

REGISTRY (formerly known as SENSOR)

The screenshot shows the AWI Registry web application. The top navigation bar includes the AWI logo, a home icon, a 'Browse' button, a search bar with the text 'temperature', and a 'LOGIN' button. The left sidebar contains a hierarchical menu with categories like 'Parent Device Type', 'Subdevice Type', 'Parameters', 'Action type', and 'Action', each with a list of items and counts. The main content area displays a table of search results for 'temperature'. The table has columns for 'Info', 'Long Name', 'Short Name', 'URN', 'Item State', and 'Tools'. It lists various temperature sensors and their associated metadata. At the bottom of the table, it says 'Showing 1 to 15 of 1517 entries' and there is a pagination control showing page 1 of 101.

Info	Long Name	Short Name	URN	Item State	Tools
1	Temperature, Water	SBE38	vessel:heincke:tsg:sbe38	public	↑
1	Conductivity-Temperature-Depth Probe	underway_ctd_240	vessel:polarstern:underway_ctd_240	public	↑
1	temperature sensor	107er_071cm	station:bayelva:cr1000_soil09:107er_071cm	public	↑
1	Air temperature and relative humidity	HMP	laboratory:mcan2018:majcs:hmp	public	↑
1	Humidity and Temperature Sensor HMT333	HMT333	aircraft:polar5:hmt333	public	↑
1	ibutton temperature	Dart_Temps_18	pack_ice:ice_ps:dart_temps_18	public	↑
1	ibutton temperature	Dart_Temps_19	pack_ice:ice_ps:dart_temps_19	public	↑
1	ibutton temperature	Dart_Temps_20	pack_ice:ice_ps:dart_temps_20	public	↑
1	ibutton temperature	Dart_Temps_6	pack_ice:ice_ps:dart_temps_6	public	↑
1	Infrared temperature	ts_3285_UCB	pack_ice:ice_ps:flux_tower_12m_ucb:ts_3285_ucb	public	↑
1	Temperature Sensor No 1 with Magnet for Logger DK 312 No 3	T_Sensor_DK312_HSVA_3_1	vessel:polarstern:logger_dk312_hsva_3_1:sensor_dk312_hsva_3_1	public	↑
1	bottom temperature recorder	Tpop_60	mooring:tpop_60	public	↑
1	bottom temperature recorder	Tpop_67	mooring:tpop_67	public	↑
1	bottom temperature recorder	Tpop_72	mooring:tpop_72	public	↑
1	bottom temperature recorder	Tpop_57	mooring:tpop_57	public	↑

Related Links

- REST services <https://registry.awi.de/api/>
- SensorML output <https://registry.awi.de/rest/sensors/device/getDeviceAsSensorML/625> (example for ID 625)
- JSON output including children: <https://registry.awi.de/rest/sensors/device/getDetailedItem/458?includeChildren=true> (example for ID 458)
- Videos <https://www.youtube.com/channel/UCijKBoLBjQy8XASA3QKrRx/>

REGISTRY.awi.de aims to create an authoritative repository for managing platform, device and sensor-related information. It was launched in August 2016 and it will be continuously improved in the form of bi-annual release packages. It supports:

- Autocompletion of **station metadata** (required under "Actions") for all **large and medium-sized german research vessels** (Polarstern, Sonne, Meteor, Alkor, Heincke, Merian and Poseidon) using PANGAEA expedition catalogue
- Metadata **versioning** including minting of **PIDs** for individual versions along with **citation**. Example: <https://hdl.handle.net/10013/sensor.7bdbc478-a4c9-4eb9-917d-9a89ee098774#subItemID=625&subItemEventID=3634>
- **Provenance metadata** for repositories as **good-scientific practice**. Example: <https://doi.pangaea.de/10.1594/PANGAEA.857507> links dataset in PANGAEA to sensor description, under event information <https://hdl.handle.net/10013/sensor.664525cf-45b9-4969-bb88-91a1c5e97a5b>
- Management and discovery of standard **sensor-specific** information (e.g. manufacturer information, inventory number, history of actions, precision, photos, etc),
- Management and discovery of **data-specific** information (calibration reports, physical characterization of individual sensors, etc),
- Management of **parameter properties** that trigger the [automatic quality flagging](#)
- Management of specification for **automatic data transfer** and ingest
- Bookkeeping of **ownership/affiliation** of devices
- **Machine-friendly** access to metadata. Example: OGC compliant output standards,
- Sensor properties are used in machine-friendly **monitoring of data streams** in near real-time (see [DASHBOARD](#))
- **Re-use** in AWI-operated portals and various national and international service infrastructures. Example: <https://data.awi.de/?site=platforms>
- Use on board of **RV Polarstern** including **synchronization of DSHIP** action log with sensor actions

Recommended videos