HYDROBALL

Mapping the inaccessible now becomes possible!



HydroBall® Buoy

The HydroBall® buoy is a fully-autonomous solution for bathymetric data acquisition. Its spherical design and robust shell casing have been engineered to make the HydroBall® buoy most effective in perilous whitewater areas (e.g. river gorges, high-flowing river, very shallow water). The 40cm spherical shell encloses* a singlebeam echosounder, a GNSS receiver and a digital compass.

* See reverse for detailed specifications

TECHNICAL SPECIFICATIONS HydroBall®

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DIMENSIONS	Diameter: 0.4m (16 inches)	
WEIGHT	13kg (28 pounds)	
POWER CONSUMPTION	Rechargeable 6V gel-cel (x6)	
BATTERY LIFE (in operation)	24h	
CONNECTION	USB	
GPS	Standalone mode 2.5m (95%) DGPS (SBAS) mode 0.6m (95%) Post-Processed (PPK) mode 0.02m (95%) Update Rate: 1Hz -> 10Hz	
DIGITAL COMPASS	Heading Tilt $< \pm 20^\circ$: 0.5 Pitch, Roll Tilt $< \pm 20^\circ$: 0.4° Tilt $> \pm 20^\circ$: 06° Update rate: 10Hz	
DEPTH SOUNDER	Shallow to mid-range model Frequency : 675kHz Beam width : 10° Range : 0.50m – 50.0m Range resolution : 20mm Update rate : 1Hz -> 10Hz	Ultra-shallow model Frequency : 500kHz Beam width : 6° Range : 0.10m — 10.0m Range resolution : 0.025% of range Update rate : 10Hz
SOFTWARE	HydroBall® data is easily processed with either the cloud-based or the desktop version of SBP. SBP provides filtering tools and an intuitive georeferencing process. Quality analysis functions are also available to quickly confirm the integrity of the collected soundings. Together, the HydroBall® and the SBP software offer an integrated and costeffective solution that meets the requirements of the highest IHO standards. The HydroBall® is also compatible with Hydromagic and Hypack software packages.	
4-33 6-57 8	1-Switch 2-Light indicator (LED) 3-GNSS antenna 4-Iridium (option) 5-GNSS receiver 6-Digital compass 7-ME processor and datalogger 8-Rechargeable batteries 9-Depth sounder	

APPLICATIONS

RIVERBED SURVEY



Dropped upstream, the HydroBall® buoy autonomously collects bathymetric data while drifting.

ULTRA-COASTAL ZONE SURVEY



Mounted on an amphibious vehicule, the HydroBall™ buoy can produce continuous land-sea profiles for integration of continuous land and sea data.

STEALTH SURVEY



The HydroBall® buoy can stealthily be towed by combat divers for military landing reconnaissance survey.

WATER LEVEL AND WAVE MEASUREMENTS



Equipped with an external battery pack, the HydroBall® buoy can be moored up to 30 days for water level and wave measurements campaigns.

CONTACT



115, rue Saint-Germain Ouest, local 1 Rimouski (Québec) G5L 4B6 +1 506 449-3109 • info@m2ocean.com www.m2ocean.com

