



Paco Santana, Rob Howard and Nick Hartman launch the Bayonet Ocean Vehicles range

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Bayonet Ocean Vehicles Range Introduced at Undersea Defence Technology

Richmond, VT. Wednesday 15th June 2022 – Bayonet Ocean Vehicles, a new company, was successfully launched at Undersea Defence Technology (UDT) in Rotterdam last week. At the three day show the company introduced its new line of amphibious crawling vehicles the Bayonet 150, 250 and 350.

Deployable from land or water independent of weather, the new Bayonet crawlers have been designed to transit along the ocean floor as well as on

land, making them the only robotic platform in the world capable of working the surf zone, at ocean depths of up to 100 meters, and all the way up the beach.

The Bayonet 150, 250 and 350 amphibious crawlers, are built on OPENSEA, Greensea’s fully open architecture platform. Benefiting from this state-of-the-art software, the crawlers offer precision navigation, payload integration, autonomy, and over-the-horizon command and control, and, combined with robust hardware, cover a wide range of possible payloads and applications.

Attending UDT Nick Hartman, VP Growth and Strategy, said: “Our new amphibious crawlers created quite a stir in our booth as visitors from across Europe saw the spectrum of capability and power these vehicles offer. The variety of integrations, enabled through Greensea’s OPENSEA platform, provide adaptable and flexible user-applications across the defense and wider commercial markets.”

Originally developed by Arnis Mangolds and Mike Farinella of C-2i, the crawlers can easily work in the surf zone, carrying larger sensor payloads on the seafloor, and can be fitted with a variety of environmental, oceanographic, hydrographic, benthic and industry specific sensors to accommodate numerous commercial and military applications.

These can include hydrographic survey, wind farm survey and maintenance, littoral warfare such as mine detection and clearance, coastal dredging support, environmental monitoring of the seafloor, beach zone, rivers and marshes, and wharf inspections.

Bayonet 150	Bayonet 250	Bayonet 350
DIMENSIONS (STANDARD): 33 x 20 x 10 inches	DIMENSIONS (STANDARD): 48 x 52 x 14 inches	DIMENSIONS: 5 x 6 x 1 ft
OPEN DECK SPACE: 24 x 6 inches	STANDARD OPEN DECK SPACE: 33 x 14 inches	DEPTH: 109 yards (100m)
	GROUND CLEARANCE: 7.5 inches	RANGE: 38km+ @ 1.8km/hr 64km+ at slower speeds Cable laying ~15km

WEIGHT (WITH BATTERIES): 125lbs	WEIGHT (WITH BATTERIES): 250lbs	WEIGHT (WITH BATTERIES): 600lbs
DURATION DRY / WET: 22/10 miles	DURATION DRY / WET: 24 / 10 miles	SPEED: 1.8km/hr
DECK CAPACITY: 150lbs (68kg)	DECK CAPACITY: 250lbs (113kg) (max component 75lbs (34kg))	DECK CAPACITY: 350lbs
GROUND PRESSURE – DRY / WET: 0.15 dry / 0.08 psi wet	GROUND PRESSURE 10” TRACK – DRY / WET: 0.39 / 0.20 psi	PLOW DEPTH: 6-in to 2-ft (10.15 to 0.6m)
	GROUND PRESSURE 15” TRACK – DRY / WET: 0.26 / 0.13 psi	AUTONOMY: Post mission data recovery; data pod 2 terabyte
BATTERY: Li-ion 54V, 80Ahr with 2 packs on inside of track	BATTERY: Li-ion 54V, 80Ahr with 2 packs on inside of track	BURIED FO CABLE: 100Gb ethernet at 10km, Secure, Safe - Buried 5mm cable: 36 x 6 x 24-in reel carries 15km
MAX RECHARGE: 4hrs per battery	MAX RECHARGE: 4hrs per battery	RF BUOY: Electrical or fiber optic
I/O: RS232 (2), RS485(1), non- isolated analog input (2), non- isolated analog output (2), isolated digital input (2), isolated digital output (2), Ethernet (4)	I/O: RS232 (2), RS485(1), non- isolated analog input (2), non- isolated analog output (2), isolated digital input (2), isolated digital output (2), Ethernet (4)	MAST: 19-ft, RF link 10mB
CONNECTORS: SUBCON or Heyco	CONNECTORS: SUBCON or Heyco	ACCOUSTIC COMMS: 2,000m max
COMMAND AND CONTROL SOFTWARE: OPENSEA®, Greensea Workspace user interface, Greensea EOD and Pro Workspace (options)	COMMAND AND CONTROL SOFTWARE: OPENSEA®, Greensea Workspace user interface, Greensea EOD and Pro Workspace (options)	COMMAND AND CONTROL SOFTWARE: OPENSEA®, Greensea Workspace user interface, Greensea EOD and Pro Workspace (options)
NAVIGATION: Greensea GS4 INS POSITIONING: GNSS Receiver (Dual RX and RTK Options)	NAVIGATION: Greensea GS4 INS POSITIONING: GNSS Receiver (Dual Rx and RTK Options)	NAVIGATION: Greensea GS4 INS POSITIONING: GNSS Receiver (Dual Rx and RTK Options)
INTERNAL SENSORS: Temp, Overvoltage, Wet/Dry, Battery Monitoring	INTERNAL SENSORS: Temp, Overvoltage, Wet/Dry, Battery Monitoring	
SINK GAUGE: +/- 0.05 inches with 3.75 inch range (opt)	SINK GAUGE: +/- 0.05 inches with 3.75 inch range (opt)	
EXTERNAL COMMS: Ethernet tether, 2.4 GHz XBee RF	EXTERNAL COMMS: Ethernet tether, 2.4 GHz XBee RF	

ADDITIONAL COMMS: RTK, MIMO RF link buoy (option)	ADDITIONAL COMMS: RTK, MIMO RF link buoy (option)	
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The full datasheet for each of the Bayonet Ocean Vehicles is available to download from their website <https://bayonetocean.com/>.

Ends

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About Bayonet Ocean Vehicles

Bayonet Ocean Vehicles was created in 2022 through the acquisition of IP and inventory of C-2 Innovations' crawling robot product line-up. Based in Plymouth, Massachusetts USA, the company designs and manufactures innovative amphibious crawlers for the beach and surf zone environment. Powered by OPENSEA with its central library software suite, Bayonet Ocean Vehicles are used in military applications such as marine mine countermeasures and explosive ordnance disposal and in commercial applications such as beach restoration, surf zone search and rescue, and offshore wind survey. <https://bayonetocean.com/>