Oceanus Pro ROV System

A00159 MN-Pro Specifications-December 2022-PR10

A mission-ready ROV system with a diverse range of attachment options for deep-dive recovery, defense, scientific research, and complex inspection tasks.

Widely used as an inspection-class ROV system performing demanding vessel and structural inspections, the Oceanus Pro operates to a maximum standard depth of 305 m (1000 ft.) with an optional upgrade to maximum depth of 400 m (1312 ft.)[¶], and a top speed of 6 knots*. A wide range of attachments, including sonar systems makes the Oceanus Pro ideal for sectors requiring ROVs to conduct diver support, border protection, port security, evidence location, search and rescue, and recovery duties.

The MarineNav Oceanus Pro ROV offers these standard features:

- Fully vectorized thruster design delivering superior ROV maneuverability (Lateral ROV movement axis standard)
- Depth rating of 305 m (1000 ft), optional upgrade to 400 m (1312 ft)¶
- Power over tether design
- High bright 18.5" and 10" displays
- Four front-facing 1500 lumen lights
- Front facing 1080p HD camera with camera tilt angle of 180° pitch (vertical rotation)
- Up to 6 knot top speed (with performance float block)*
- Touch-sensitive user interface provides control of all important ROV functions
- MarineNav's Oceanus Multi-Port communication system allows rapid integration of third-party accessories, software and external processors
- 500GB solid state drive topside
- Wireless broadcasting feature allows operator screen sharing to multiple parties
- Optional MarineNav Fleet Management Suite reports status and health of ROV remotely for full tracking of individual or multiple units
- Limited 2-year warranty and MarineNav's Peace of Mind Guarantee*



Oceanus Pro ROV system includes Pro Plus ROV, 18.5-inch topside control case and Oceanus Joystick





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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	Full depth, horizontal and lateral movement: Auto depth, Heading hold and ROV stabilize modes
Depth Rating	305 m (1000 ft), Optional upgrade to 400 m, (1312 ft)
Maximum Speed *	6 kn
Topside Unit Weight‡	18.6 kg (41.0 lbs)
ROV Weight	17.91 kg (39.5 lbs)
Approximate Total Shipping Weight [†]	46.81 kg (103.2 lbs)
ROV Dimensions	605 mm (23.82") long, 418 mm (16.46") wide, 279 mm (10.98") height
Topside Unit Housing Material	Ultra high density polyethylene, neoprene o-ring and ABS latches
ROV Housing Material	Marine grade aluminum
Lights	4 x 1500 Lumen front lights
Cameras	Internal front: 1080p with tilt control, Optional 4k external camera available, (toggle between camera systems functions and control recording feature with topside Flight Control Software)
Camera Tilt Angle	+/- 180° Pitch (vertical rotation)
Camera Focus Range	From the face of the housing dome to infinity with manual control
Camera Field of View	120° field of view
Primary Display	$18.5\mbox{"}$ TFT active matrix panel, 1600 nits brightness (full daylight readable), $1920x1080$ resolution.
Secondary Display	10.1° TFT Touch active matrix panel, 1000 nits brightness (full daylight readable), 1280×800 resolution
Topside Ports	2 USB, 1 LAN (Ethernet), 1 Multi Port
Video Output	HDMI video output
Data Storage	500 GB solid state drive topside, 32 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: 100/240 V AC 50/60 Hz, System fully operational in 60 seconds
ROV Power	Power over tether

Specifications - continued	
Topside Control Case	Rugged waterproof case, transport requires one person, IP 65 when closed, IP 62 when open
AUX Ports	3 auxiliary ports: capable of Ethernet/12VDC/24VDC/Manipulator
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
Tether System	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, Ethernet based sonars and accessories.

- The Oceanus Pro ROV system is rated to a maximum depth rating of 300 m (1000 ft) as a standard feature. A maximum depth rating of 400 m (1312 ft) is available as an optional upgrade feature. Contact a MarineNav representative for more details.
- * 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.
- * Maximum speed test conducted with absence of all ballast weights.
- * Approximate weight with standard primary 15" TFT active matrix panel.
- Estimated dry weight.
- † Choice of available options will change overall shipping weight. Shipping weight based on 100 m tether, ROV unit, topside & hand controller.
- +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.







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