

# List of all available item categories in [sensor.awi.de](http://sensor.awi.de) as of July 24, 2020

	Short Name	Long Name	ID	Description
1	acoustic_backscatter_sensor	acoustic backscatter sensor	269	Instrument that measures the amount of sound energy transmitted into the water column returned to the instrument.
2	acoustic_doppler_velocimeter	acoustic doppler velocimeter	248	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that make high frequency measurements of three-dimensional current velocity in order to determine the extent of turbulence within a water body.
3	aerosol_sampler	aerosol sampler	144	A device that collects a sample of aerosol (dry particles or liquid droplets) from the atmosphere.
4	air_data_computer	air data computer	514	
5	Air_sampler	Air sampler	361	A device that collects a sample of air from the atmosphere
6	Airgun_Seismic_Source	Airgun - Seismic Source	380	Air Gun as seismic source towed by a vessel in the ocean to generate a controlled seismic signal - one type of several seismic sources
7	airspeed_vector_system	airspeed vector system	485	
8	alkalinity_sensor	alkalinity sensor	250	
9	altimeter	altimeter	150	Instruments that measure their distance above a specified elevation such as the sea surface or the seabed. Classification includes acoustic and pressure-based instruments that are designed to provide platform z co-ordinate spatial coverage in the atmosphere or a water body. It excludes remote sensing instruments such as LIDAR and satellite radar altimeters designed to map surface elevation.
10	anemometer	anemometer	390	Windspeed Sensor
11	autoanalyser	autoanalyser	229	Autoanalyser
12	autonomous_surface_water_vehicle	autonomous surface water vehicle	518	A self-propelled vehicle operating on the sea surface with no human occupants.
13	autonomous_underwater_vehicle	autonomous underwater vehicle	136	Autonomous underwater vehicle
14	bathythermograph	bathythermograph	168	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temperature sensor package (MBT) or dropping a free falling disposable sensor (XBT).
15	battery_pack	battery pack	251	
16	benthic_incubation_chamber	benthic incubation chamber	166	A device that isolates a portion of seabed plus overlying water from its surroundings. Either returns the entire system to the surface or incorporates sampling devices and/or in-situ sensors.
17	benthos_sampler	benthos sampler	155	A net or sledge dragged across the seabed designed to sample benthic fauna.
18	Bottom_Net	Bottom Net	357	
19	bottom_pressure_recorder	bottom pressure recorder	263	
20	broadband_radiometer	broadband radiometer	393	
21	buoy	buoy	123	Buoy
22	camera	camera	465	
23	chamber_for_gas_sampling	chamber for gas sampling	441	
24	chirp	chirp	137	Chirp systems emit a swept-frequency signal, meaning that the transmitted signal is emitted over a period of time and over a set range of frequencies. This repeatable (transmitted) waveform can be varied in terms of pulse length, frequency bandwidth, and phase/amplitude. A matched filter, or correlation process, collapses the swept frequency modulated (FM) received signal into a pulse of short duration, maximizing the signal-to-noise-ratio. The reflected signal is received by a tuned transducer array that generates the outgoing acoustic energy. Chirps operate within a range of 400Hz - 24 kHz and are used for the first 20-30 metres of unconsolidated sediments.(sub bottom profiler)
25	Cloud_Condensation_Nuclei	Cloud Condensation Nuclei	377	<a href="http://vocab.nerc.ac.uk/collection/P04/current/G106/">http://vocab.nerc.ac.uk/collection/P04/current/G106/</a>
26	Cloud_Radar_System	Cloud Radar System	379	no further information
27	CO2_analyser	CO2 analyser	400	CO2 ANALYZERS
28	CO2_Sensor	CO2 Sensor	358	
29	combined_temperature_and_humidity_sensor	combined temperature and humidity sensor	463	

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	Short Name	Long Name	ID	Description
30	compass	compass	288	
31	conductivity_meter	conductivity meter	283	
32	Corer	Corer	355	
33	CTD	CTD	122	A package lowered and raised vertically from a surface platform, usually a ship, always carrying pressure, temperature and conductivity sensors. Additional optional sensors include fluorometers, transmissometers and radiometers. The package may also carry water bottles.
34	current_meter	current meter	140	Instrument that measures current speed and direction at a single depth.
35	current_profiler	current profiler	127	Instrument that measures current speed and direction at multiple predetermined depths simultaneously.
36	data_logger	data logger	462	
37	Differential_Optical_Absorption_Spectrometers	Differential Optical Absorption Spectrometers	375	
38	dissolved_oxygen_sensor	dissolved oxygen sensor	214	Dissolved Oxygen Sensor
39	distributed_temperature_sensor	distributed temperature sensor	464	
40	Dredge	Dredge	339	
41	Drifter	Drifter	340	
42	Drill	Drill	337	
43	echo_sounder	echo sounder	290	
44	Fish_Net	Fish Net	356	
45	fishing_gear	fishing gear	473	
46	float	float	351	A free-floating platform either on the surface of the water column or at a predetermined depth within the water column.
47	flowmeter	flowmeter	510	
48	fluorescence_Sensor	fluorescence Sensor	245	Fluorescence Sensor
49	fluorometer	fluorometer	152	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of electromagnetic radiation emitted into the water column.
50	flux_plate	flux plate	467	
51	frost_point_hygrometer	frost point hygrometer	417	
52	gas_analyzer	gas analyzer	469	
53	gas_chromatograph	gas chromatograph	399	Instruments separating gases, volatile substances or substances dissolved in a volatile solvent by transporting an inert gas through a column packed with a sorbent to a detector for assay.
54	glider	glider	135	Glider
55	GPS_receiver	GPS receiver	499	
56	Grab	Grab	338	
57	gravimeter	gravimeter	148	Instrument that makes measurements of the Earth's gravity field.
58	Heat_Flow_Probe	Heat Flow Probe	345	
59	humidity_sensor	humidity sensor	416	
60	Hydrophon	Hydrophon	365	Instrument for recording underwater sound.
61	inertial_measurement_unit	inertial measurement unit	481	
62	inertial_navigation_system	inertial navigation system	311	Systems that determine spatial position using high-accuracy inertial measurements plus input from other sensors such as doppler current sensors to determine platform 3-D location by interpolation between satellite network fixes.
63	infrared_gas_analyzer	infrared gas analyzer	383	Infrared Gas Analyzers
64	inverted_echosounder	inverted echosounder	231	Instruments that locate acoustic reflectors such as fronts in the water column by transmitting pulses of sound from the seabed and determining reflection return times.
65	Lander	Lander	336	
66	large_scale_facility	large scale facility	191	Large Scale Facility
67	laser_distance_meter	laser distance meter	497	

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	Short Name	Long Name	ID	Description
68	laser_scanner	laser scanner	498	
69	Launch_and_recovery_system_Depressor	Launch and recovery system Depressor	406	Launch and recovery system (LARS) Depressor
70	Light_Detection_And_Ranging	Light Detection And Ranging	374	Device for surveying method that measures distance to a target by illuminating target with laser light.
71	Light_Optics	Light_Optics	334	
72	magnaprobe	magnaprobe	517	
73	magnetic_snow_depth_sensor	magnetic snow depth sensor	493	The device should measure snow depth along transects or in grids as the observer walks or skis on the snow surface.
74	magnetometer	magnetometer	104	Instrument that makes measurements of the Earth's magnetic field.
75	mass_spectrometer	mass spectrometer	382	
76	meteorological_package	meteorological package	172	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressure, temperature and humidity.
77	methane_sensor	methane sensor	444	
78	Micro_Structure_Probe	Micro Structure Probe	346	
79	MicroCAT	MicroCAT	258	
80	microscope	microscope	427	
81	microstructure_sensor	microstructure sensor	268	Fast response sensors sampled at high frequency to determine the distribution of water body properties on a millimetric scale.
82	Microwave_Radiometer	Microwave Radiometer	373	
83	mooring	mooring	114	Mooring
84	motion_sensor	motion sensor	292	
85	multi_corer	multi corer	333	
86	multi_beam_echosounder	multi-beam echosounder	266	Instruments that measure water depth along several tracks parallel to the platform track by timing pulses of sound reflected on the seafloor.
87	multimeter	multimeter	279	
88	multiparameter_water_monitoring_probe	multiparameter water monitoring probe	495	<a href="https://en.eijkelkamp.com/products/sensors-monitoring_uk/multiparameter-ap-5000-set-uk.html">https://en.eijkelkamp.com/products/sensors-monitoring_uk/multiparameter-ap-5000-set-uk.html</a>
89	navigation_system	navigation system	300	
90	nephelometer	nephelometer	278	
91	Net	Net	343	
92	Neuston_Microplastics_Catamaran	Neuston Microplastics Catamaran	408	
93	niskin_bottle	niskin bottle	474	
94	NO3_sensor	NO3 sensor	242	NO3 Sensor
95	not_assigned	not assigned	219	not assigned
96	nutrient_analyser	nutrient analyser	369	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phosphate or silicate dissolved in the water column.
97	observer	observer	378	Humans who estimate a parameter through observation of a phenomenon such as bird counts, bird song mappings and visual wave observations.
98	oxygen_sensor	oxygen sensor	118	Oxygen Sensor
99	ozone_analyzer	ozone analyzer	476	
100	Ozone_Sonde	Ozone Sonde	364	Airborne (balloon) measurements of ozone in atmosphere and above
101	PAR_Sensor	PAR Sensor	244	PAR Sensor
102	particle_camera	particle camera	405	
103	particle_counter	particle counter	452	
104	particle_sampler	particle sampler	426	
105	pCO2_Sensor	pCO2 Sensor	243	pCO2 Sensor

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	Short Name	Long Name	ID	Description
106	PH	PH	230	PH
107	photo	photo	153	Photo
108	Photometer	Photometer	372	Generic type for various photometric instruments measuring light intensities or optical properties
109	photometric_dissolved_oxygen_titrator	photometric dissolved oxygen titrator	484	
110	piezometer	piezometer	167	Devices that measure fluid (air, gas, water, or oil) pressure within soil, sediment, rock or concrete providing information such as water table level in an aquifer system.
111	plankton_net	plankton net	171	A fine-meshed net designed for sampling microzooplankton, mesozooplankton or nekton.
112	plankton_recorder	plankton recorder	149	A device that continuously samples a flow of water, separating and fixing plankton for subsequent identification and counting.
113	Positioning_System	Positioning System	350	
114	Pressure_Inverted_Echo_Sounder	Pressure Inverted Echo Sounder	348	
115	pressure_sensor	pressure sensor	271	AWI
116	profiler	profiler	262	
117	provisioning_system	provisioning system	265	Addon systems like batteries, lights, cables, lifting bodies, ...
118	pump	pump	249	
119	pyranometer	pyranometer	413	
120	pyrgeometer	pyrgeometer	412	
121	pyrometer	pyrometer	483	
122	radar_altimeter_	radar altimeter	482	
123	radar_system	radar system	291	
124	Radiation_Meter	Radiation Meter	362	Instrument measuring photosynthetically active radiation
125	radiometer	radiometer	117	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the water column.
126	radiosonde	radiosonde	363	A balloon-borne package equipped with a radio transmitter and meteorological sensors typically measuring temperature, pressure, and humidity.
127	radon_extractor_and_counters	radon extractor and counters	442	
128	rain_water_collector	rain water collector	404	
129	Recorder	Recorder	360	
130	releaser	releaser	260	
131	remote_water_sampler	remote water sampler	253	
132	rock_dredge	rock dredge	504	A device dragged across the seabed designed to collect loose rock samples
133	Ruler	Ruler	488	
134	salinity_sensor	salinity sensor	227	Instrument that simultaneously measures electrical conductivity and temperature in the water column to provide temperature and salinity data.
135	Sampler	Sampler	352	
136	satellite_positioning_system	satellite positioning system	147	A network of satellites that generate signals that allow a receiver to determine its position such as GPS.
137	satellite_tracking_system	satellite tracking system	257	A network of satellites that determines the position of a transponder by triangulation such as Argos. Generally used to track surface buoys for the determination of Lagrangian currents.
138	scales	scales	449	
139	scintillation_counter	scintillation counter	428	
140	Secchi_Disk	Secchi Disk	409	
141	sediment_dredge	sediment dredge	111	Bucket-like containers hauled over the sea bed collecting integrated samples of surface sediment along a segment of ship track.
142	sediment_grab	sediment grab	110	A device that collects a sample of surface sediment including manually deployed equipment like a shovel or bucket.
143	sediment_trap	sediment trap	107	A collector of particulates as they sink through the water column.

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	Short Name	Long Name	ID	Description
144	Seismic_Ocean_Bottom_Receiver	Seismic Ocean Bottom Receiver	354	instrument to collect seismic data
145	Seismic_profile	Seismic profile	353	
146	Shadowband_Radiometer	Shadowband Radiometer	371	Special radiometer, where shadow casted on sensor allows estimate of direct sunlight, which in turn can be used to estimate aerosol and cloud properties during its rotation.
147	sidescan_sonar	sidescan sonar	121	Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that emit fan-shaped pulses down toward the seafloor across a wide angle perpendicular to the path of the platform through the water.
148	small_scale_facility	small scale facility	199	Small Scale Facility
149	snow_fall_sensor	snow fall sensor	425	
150	snow_micro_pen	snow micro pen	496	penetration resistance of snow
151	SODAR	SODAR	411	Sound Detection and Ranging
152	sonic_anemometer	sonic anemometer	451	SONIC ANEMOMETER
153	sonic_ranger	sonic ranger	468	
154	Sound_Velocity_Profiler	Sound Velocity Profiler	349	
155	sound_velocity_sensor	sound velocity sensor	143	Instrument that measures the velocity of sound in seawater.
156	Spectrometer	Spectrometer	376	
157	spectrophotometer	spectrophotometer	238	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in the near infra-red, visible and ultraviolet wavebands by samples.
158	spectroradiometer	spectroradiometer	392	The raw output expressed in counts from an downward-facing radiometer measuring light travelling vertically upwards for one particular wavelength from the measured spectrum.
159	speed_log	speed log	289	
160	strain_gauge	strain gauge	457	
161	Sub_Bottom_Profiler	Sub Bottom Profiler	347	
162	temperature_sensor	temperature sensor	294	
163	thermal_camera	thermal camera	466	
164	thermal_properties_analyzer	thermal properties analyzer	494	measuring the thermal conductivity of soil and ice samples
165	thermometer	thermometer	194	Thermometer
166	thermosalinograph	thermosalinograph	14	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a surface water supply
167	TOC_analyzer	TOC-analyzer	240	TOC-Analyzer
168	Total_Sky_Imager	Total Sky Imager	370	Device which provides continuous images of the sky and computes cloud amount for each image.
169	trace_gas_monitor	trace gas monitor	424	
170	transmissometer	transmissometer	267	System that measure the attenuation of electromagnetic radiation by the water column. Includes human observer plus Secchi Disk.
171	transponder	transponder	261	
172	Trap	Trap	335	
173	Trawl_net	Trawl net	407	
174	turbidity_meter	turbidity meter	282	
175	Turbidity_Sensor	Turbidity Sensor	368	Measurement unit for turbidity in the water column.
176	turbulence_probe	turbulence probe	511	
177	UAV	UAV	366	Unmanned aerial vehicle Any untethered heavier-than-air aircraft that is not occupied by people: may be a remotely piloted aircraft or an autonomous aircraft. Also referred to as a drone.
178	ultra_short_baseline_positioning_systems	ultra short baseline positioning systems	198	Systems dedicated to the positioning of subsea vehicles such as ROV and AUV. They are based on acoustic transmitted signals between one or several transponders and one acoustic antenna installed on a surface vessel. The transponders are mounted on the underwater vehicle or are fixed on the seafloor. These underwater acoustic positioning systems are coupled with inertial navigation systems.

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Short Name	Long Name	ID	Description
179 unconsolidated_sediment_corer	unconsolidated sediment corer	505	Devices designed to collect samples of unconsolidated sediment from between the surface and depths from centimetres to 10s of metres with minimal disturbance of the sediment structure
180 underwater_acoustic_recorder	underwater acoustic recorder	259	Underwater Acoustic Recorder
181 underwater_cameras	underwater cameras	341	All types of photographic equipment that may be deployed underwater including stills, video, film and digital systems.
182 video	video	119	Video
183 video_and_sampling_system	video and sampling system	293	
184 water_content_analyzer	water content analyzer	513	
185 Water_Sampler	Water Sampler	342	
186 water_temperature_sensor	water temperature sensor	359	An instrument that measures the temperature of the water with which it is in contact.
187 Weather_station_or_Meteorological_observation	Weather station or Meteorological observation	367	Station where meteorological data such as air temperature, humidity, air pressure, wind speed and direction are monitored.
188 Whale_Watching	Whale Watching	344	
189 Aircraft	Aircraft	254	A fixed-wing self-propelled aircraft.
190 Buoy	Buoy	232	An undrogued (i.e. no sub-surface parachute) surface float that is deployed in regions where sea ice forms that moves with either ice or water depending upon the time of year.
191 Device_Store	Device Store	237	Device Store
192 Laboratory	Laboratory	246	
193 Land	Land	491	A platform located on the solid surface of the Earth either above or below sea level.
194 Land_sea_mammals	Land-sea mammals	492	A mammal that exists both on land and within the water column. Includes seals, sealions, sea-otters and walruse
195 Model	Model	396	Models or model data products including forecast data
196 Mooring	Mooring	44	A tethered collection of oceanographic instruments at a fixed location that may include seafloor, mid-water and surface components.
197 Pack_Ice	Pack_Ice	328	Sea ice not connected to land with an ice concentration of over 70 per cent
198 Satellite	Satellite	233	A vehicle operating beyond the Earth's atmosphere without human occupants that orbits the Earth at a different rate to the Earth's rotation so it moves over the Earth's surface..
199 Small_boat	Small_boat	329	A small self-propelled platform operating on the surface of the water column that may be easily removed from the water (e.g. shore-based RIBs, ships' boats)
200 Station	Station	234	
201 Tethered_Balloon	Tethered Balloon	389	A container filled with a gas that is lighter than air, which is tethered at a fixed height and location.
202 Towed_Systems	Towed_Systems	247	
203 Vehicle	Vehicle	235	
204 Vessel	Vessel	236	A platform of any size operating on the surface of the water column in unpredictable locations that is specifically equipped, manned and operated for scientific, usually oceanographic, research