

SENSOR metadata system

SENSOR aims to create an authoritative repository for managing platform, device and sensor-related metadata information.

SENSOR is based on the OGC standard SensorML (and device descriptions are downloadable in XML or JSON format). SENSOR also provides an API to export (and import) data programmatically. Due to the improved internet connectivity there is only one SENSOR instance available online via <https://sensor.awi.de/>

Data Contacts

Every group has assigned chief editors for their devices. They are your first contacts concerning SENSOR related questions. You find them here:

[Chief Editors](#)

PLEASE NOTE:

- **All scientific instruments and sampling devices used on the expedition must be registered in SENSOR!**
- SENSOR can be accessed via <https://sensor.awi.de/>
- This is where you may work on while being on the ship, if network connection allows.
- **It is therefore highly recommended to enter all specifications before the expedition as internet connectivity is not always guaranteed**
- If network connection fails and you have urgent needs to make changes to your devices you may contact the data supporter. The same applies if you have to make the changes to a lot of devices.

Metadata registered in SENSOR include the following:

- general (overview) information such as unique short names, serial numbers, short description etc.
- Properties: used for quality checks
- Contacts with different roles e.g. Editor, Owner, Principal Investigator.
- Actions: Deployment, Recovery, ...
- Resources: fact sheets, manuals, SOPs
- Parameters: measurement parameters with parameter types. Parameter types follow NERC vocabulary and are now matched to PANGAEA parameter types
- Subdevices: devices attached to the device



IMPORTANT!!!

- **ONLY** devices which are set to '**Public**' and have the contact '**polarstern dship**' with the role '**dship connector**' will be accessible via the [DShip Actionlog \(*\)](#).
- Device operations entered in the [DShip Actionlog \(*\)](#) will appear under 'Actions' in SENSOR. Still, choice of available actions types is limited in SENSOR and therefore several action types in DShip are associated with the same action type in SENSOR.

You will find the extensive manual here: [SENSOR manual](#)

Overview

https://sensor.awi.de/?urn=vessel:polarstern:ctd_watersampler

Platform-Type: Vessel
Platform: RV Polarstern
Device: CTD Watersampler

Subdevices

Altimeter
Lowered Acoustic Doppler Current Profiler
SBE32 water sampler
SBE3plus temperature sensor
SBE4 conductivity sensor
SBE43 oxygen sensor
Transmissiometer

Parameters

conductivity
temperature
altimeter
transmission
oxygen
pressure
fluorescence

Overview

Long and short names
Manufacturer
Model-Nr.



Properties

- used for quality checks: e.g. Water temperature min/max values

Contact

Owner: AWI
Editor: Peter Gerchow
Engineer in Charge: Marius Hirsekorn
Principal Investigator: ...
Data Scientist: ...
Data Provider: ...

Resources

- factsheets
- calibration certificates
- manuals

Actions

Deployment
Recovery

* only onboard