Sediment Echo Sounder (Parasound P70)

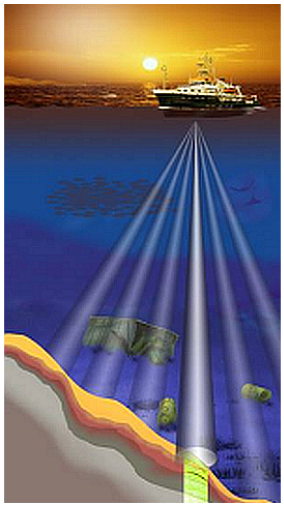
Attention:

Please note that operations of the Sediment Echo Sounder Atlas Parasound P70 requires experienced scientific staff on board for permanent supervision of data aquisition and storage. The system is not operated by the ship's crew. Announce operations with the Sediment Echo Sounder Atlas Parasound P70 to AWI-Logistics prior to the cruise and clarify the data transfer after the cruise.

Summary

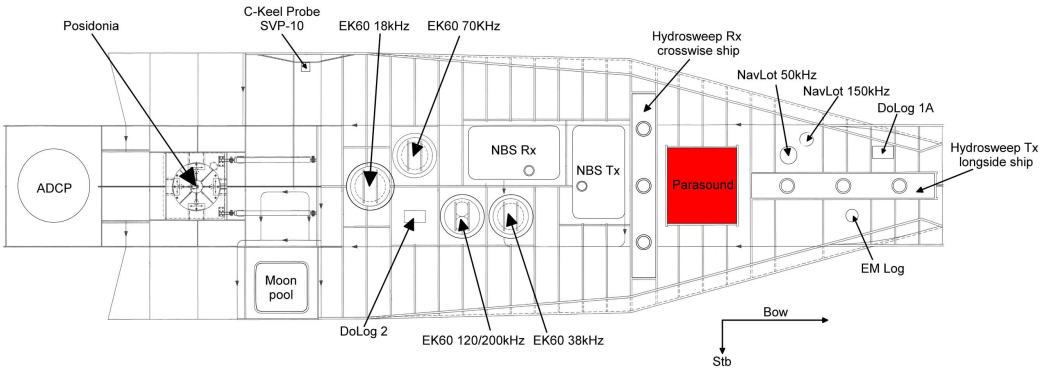
The Sediment Echo Sounder surveys the upper layers of the seafloor via the reflection of acoustic signals. Depending upon the reflectivity of the sediments penetration depths of about 200m can be reached.

Manufacturer	Teledyne RESON (ATLAS Hydrographic before takeover)
Model	Parasound P70
Serial No.	n/a
Type	echo sounder
REGISTRY-Link	REGISTRY (1392)



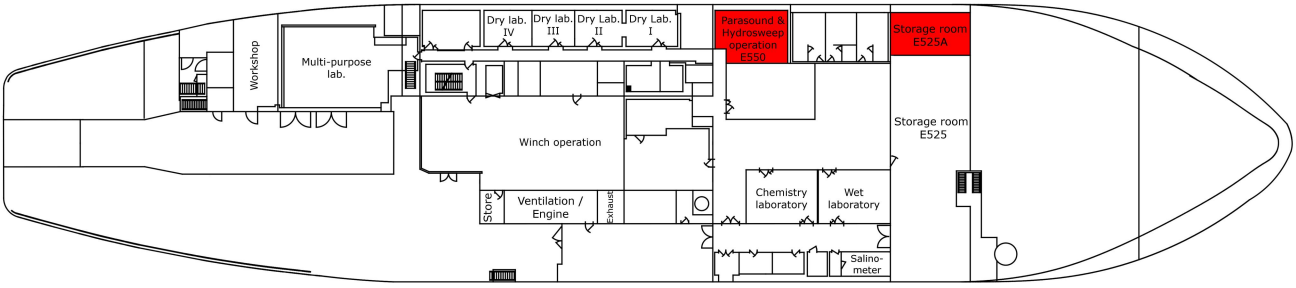
Parasound electronics

Position of Devices in Polarsterns box keel



schematic drawing of Polarstern deck E

location of storage room E525A (GAPS, Posidonia, Parasound and Hydrosweep electronics) and room E550 for Parasound and Hydrosweep operation



Transducer Frequency

Contacts

Name	Institution	Role
Catalina Gebhardt	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Principal Investigator
Alfred Wegener Institute for Polar and Marine Research	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Owner

Components

Position

Info	xyz-position calculated from Alignment Survey Report (2016), transducer array located in box keel, electronics located in E525A, computers located in E550 (HSPS room)
X	76.498 m (X-0 is at the center of der rudder (ref. design drawing of the vessel), positive X-axis is forward and along vessel centerline)
Y	0.004 m (Y-0 at centerline, positive Y-axis is portside)
Z	0.0 m (Z-0 is set to the lowest point of the keel, positive Z-axis is upwards)

Data logging, storage and archiving

Logged parameters

Parameter	O2ARegistry Output Type	Unit
depth	depth	m

Central geographical ship's position and time standard

Rawdata storage on board

Dship

Data archiving on land

Documentation

- ParaSound datasheet (Factsheet, 1 MB)