

Oceanus Ultimate ROV System

Designed,
engineered &
manufactured
on-site. | MN

A00159 MN-Ultimate-Specifications-August 2022-PR9

Distinctive eight vectorized thruster design and an optional autopilot mode^Δ provides ultimate maneuverability when it's needed most. Dual full HD1080P video cameras provide extensive front and rear views.

A unique eight vectorized thruster configuration capable of sustained pitch and roll maneuverability. Freedom of motion offers precision when using on-board camera systems, manipulators, sonar systems, and other attachments. An autopilot^Δ feature is available when the ROV is integrated with optional DVL ROV accessory, allowing users the ability to follow preset vector-based mapping waypoints measured against collected DVL data. Users can create flight patterns using preset variables including ROV flight coordinates, speed, and depth variables which can be reviewed and edited prior to conducting an ROV flight mission.

The MarineNav Oceanus Ultimate ROV offers these standard features;

- Unique eight vectorized thruster design provides lateral movement and pitch and roll for precise piloting capabilities
- Choose between 'full manual control', 'autopilot assisted flight' and 'autopilot' ROV piloting modes^Δ
- Numerous attachment options through MarineNav's topside Multi-Port. Operate up to three attachments simultaneously
- Power over tether design
- Up to 4 knot top speed (with performance float block)*
- 6 x 1500 Lumen front lights, 2 x 1500 Lumen back lights
- Two on-board 1080p high definition cameras including a front-facing camera with 180° vertical tilt functionality and a back-facing fixed position camera. Camera functions controlled through touch sensitive interface commands
- Topside with 18.5" widescreen video display and 10.1" TFT panels
- Limited 2-year warranty and MarineNav's Peace of Mind Guarantee*

^Δ 'Autopilot Mode' is available when the Ultimate ROV system is integrated with an optional DVL ROV accessory



Oceanus Ultimate ROV system includes Ultimate ROV, 18.5-inch topside control case and optional Oceanus hand controller (v4)



MARINE NAV
BUILT NORTH ATLANTIC TOUGH.
TRUSTED EVERYWHERE.



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Specifications	
Certifications	ISO 9001: 2015
Operating Environment	Fresh or salt water, 0-50°C (32-122° F)
ROV movement and control	6 Degrees of Freedom, full vertical, horizontal and lateral movement. Full pitch and roll control: Auto depth, Heading hold and ROV stabilize modes. Optional position hold mode with addition of DVL / USDL ROV accessories.
Autopilot (Optional DVL ROV accessory required)	Available ROV upgrade option of integrated compact DVL and integrated GPS topside (compatible with USBL or other sub-sea positioning systems)
Depth Rating †	305 m (1000 ft), Optional upgrade to 500 m (1640 ft)
Maximum Speed *	4 kn
Topside Unit Weight	20.65 kg (45.5 lbs)
ROV Weight ■	30.25 kg (66.7 lbs)
Approximate Total Shipping Weight †	90.00 kg (200.00 lbs)
ROV Dimensions	826 mm (32.50") long, 565 mm (22.25") wide, 330 mm (13.00") height
Topside Unit Housing Material	Ultra high density polyethylene, neoprene o-ring and ABS latches
ROV Housing Material	Anodized marine grade aluminum, protective coating available
Lights	8 x 1500 Lumen lights (6 x 1500 Lumen front lights, 2 x 1500 Lumen rear lights)
Cameras	Internal Front Camera: 1080p full HD with tilt control Internal Rear Camera: 1080p full HD fixed position
Camera Tilt Angle	Front camera: +/- 180° Pitch (vertical rotation) front camera. Rear camera: fixed position
Camera Focus Range	Front: From the face of the housing dome to infinity with manual control Rear: 6" to infinity fixed focus
Camera Field of View	120° field of view
Primary Display	18.5" TFT active matrix panel, 1600 nits brightness (full daylight readable), 1920 x 1080 resolution. Optional 2000 nits available
Secondary Display	10.1" TFT Touch active matrix panel, 1000 nits brightness (full daylight readable), 1280 x 800 resolution
Topside Ports	3 USB, 1 LAN (Ethernet), 1 Multi Port
Video Output	HDMI video output
Data Storage	1 Terabyte solid state drive topside, 64 GB solid state ROV
Topside Unit Software OS	Linux OS (MARINENAV Proprietary software interface)
IMU (Sensors)	Always on, Integrated with accelerometer & magnetometer measuring telemetry including tilt, roll, pitch, and heading, auto heading, auto depth functionality
Depth Gauge	Calibrated in meters or feet (user selectable)
Topside Power	: Input: 200-240 VAC, 3000 watts. Available option 90-240 VAC input. System fully operational in 60 seconds
ROV Power	Power over tether
ROV Control	MarineNav Ultimate hand controller with pitch and roll control (IP 65)

Specifications - continued	
Topside Control Case	Waterproof case made of ultra high density polyethylene, neoprene o-ring and ABS latches, IP 65 when closed, IP 62 when open, transport requires one person
Auxiliary Ports	3 auxiliary ports supporting: Ethernet / Spare pair / Manipulator / USB / 12V / 24V DC
On-Screen Display (OSD)	Real-time data including recording time, voltage, water temperature, depth, date/time stamp, heading and attitude is overlaid or embedded with video, Operator input lines available, GPS co-ordinates displayed as overlay option when paired with accessory, enabled data entry field with customized logo available
Settings	Internally saved, persist through power cycles
Wireless	Wi-Fi video broadcast to multiple devices simultaneously via integrated antenna, Wireless specification 802.11 ac/b/g/n on 2.4/5 GHZ
Remote Fleet Management	Available as an optional upgrade. Monitor multiple ROV systems within your fleet. Track real-time GPS positioning on an interactive map. View remote health reporting. Export data to .CSV format
Tether System	Optional rapid deployable, neutrally buoyant tether with water-tight cable connections, optional tether deployment system available
Tether Length	500 m (1640.4 ft) maximum tether length
Available Accessory Attachments + ▲	Single axis manipulator arm, 360° Rotating manipulator arm, USBL, Hull crawler, Metal thickness gauge, RS485 or Ethernet based sonars and accessories

* Limited Two year warranty is available to MarineNav Oceanus ROV registered within the first year of purchase. For warranty to be valid all scheduled maintenance must be adhered to according to manufacturers guidelines. Warranty excludes tampering, misuse and regular wear. Contact MARINENAV for full details and restrictions of Peace of Mind Guarantee

† ROV maximum depth rating of 400 m is available as an optional upgrade. Diving beyond 305 m requires fitting ROV with MarineNav's Deep Water Buoyancy float block. Contact a MarineNav representative for full details and current pricing

* Maximum speed test conducted with absence of all ballast weights

■ Estimated dry weight (Estimated dry weight does not include ballast weight system)

† Includes empty ROV case weight of 26.3 kg / 58 lbs. (Choice of available options will change overall shipping weight)

+ Some accessories require use of the MarineNav multi port communication system

▲ Oceanus ROVs may exceed recommended depth ratings of available accessories. Consult manufacturer specifications for all accessories prior to use. MarineNav Ltd. is an ISO 9001:2015 certified company. Our certified Quality Management System ensures that each unit we produce adheres to the strictest standards and complies with customer requirements

While we strive to ensure the accuracy of all items and descriptions in this document, this is not always possible. Specifications, options, and availability are subject to change without notice. Errors and omissions excepted. We reserve the right to limit quantities

8 powerful vectorized thruster design provide lateral, pitch and roll movements

6x 1500 Lumen front lights
2x 1500 Lumen rear lights



ROV powered over tether



Front & rear 1080p HD cameras

Top speed up to 4 knots

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