

ASCENSION eDNA

Automated environmental DNA
depth sampler



Collect reliable eDNA samples anytime, anywhere.

Environmental DNA (eDNA) sampling is a simple, cost-effective and non-destructive method to assess and monitor biodiversity and provide early detection of invasive species, parasites and pathogens. Ascension eDNA by Ocean Diagnostics enables researchers, park operators and community scientists to collect reliable eDNA in freshwater and marine environments without needing large vessels, crews, additional equipment or specialized technical training.



The best place to look for information is going to be at depth. Ascension is really one of the only ways that we can get our hands on those deeper samples given the platforms of opportunity available to us for this project.



– Dr. Eily Allan, Chief Scientist,
eDNA Collaborative

Easily monitor freshwater and marine biodiversity down to 400 meters from a small boat or fixed installation

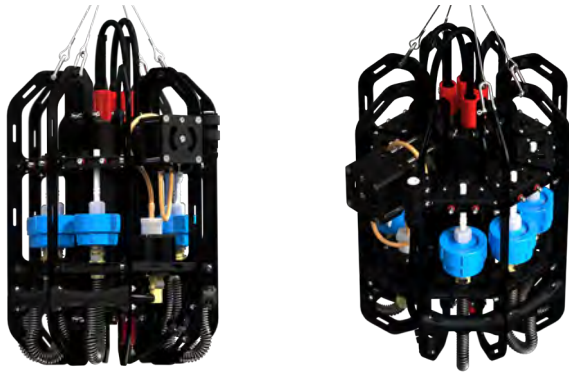
Ascension is a 22-pound automated depth sampling instrument capable of collecting 7 separate eDNA samples in a single deployment from the side of a small boat or fixed installation. Equipped with in-situ filtration and a unique pinch valve system, Ascension saves time while eliminating sample contamination risks. Its fully integrated CTD sensor and flow meter measure depth, temperature, salinity, flow rate and total volume filtered in real-time so you can collect highly targeted samples based on your unique research interests. Dive deeper with Ascension.

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With Ascension, *anyone, anywhere* can collect reliable eDNA data at *anytime*



Put Ascension's innovative and smart design to work for you.

- Deploy by hand from a small boat down to 400-meter depths
- Pre-program and attach to a fixed installation for automated sampling
- Collect up to 7 separate samples per deployment or include replicates for every deployment
- Eliminate sample contamination risks with in-situ filtration
- Capture real-time depth, salinity, temperature, flow rate and total volume data every second
- Recharge the battery within 2-3 hours using a standard wall outlet
- Make on-the-fly changes during your deployment with an easy-to-use computer interface

Specifications

Dry Weight	10 Kg (22 lbs)
Depth Rating	400m
Tether Length	50, 100 or 200 m
Battery	266 W-Hr. rechargeable LIPO battery
External Sensors	Star-Oddi DST DCT Online
Temperature Range	-1°C to +40°C (30°F to 104°F)
Temperature Resolution	0.032°C (0.058°F)
Temperature Accuracy	+/- 0.1°C (0.18°F)
Pump Type	High-pressure peristaltic
Depth Range	5-500m
Depth Resolution	0.03% of depth range
Depth Accuracy	+/- 0.6% of depth range
Salinity Range	3-68 mS/cm
Salinity Resolution	0.02 PSU
Salinity Accuracy	+/- 1 PSU
Acceptable Filter Pore Size	>0.45 µm
Flow Meter Range	0.05 – 0.5 litres per minute
Typical Flow Rates	0.05 – 0.5 litres per minute

About Ocean Diagnostics

Innovative technology to diagnose and protect the health of our freshwater and marine environments. Learn more at oceandiagnostics.com



Request a Quote

Learn more or request a quote:
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