#### **Oceanus Ultimate ROV System**

Designed, engineered a manufactured on-site. | MN

#### Distinctive eight vectorized thruster design and built-in autopilot feature 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. With a built-in autopilot feature, the ROV follows preset vector-based mapping waypoints measured against collected DVL data. 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 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.
- 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)\*
- 4 x 1500 front Lumen lights, 2 x 1500 back Lumen 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\*



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) Ceanus Ultimate ROV system includes Ultimate ROV, 8.5-inch topside control case and Oceanus hand controlle





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### Oceanus Ultimate ROV System

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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, ROV stabilize and position hold modes
Autopilot	Standard compact DVL and integrated GPS topside, also compatible with USBL or other sub-sea positioning systems
Depth Rating <sup>‡</sup>	305 m (1000 ft), Optional upgrade to 500 m (1640 ft)
Maximum Speed *	4 kn
Topside Unit Weight	19.96 kg (44.0 lbs)
ROV Weight	24.95 kg (55.0 lbs)
Approximate Total Shipping Weight <sup>†</sup>	55.21 kg (121.72 lbs)
ROV Dimensions	770 mm (30.31") long, 465 mm (18.30") wide, 280 mm (11.02") height
Topside Unit Housing Material	Ultra high density polyethylene, neoprene o-ring and ABS latches
ROV Housing Material	Marine grade aluminum. Optional upgrade of anodized marine grade aluminum, protective coating available
Lights	4 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	From the face of the housing dome to infinity with manual control
Camera Field of View	120° field of view
Primary LCD Display	18.5" TFT active matrix panel, 1600 nits brightness (full daylight readable), 1024 x 1200 resolution. Optional 2000 nits available
Secondary LCD Display	10.1" TFT Touch active matrix panel, 1000 nits brightness (full daylight readable), 1280 x 800 resolution
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: 100/240 V AC 50/60 Hz, System fully operational in 60 seconds
ROV Power	Power over tether
ROV Control	MarineNav Ultimate hand controller with pitch and roll control (IP 65)

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Topside Control Case	Waterproof Poli	can case transport room	iires one person, IP 65 when
	closed, IP 62 wh		
Auxiliary Ports	3 auxiliary ports	: 1 x ethernet, 2 x RS485	/ Manip / 12V / 24 DC / aux camer
On-Screen Display (OSD)	depth, date/tim with video, Ope	e stamp, heading and at rator input lines availabl n when paired with acce	, voltage, water temperature, titude is overlaid or embedded e as, GPS co-ordinates displayed ssory, enabled data entry field
Settings	Internally saved	, persist through power	cycles
Wireless		adcast to multiple device ss specification 802.11 a	es simultaneously via integrated ac/b/g/n on 2.4/5 GHZ
Remote Fleet Management	your fleet. Track	optional upgrade. Monit < real-time GPS positioni eporting. Export data to	or multiple ROV systems within ng on an interactive map. View .CSV format
Tether System			oyant tether with water-tight oyment system available
Tether Length	500 m (1640.4 f	ft) maximum tether leng	th
Available Accessory Attachments + ▲			g manipulator arm, USBL, Hull Ethernet based sonars and
float block. Contact a MarineNav r Maximum speed test conducted wi	epresentative for full details ith absence of all ballast weig	and current pricing hts	es fitting ROV with MarineNav's Deep Water Buoy
Estimated dry weight (Estimated d Choice of available options will chang		nlast weight system)	
Some accessories require use of the		nunication system	
Ocennus ROVs mov exceed recomi	mended depth ratings of avai	Inhle accessories Consult manufactu	
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#### **Oceanus Mini ROV System**

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#### A compact ROV system that can fit in a 12-inch diameter pipe, with high-end features including six vectorized thrusters providing lateral ROV movement and a full HD 1080p on-board camera.

A uniquely rugged inspection-class ROV system capable of operating to a maximum depth of 305 m (1000 ft.) and with a top speed of up to 4 knots<sup>\*</sup>, the Oceanus Mini is ideal for performing inspections in confined areas like pipelines and holding tanks. The use of lightweight materials and a reduced footprint makes this ROV unit incredibly easy to transport and operate. A smaller size does not mean this ROV is lacking in power and versatility. Core construction of marine-grade aluminum and the same robust engineering standards found in our larger ROV vectorized thruster system ensures this system will stand-up to the toughest tests.

The MarineNav Oceanus Mini ROV offers these standard features;

- Powerful vectorized thruster design provides lateral movement
- Lightweight, compact design ideal for pipe and water tank inspections
- ROV weight of 8.62 kg (19 lbs)
- Power over tether design
- Up to 4 knot top speed<sup>\*</sup>
- 2 x 1500 lumen lights
- 1080p high definition camera
- 15" topside
- Depth rating of 305m (1000ft)
- Compatible with Oceanus Pro topside control system and many Oceanus Pro accessories
- Limited 2-year warranty and MarineNav's Peace of Mind Guarantee\*







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#### **Oceanus Mini ROV System**

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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)
Maximum Speed ×	4 kn
Topside Unit Weight	18.05 kg (39.8 lbs)
ROV Weight	8.62 kg (19 lbs)
Approximate Total Shipping Weight <sup>†</sup>	36.97 kg (81.5 lbs)
ROV Dimensions	520 mm (20.47") long, 293 mm (11.53") wide, 225 mm (8.86") height
Topside Unit Housing Material	Ultra high density polyethylene, neoprene o-ring and ABS latches
ROV Housing Material	Marine grade aluminum. Optional upgrade of anodized marine grade aluminum, protective coating available
Lights	2 x 1500 Lumen front
Cameras	Internal Front: 1080p with tilt control
Camera Tilt Angle	+/- 120° Pitch (vertical rotation)
Camera Focus Range	Fixed focus 4" to infinity
Camera Field of View	120° field of view
Primary LCD Display	15" TFT active matrix panel, 1600 nits brightness (full daylight readable), 1024x786 resolution. Optional 2000 nits available
Secondary LCD Display	10.1" TFT Touch active matrix panel, 1000 nits brightness (full daylight readable), 1280 x 800 resolution
Video Output	HDMI video output
Data Storage	500 GB 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: 100/240 V AC 50/60 Hz, System fully operational in 60 seconds
ROV Power	Power over tether
ROV Control	MarineNav Hand Controller (IP 65)
Topside Control Case	Rugged waterproof case, transport requires one person. IP 65 when closed, IP 62 when open

Auxiliary Ports	1 auxiliary port: capable of 1 x F	RS485 / Manip / 15VDC	
On-Screen Display (OSD)	Real-time data including record depth, date/time stamp, headii with video. Operator input line overlay option when paired wit customized logo available	ng and attitude is overla s available. GPS co-ord	id or embedded nates displayed as
Settings	Internally saved, persist throug	ıh power cycles	
Wireless	Wi-Fi video broadcast to multip antenna. Wireless specification		
Tether System	Optional rapid deployable, neu cable connections. Optional te		
Tether Length	500 m (1640.4 ft) maximum te	ther length	
Available Accessory Attachments + ▲	Single axis manipulator arm, US RS485 based sonar and accesso		thickness gauge,
strictest standards and complies While we strive to ensure the accu	115 certified company. Our certified Quality Manag with customer requirements. Iracy of all items and descriptions in this document without notice. Errors and omissions excepted. We	, this is not always possible. Specifi	cations, options, and
Powerful vectorized 🛛 🦛	1050p high definition camera	Top speed up to 4 knots	Depth rating of 305m
Powerful vectorized chruster design ROV powered over tether		Top speed up to 4 knots	
chruster design		Top speed up to 4 knots	of 305m

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#### **Oceanus Pro ROV System**

# 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.)<sup>¶</sup>, and a top speed of 6 knots<sup>\*</sup>. 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 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)<sup>¶</sup>
- Power over tether design
- Up to 6 knot top speed (with performance float block)<sup>\*</sup>
- 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\*

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Oceanus Pro ROV system includes Pro ROV, 15-inch topside control case and Oceanus Joystick

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# Oceanus Pro ROV System

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	18.05 kg (39.8 lbs)
ROV Weight	17.91 kg (39.5 lbs)
Approximate Total Shipping Weight <sup>†</sup>	46.26 kg (102 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. Optional upgrade of anodized marine grade aluminum, protective coating available
Lights	4 x 1500 Lumen front
Camera	Internal Front: 1080p with tilt control
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 LCD Display	15" TFT active matrix panel, 1600 nits brightness (full daylight readable), 1024x786 resolution. Optional 2000 nits available
Secondary LCD Display	10.1" TFT Touch active matrix panel, 1000 nits brightness (full daylight readable), 1280 x 800 resolution
Video Output	HDMI video output
Data Storage	500 GB 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: 100/240 V AC 50/60 Hz, System fully operational in 60 seconds
ROV Power	Power over tether
ROV Control	MarineNav Hand Controller (IP 65)
Topside Control Case	Rugged waterproof case, transport requires one person. IP 65 when closed, IP 62 when open

Specifications - c	continued			
Auxiliary Ports	1 auxiliary port: o	capable of 1 x RS485 + I	Manip / 15VDC	
On-Screen Display (OSD)	depth, date/time with video, Oper	ncluding recording time e stamp, heading and at ator input lines availab hen paired with access available	titude is overlaid le. GPS co-ordina	or embedded ites displayed as
Settings	Internally saved,	persist through power	cycles	
Wireless		dcast to multiple device s specification 802.11		
Tether System		e, neutrally buoyant tet tional tether deployme		
Tether Length	500 m (1640.4 ft	t) maximum tether leng	th	
Available Accessory Attachments + ▲		oulator arm, USBL, Hull hars and accessories.	crawler, Metal th	ickness gauge,
<ul> <li><sup>†</sup> Choice of available options will chan</li> <li><sup>+</sup> Some accessories require use of th</li> </ul>	nge overall shipping weight. Ship	ning weight based on 100 m tether R		
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