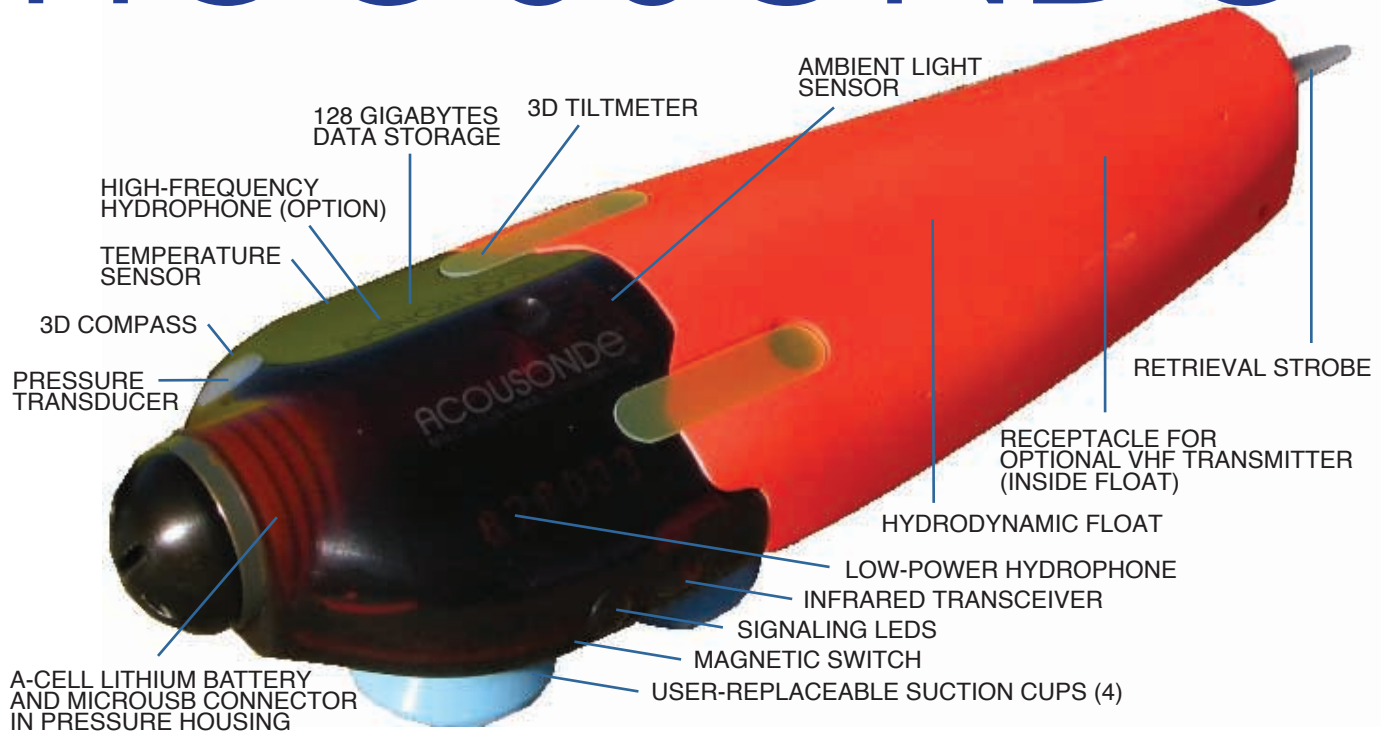


ACOUSONDE™



LENGTH: 22.9 cm (9.0 in) *not including strobe or VHF transmitter*

WEIGHT IN AIR: 362 g (12.8 oz) *with battery and VHF transmitter*



The *Acousonde™ 3B* is a self-contained underwater acoustic recorder comprising one or, optionally, two hydrophones, sensors for attitude, orientation, depth and temperature, a digital recorder, and a field-replaceable battery. Attached to an animal subject with the included suction cups, the Acousonde measures the subject's sound environment and vocalization activity as well as potentially associated behavior. When the suction cups release, the Acousonde's hydrodynamic float buoys it to the surface where it can be retrieved by boat.

SPECIFICATIONS, ACOUSONDE 3B UNDERWATER ACOUSTIC RECORDER

Maximum operating depth (fixed build option)	500 m (-500m suffix) / 1000 m (-1km) / 2000 m (-2km) / 3000 m (-3km)
Maximum continuous acoustic sampling rate	232 kHz
Anti-alias filter, low-power (LP) channel	8-pole elliptic, adjustable (automatic) up to 9.2 kHz maximum
Anti-alias filter, high-frequency (HF) channel	6-pole linear phase, fixed
3-dB anti-alias cutoff	9.2 kHz (LP chan max); 42 kHz (HF chan)
22-dB anti-alias cutoff	11.1 kHz (LP chan max); 100 kHz (HF chan)
3-dB high-pass cutoff	22 Hz (LP chan); 20 Hz/1 kHz/10 kHz (HF chan, fixed, customer spec)
Unamplified raw ceramic sensitivity, re 1 V/ μ Pa	-201 dB (LP chan hydrophone) & -204 dB (HF chan hydrophone)
Saturation at 0-dB gain, re 1 μ Pa zero-peak	187 dB (LP chan) & 176 dB (HF chan)
Acoustic gains, selectable at deployment	0 or +20 dB
Acoustic sampling resolution	16 bits
Auxiliary sampling rate	Up to 800 Hz (tilt), 40 Hz (compass), 10 Hz (depth), 5 Hz (temp, light)
Auxiliary sampling resolution	16 bits (except 10 bits for tilt)
Auxiliary sampling channels	Depth (pressure), internal temperature, 3D tilt, 3D compass, ambient light level
Onboard storage capacity (primary & spare)	128 gigabytes (<i>note: at sample rates < 26 kHz, battery limits storage</i>)
Maximum duration if sampling < 26 kHz	6-14 days depending on temperature and aux sampling activity
Maximum measured data download rate	3.3 GB/hour via MicroUSB connector

December 2019

Firmware support for some specifications, performance and/or functionality may be pending; see current release notes. Data subject to change without notice.

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