam
Float / Short term / 6000m:
4 disks syntactic foam
Float / Short term / 7300m:
4 disks syntactic foam

In the course of permanent further development of the OBS-System LOBSTER modifications are subject to change without prior notice.