

Dual Axis Doppler Log (DO-Log)



Attention:

The Doppler Log (DO-Log) is part of nautical equipment. The operation belongs to the bridge only.

The new DO-Log system was installed in December 2017.

Summary

The Doppler log measures speed through water by using the Doppler effect of sound signal reflected from the seafloor or from suspended matter in the water column. Two transducer are installed in the ships keel and can be alternatively used. Hydroacoustic frequency amounts to 270 kHz.

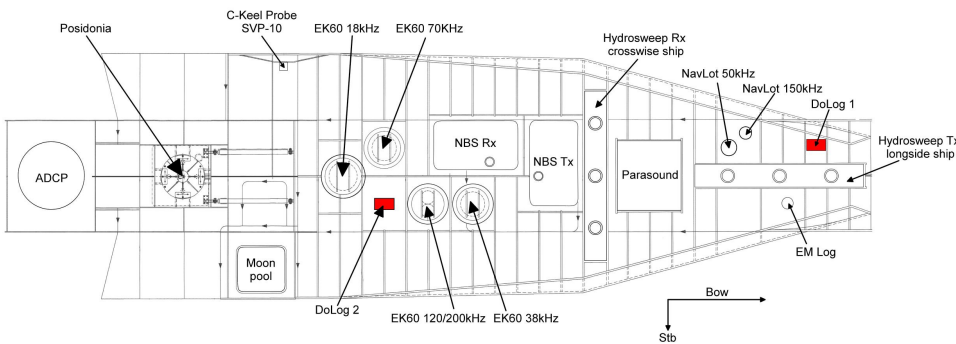
| | |
|---------------|--|
| Manufacturer | Skipper Electronics A/S |
| Model | DL850 |
| Serial No. | Transducer 1 S/N: 17889, Transducer 2 S/N: 17895 |
| Type | speed log |
| REGISTRY-Link | REGISTRY (626) |

DL850 System Components



DL850 270kHz transducer

Position of Devices in Polarsterns box keel



Transducer Frequency:

Contacts

| Name | Institution | Role |
|-----------------|-------------|--------------------|
| Reederei Laeisz | F. Laeisz | Engineer In Charge |

Components

Subdevices

| Name | Model | Serial Number | REGISTRY-Link |
|---------------------|-------|---------------|---------------------------------|
| DOLOG_1A transducer | DOLOG | n/a | REGISTRY (1442) |
| DOLOG_1B transducer | DOLOG | n/a | REGISTRY (1443) |
| DOLOG_2 transducer | DOLOG | n/a | REGISTRY (1444) |

Position

| | |
|-------------|---|
| Info | xyz-position calculated from Alignment Survey Report RV Polarstern (June 2016), transducer located in box keel, electronics located on F-deck room F632 |
| X | 69.366 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 | 0.415 m (Y-0 at centerline, positive Y-axis is portside) |
| Z | 0.014 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 |
|--------------------------|-------------------------|------|
| speed bottomtrack across | speed | knot |
| speed bottomtrack ahead | speed | knot |
| speed watertrack across | speed | knot |
| speed watertrack ahead | speed | knot |

Central geographical ship's position and time standard

Rawdata storage on board

Dship

Data archiving on land

Documentation

- [DoLog DL850 Brochure \(Factsheet, 982 kB\)](#)
- [Doppler Log DL850 manual \(User Manual, 11 MB\)](#)