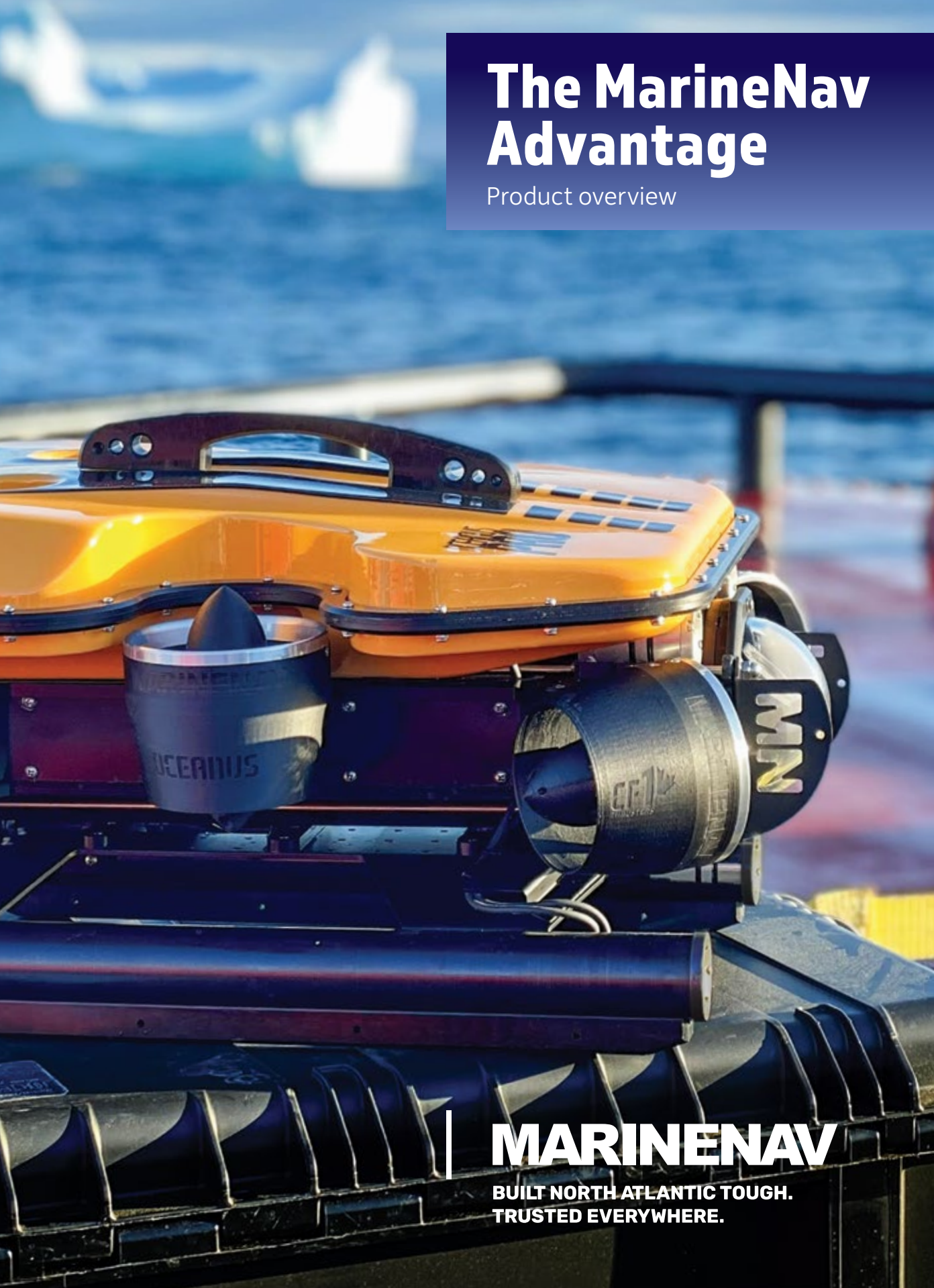
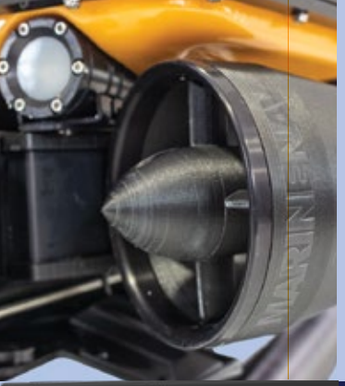
The MarineNav Advantage

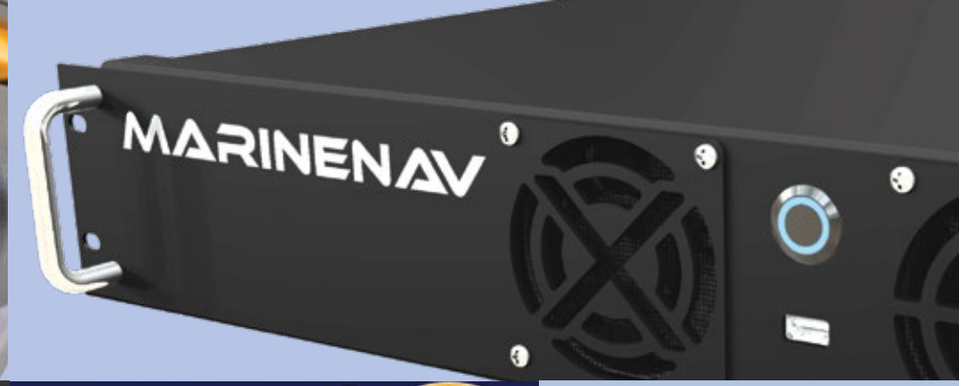
Product overview

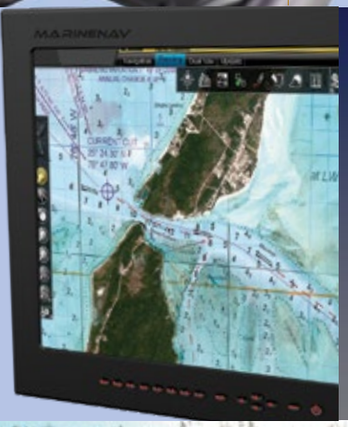


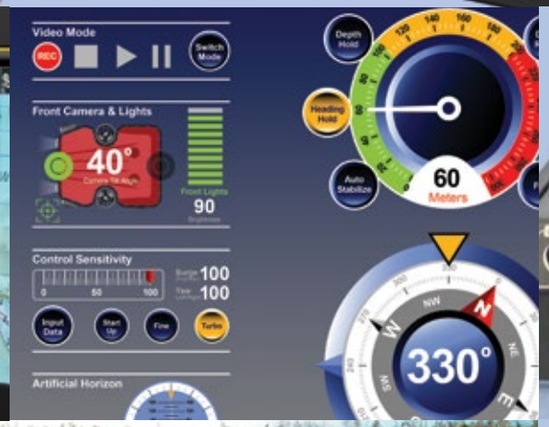
MARINENAV

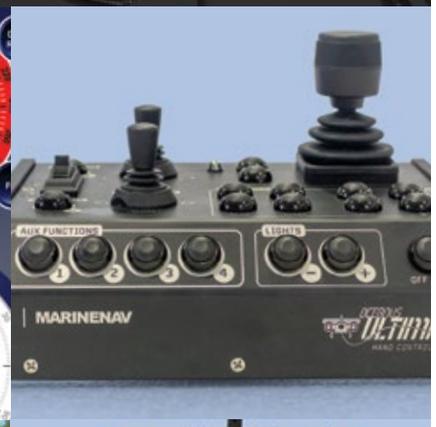
BUILT NORTH ATLANTIC TOUGH.
TRUSTED EVERYWHERE.

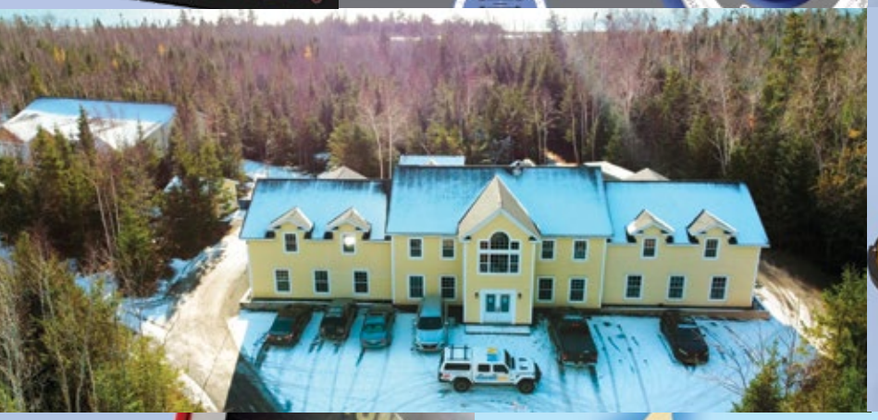


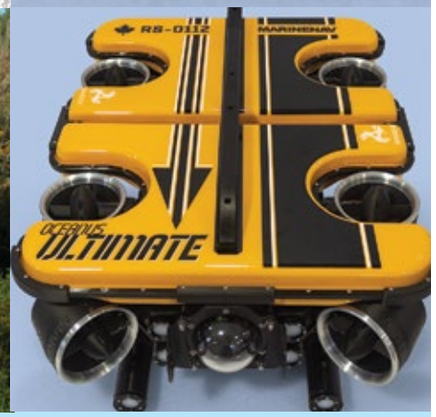


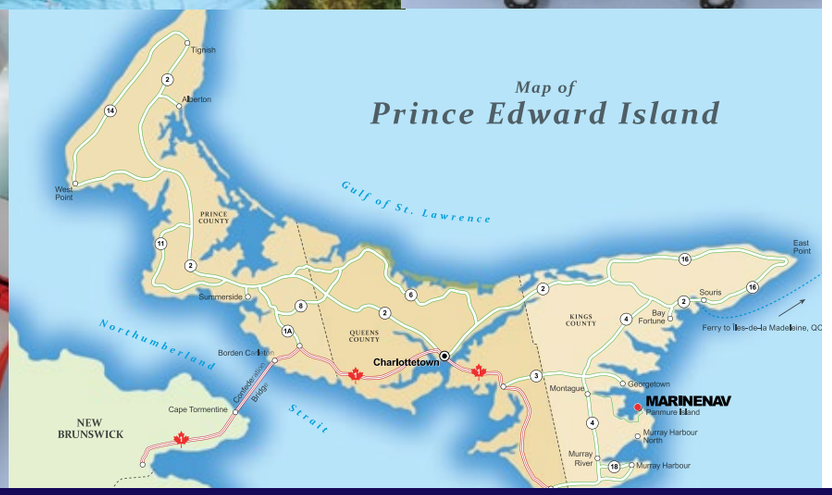












Built North Atlantic Tough. Trusted Everywhere.

Designed, engineered & manufactured on-site. | MN

Established in 2005, MarineNav has become a leading provider of custom-designed and manufactured bespoke marine-grade computers, displays, mil-spec components, and underwater remote-operated vehicles (ROVs) for commercial clients and government agencies. Represented by an ever-growing global authorized MarineNav distribution network, MarineNav's strength is building long-standing relationships with our clients, providing quality manufactured, competitively priced marine products that perform to the highest industry standards.

MarineNav is a recognized controlled goods facility with ISO certification and all product builds follow precise procedure. MarineNav products are designed, fabricated, hand-assembled and tested by experienced craftsmen at our manufacturing facility in Prince Edward Island Canada. We stand behind our builds, with all products protected by a two-year limited warranty.*

Speak to any one of our sales representatives about any of our featured products.
Our knowledgeable staff are able to assist you along each stage of order fulfillment.

Sincerely,

Kevan Merson
Managing Director

Neal Noseworthy
Technical Director

The Controlled Goods Program (CGP) is a registration and compliance program that regulates access to controlled goods in Canada. Controlled goods are primary goods that have military or national security significance.

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.

Please refer to page 24 of this document for brochure disclaimers.

MARINENAV

OCEANUS

ROV SYSTEMS

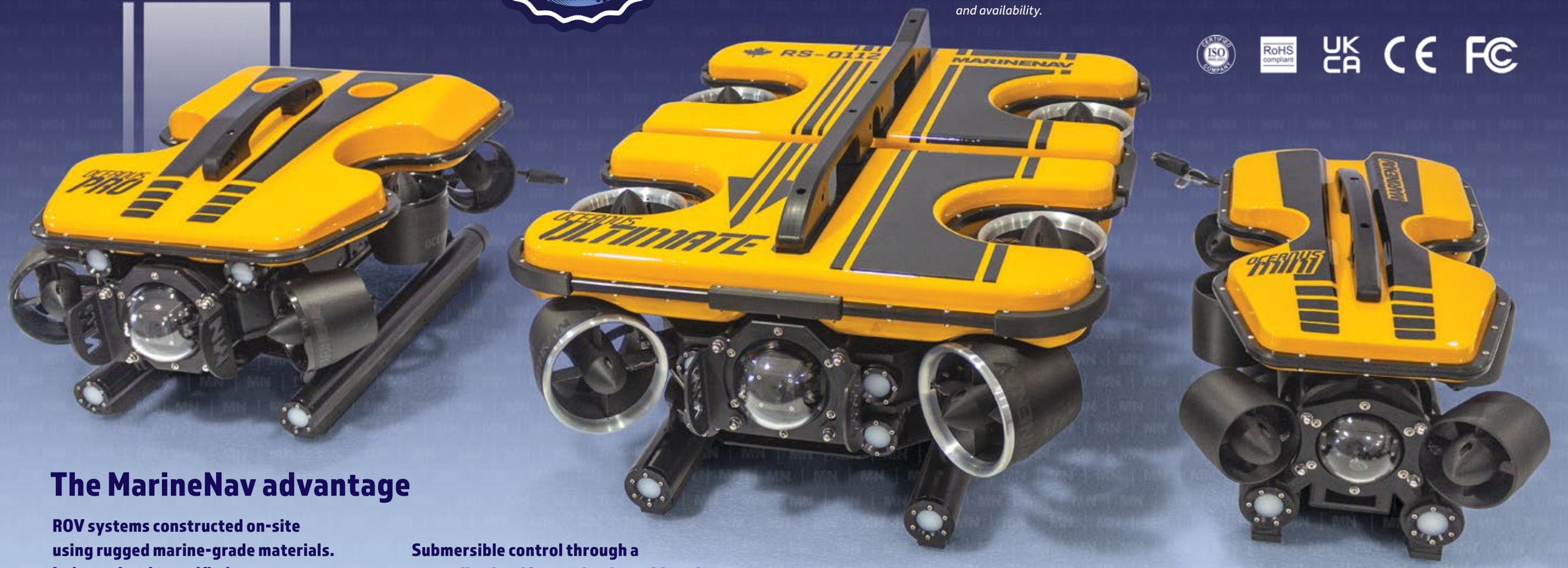
MARINENAV TWO YEAR limited warranty* *conditions apply

FULL HD 1080P video

From aquaculture to border security, environmental assessment to scientific research, our ROVs are the choice of professionals world-wide, who demand ROV systems that are adaptable to the requirements of their industry.

MarineNav offers a range of ROV platforms, optional system upgrades, and ROV accessories to ensure there is a ROV solution suited to your needs and budget. Speak to a MarineNav representative to see how our ROVs can work for you.

Mil-Spec options available on all Oceanus ROV platforms. Call for current pricing, specifications and availability.



The MarineNav advantage

ROV systems constructed on-site using rugged marine-grade materials. Independently certified.

Utilizing the latest 3D print technology and a fully furnished metal shop, MarineNav fabricates and manufactures its ROVs on-site using marine-grade anodized aluminum and rugged plastics. We adhere to ISO 9001: 2015 standards with each ROV built, and every ROV undergoes rigorous testing before delivery. MarineNav ROV systems have received pressure test certification from an independent research facility.

Submersible control through a ruggedized, self-contained topside unit and easy-to-use joystick.

Housed in an IP65-rated case and weighing approximately 18 kg, the topside unit features our proprietary FCS (flight control software) on a dedicated 10.1" touchscreen with a video feed on a larger 18.5" display. A ruggedly built hand-held Hall-effect joystick controller is fully integrated with the FCS software and provides intuitive ROV piloting.

Power to spare. Virtually unlimited ROV dive times.

With a minimum of six vectorized thruster engines, Oceanus ROV systems provide top-of-class speed and lift capabilities, ensuring our systems function even in the harshest marine environments. Unlike battery-powered systems, Oceanus ROV systems receive power through an ROV tether connected to the topside control case providing virtually unlimited dive times.

Mission ready ROV systems that are easy to transport and operate.

All ROV components are delivered in easily transportable IP-rated hard-shell weather-resistant cases and require minimum set-up time, ensuring quick ROV deployment and operation, even by one person.

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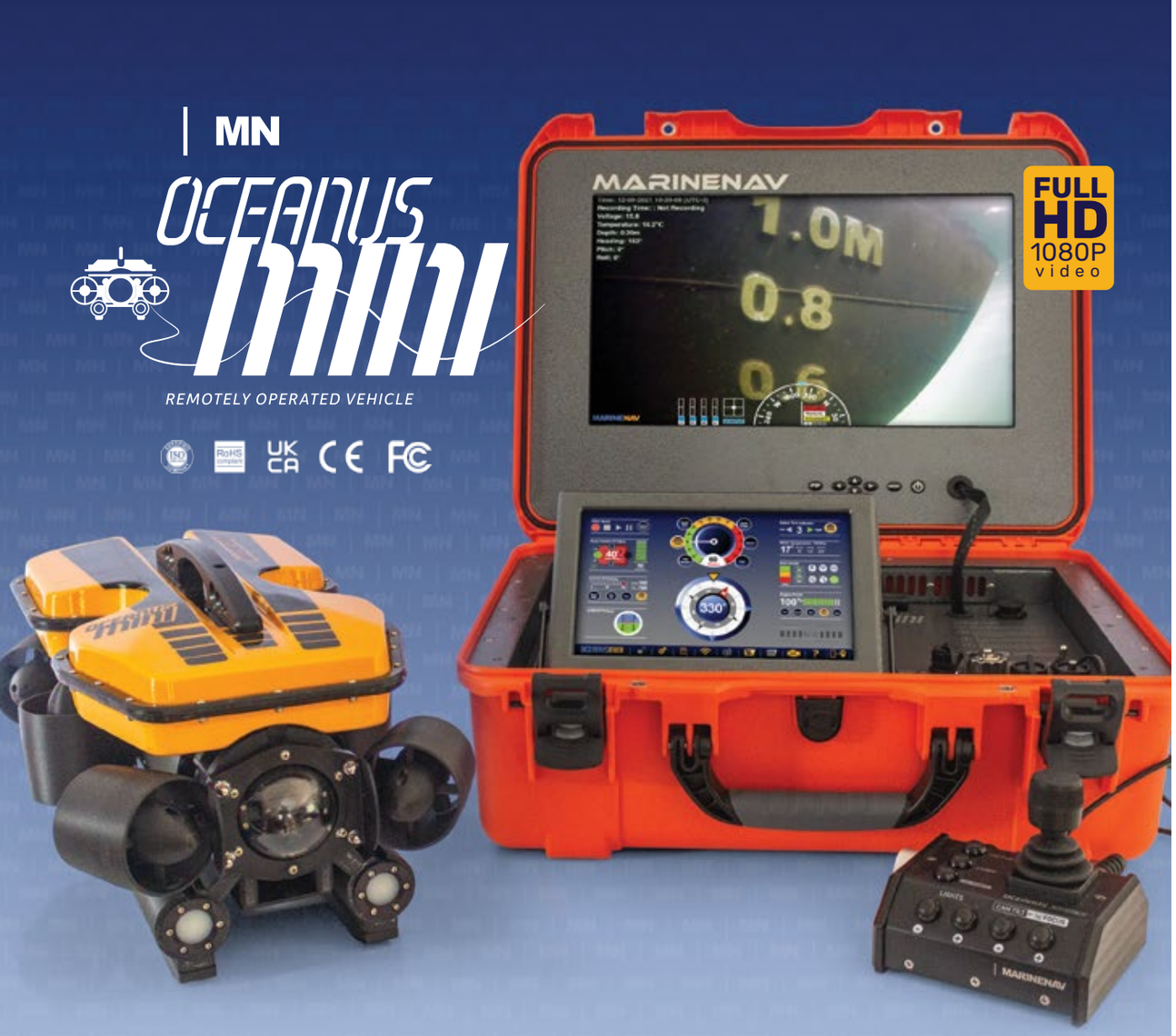
MN

OCEANUS mini

REMOTELY OPERATED VEHICLE

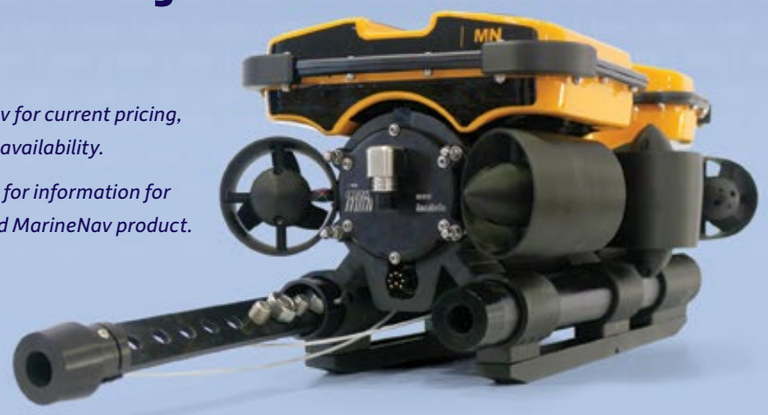


Compact and powerful, ideal for inspecting confined areas such as pipelines and holding tanks.

MARINENAV TWO YEAR limited warranty*

Contact MarineNav for current pricing, specifications and availability.

Visit marinenav.ca for information for this or any featured MarineNav product.



Weighing only 8.6 kg, this ROV is small enough to travel where other systems can't and powerful enough to accomplish demanding tasks.

Includes the Oceanus Mini ROV, the Oceanus Mini / Pro Topside Control Case system and the Oceanus Hand Controller (v2.1)

Ideal for conducting inspections in confined areas like pipelines and holding tanks. The Oceanus Mini's use of lightweight materials and a reduced footprint makes this ROV incredibly easy to transport, deploy and operate. Six vectorized thrusters generate a maximum speed of up to 4 knots, providing a wide range of ROV movement such as; full depth, horizontal and lateral movement (with auto depth, heading hold, and ROV stabilize control modes).•

Its smaller size does not mean this ROV lacks power or versatility. The Oceanus Mini ROV system flies to a maximum depth of 305m (1000 ft) and receives power over a connecting tether from the topside to the ROV. The core construction of anodized marine-grade aluminum and the same robust engineering standards found in our larger ROV vectorized thruster systems means this system will perform in harsh environments.

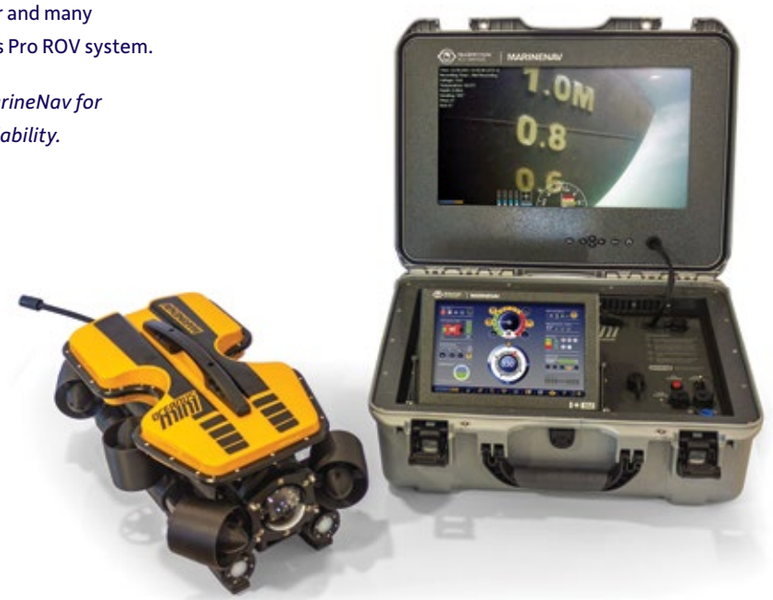
Designed to be fully compatible with the MarineNav Oceanus Pro ROV system, the Oceanus Mini ROV shares the same topside unit used by the Oceanus Pro ROV. Use the same MarineNav ROV connecting tether and many attachments developed for the Oceanus Pro ROV system.

Mil-Spec options available. Contact MarineNav for current pricing, specifications and availability.

Designed, engineered & manufactured on-site. | MN

Standard features include:

- ROV designed to fit through a 12" diameter entry point.
- ROV weight of 8.6 kg (19 Lb).
- Depth rating of 305m (1000ft).
- Up to 4 knot top speed (with performance float block).•
- Lateral axis ROV movement. Unparalleled control system and superior thruster performance delivers fully vectorized ROV maneuverability.
- 2 x 1500 lumen lights.
- Self contained topside with 15" or 18.5" TFT active matrix panel, (1600 nits brightness, full daylight readable) with 500 GB solid state drive storage (with an 64 GB SSD in the ROV).
- 1080p high definition video, high definition camera with +/- 120° tilt functionality provides stunning image captures.
- Oceanus joystick / hand controller constructed with 12 integrated function keys and a hall-effect joystick that controls important ROV functions.
- Oceanus multi port communication system allows rapid integration of third-party accessories, software and external processors.
- Power over tether design.
- Compatible with Oceanus Pro topside control system and many Oceanus Pro accessories.▾

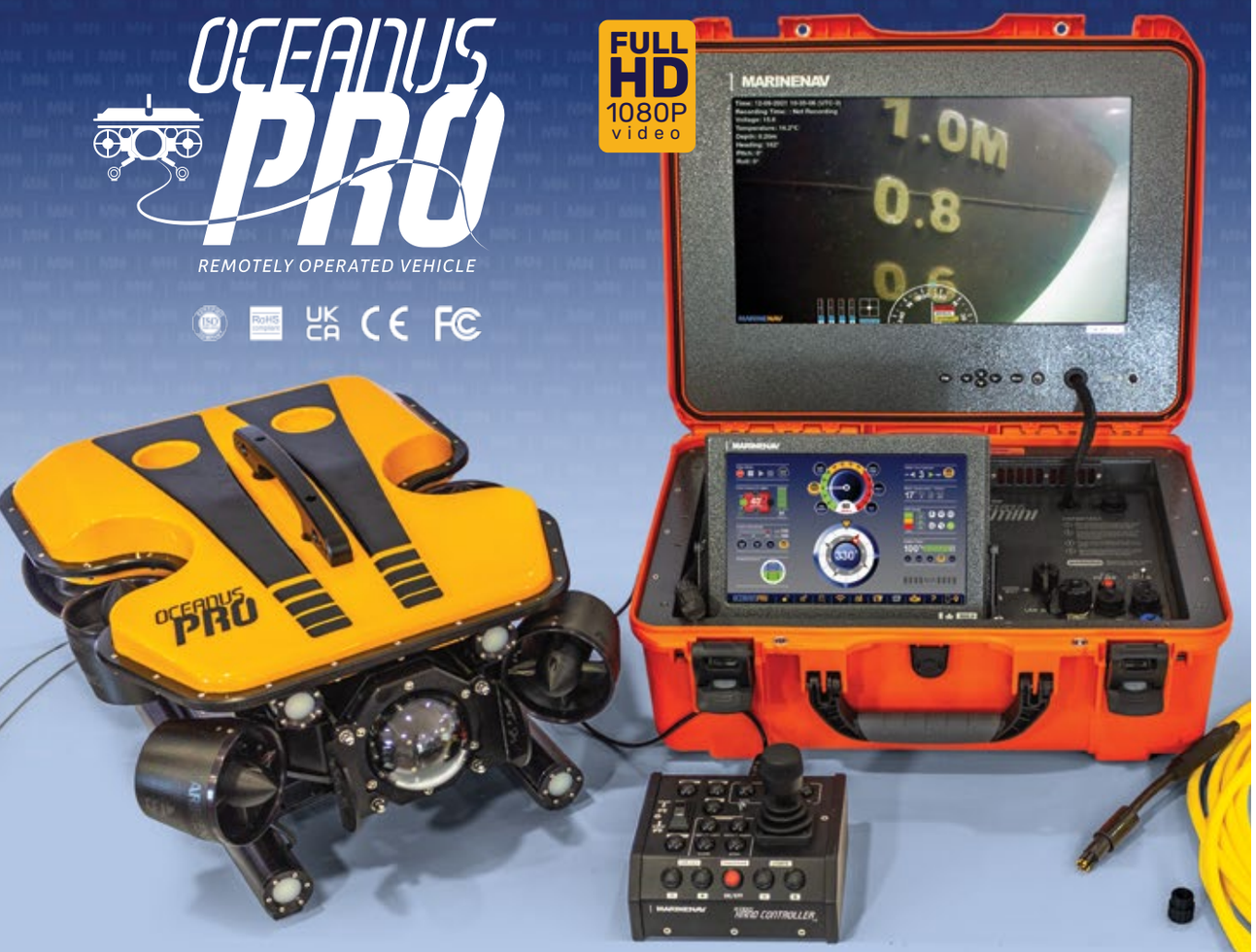


MN

OCEANUS PRO

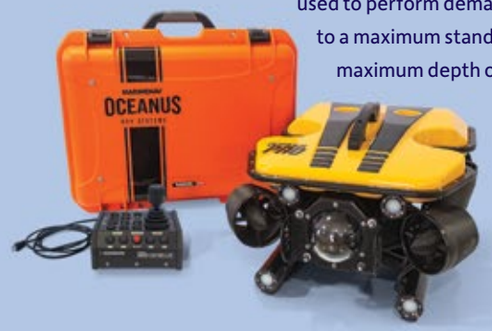
REMOTELY OPERATED VEHICLE

FULL HD 1080P video



Our most popular ROV. An abundance of features and the flexibility to accessorize for a variety of dive tasks.

Capable of deep-dive missions, the Oceanus Pro is our most popular ROV system. Favoured by commercial industries and government agencies for its rugged durability, customization options and value for the cost, the Oceanus Pro ROV system is used to perform demanding vessel and structural inspections. Independently certified to operate to a maximum standard depth of 305 m (1000 ft), an optional system upgrade allows dives to a maximum depth of 400 m (1312 ft)



MARINENAV TWO YEAR limited warranty*

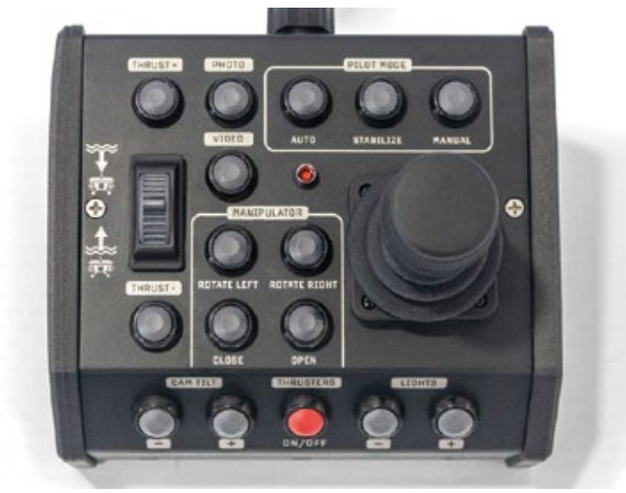
Mil-Spec options available. Contact MarineNav for current pricing, specifications and availability. Visit marinenav.ca for information for this or any featured MarineNav product.

Three built-in auxiliary ports to work with a wide range of MarineNav and third-party ROV accessories. (1 x Ethernet, 2 x RS485 / Manipulator / 12V / 24 DC / aux camera).

Includes the Oceanus Pro ROV, the Oceanus Mini / Pro Topside Control Case system and the Oceanus Hand Controller (v3.0).

Designed, engineered, and manufactured on-site, MarineNav's Oceanus Pro ROV weighs only 17.91 kg (39.5 Lb) and measures 605 mm (23.82") in length. It features rugged core construction of marine-grade anodized aluminum and other marine-grade components. The Oceanus Pro ROV is easily deployed and operated by one person and piloted in fresh or salt water, 0-50°C (32-122° F). The Oceanus Pro has been independently certified to operate to a maximum standard depth of 305 m (1000 ft). Achieve dive depths of 400m (1312 ft) with an optional system upgrade.

Six vectorized thrusters provide powerful thrust performance delivering top speeds of up to 6 knots with the ROV capable of vertical depth and horizontal lateral movement (Auto depth, heading hold, and ROV stabilize modes are standard features). A full HD 1080p internal front camera with camera tilt of +/- 180° pitch (vertical rotation), a one-touch video record function with overlay feature, and four front-facing 1500 Lumen lights ensure the ability to capture brilliant video without interruption of piloting the ROV system. •▾



Standard features include:

- Built-in lateral axis ROV movement. Unparalleled control system and superior thruster performance delivers fully vectorized ROV maneuverability.
- High output submersible with speeds of 6 knots.•
- Depth rating of 305 m (1000 ft).
- ROV weight of 17.91 kg (39.5 Lb), easily deployed by a single person.
- 4 x 1500 Lumen front lights.
- 1080P full HD video from a ROV on-board high definition camera with +/- 180° tilt functionality.
- HDMI video output provides convenience of connecting an external monitor to topside case to share streaming data captured by on-board camera to an external HD monitor.
- Auxiliary port(s) for accessories use.
- Power over tether means virtually unlimited dive times.
- 500GB SSD topside stores hours of data content.
- Touch-sensitive user interface and our FCS software (flight control system software) controls all essential ROV functions.
- MarineNav's Oceanus Multi-Port communication system allows rapid integration of third-party accessories, software and external processors.
- Wireless broadcast feature allows operator screen sharing to multiple parties.
- Optional MarineNav Fleet Management Suite reports status and health of ROV remotely for full tracking of one or multiple units.
- Ships with marine grade aluminum constructed Oceanus Joystick, configured for superior ROV control.
- 2-year limited warranty*

The Oceanus Pro ROV system includes the redesigned Oceanus Hand Controller/Joystick (v3.0). A reconfigured layout with a greater number of ROV command buttons and depth control thumbwheel provides superior access to crucial ROV functions.

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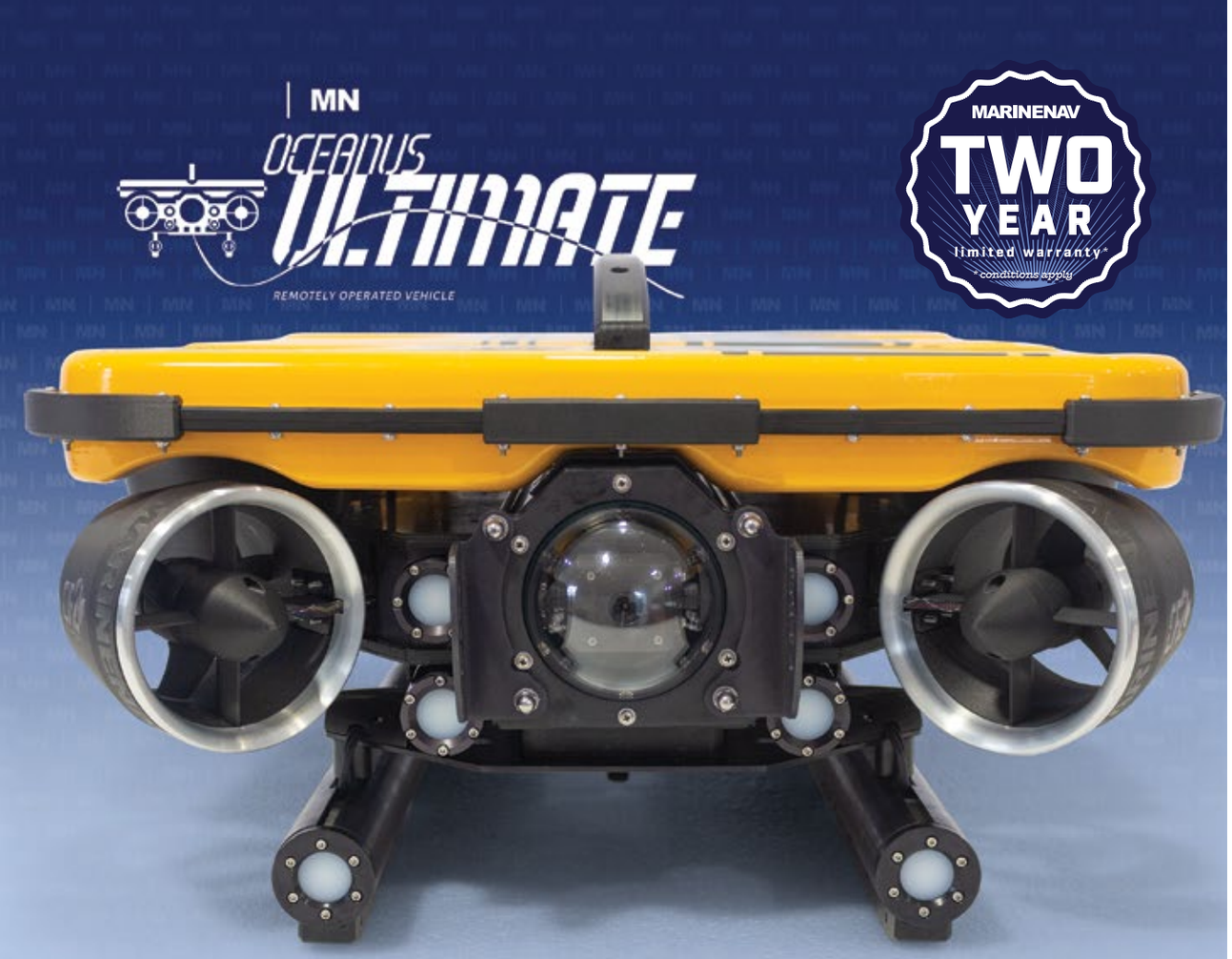
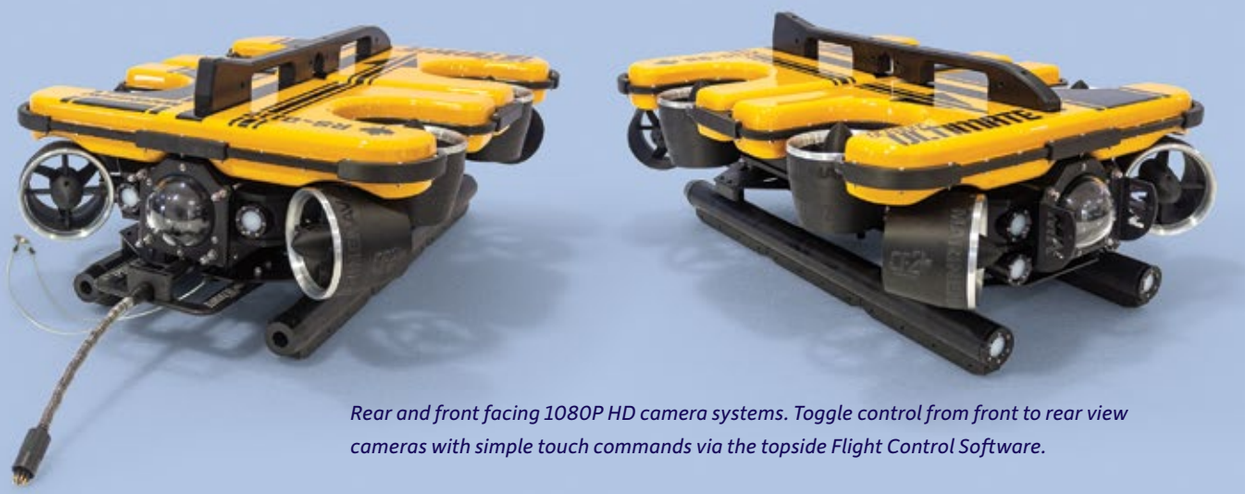


MarineNav's most powerful ROV. Eight vectorized thruster design, full pitch and roll and built-in auto pilot.



Rear and front facing 1080P HD camera systems. Toggle control from front to rear view cameras with simple touch commands via the topside Flight Control Software.

Distinctive eight vectorized thruster design, full pitch-and-roll control, built-in autopilot feature providing ultimate maneuverability when it's needed most. Dual full HD1080P video cameras provide extensive front and rear views.

Includes the Oceanus Ultimate ROV, the Oceanus Ultimate Topside Control System and the Oceanus Hand Controller (v4.0)

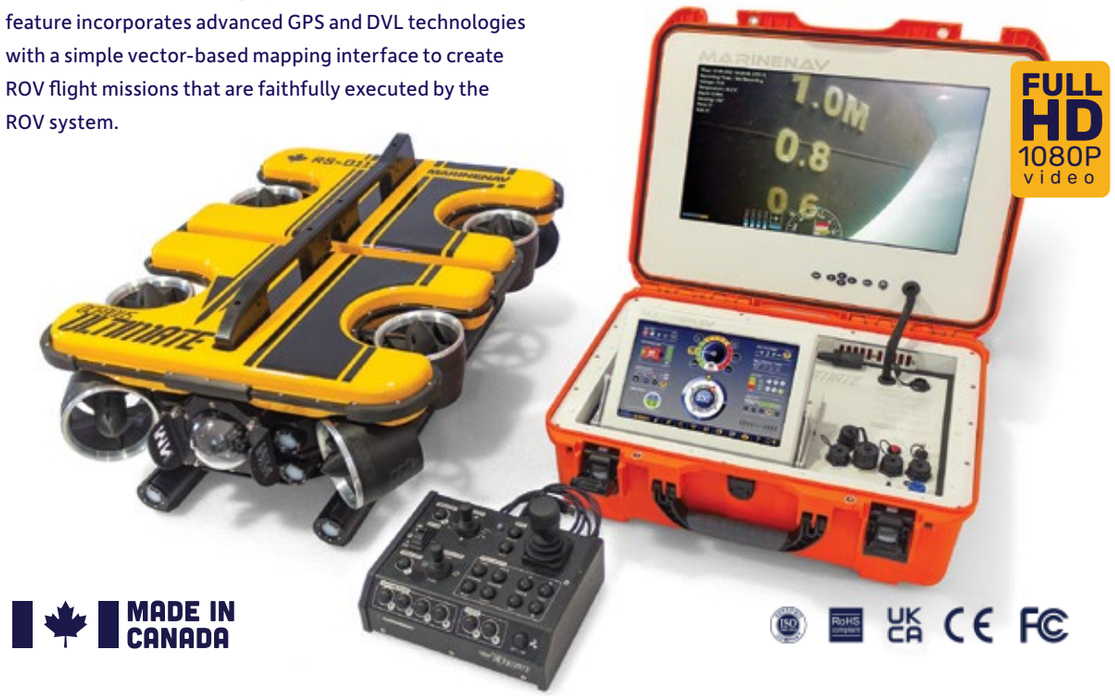
MarineNav's Oceanus Ultimate ROV system features a distinctive eight vectorized thruster configuration enabling a range of motion rarely seen in ROV systems (including sustained submersible pitch and roll maneuverability). Pitching the nose of the ROV forward or back greatly enhances the ROVs ability to effectively use on-board camera systems, manipulator arms, sonar systems, and other attachments, and roll maneuverability allows for effective navigating of restrictive areas and Auto Stabilize functionality locks the ROVs current position when optimum ROV positioning is critical during dive missions.

Built-in ROV autopilot follows preset map waypoints measured against collected DVL data. Developed for semi-autonomous ROV flight, the standard autopilot feature incorporates advanced GPS and DVL technologies with a simple vector-based mapping interface to create ROV flight missions that are faithfully executed by the ROV system.

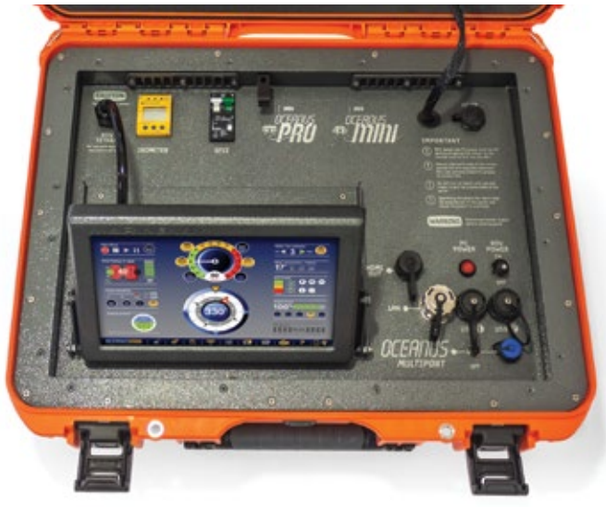
Standard features include:

- Maximum speed of 4 knots.
- ROV weight of 24.95 kg (55.0 Lb).
- Depth rating of 305m (1000 ft) with optional upgrade to a maximum of 500m (1640 ft).
- Eight powerful vectorized thruster design in a compact form provides six degrees of movement.
- Large payload and lifting power capacity.
- 8 x 1500 lumen lights (six front facing, two rear facing).
- Front and rear facing 1080P HD camera systems. Toggle control with touch commands via Flight Control Software.
- 1 Terabyte SSD topside (additional 64 GB SSD on ROV).
- 4 auxiliary ports as standard for a variety of accessories.
- Oceanus Multi-Port communication system allows for rapid integration of third-party accessories, software and external processors.
- Power over tether design.
- Topside case with primary 18.5" TFT active matrix panel.
- Unique joystick controls all ROV functions including maneuverability (including pitch and roll).

Mil-Spec options available. Contact MarineNav for current pricing, specifications and availability.



Core system components



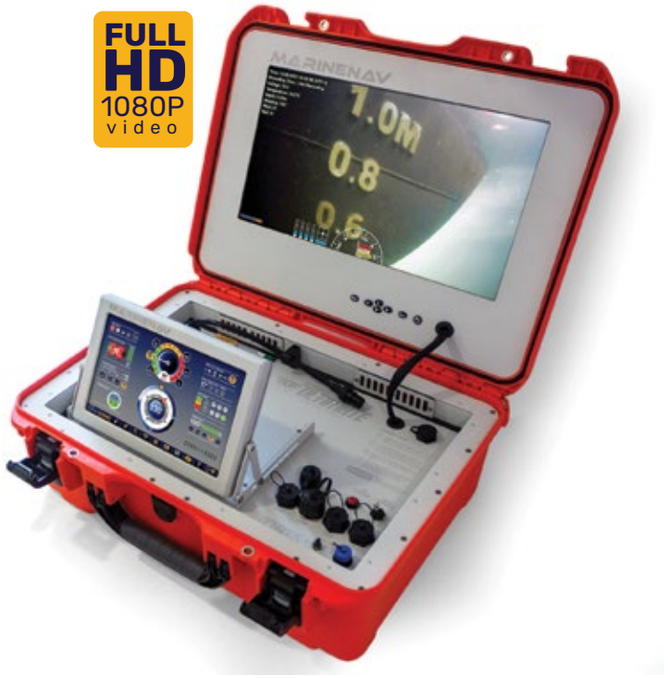
A self- contained, IP rated portable work station that contains all connecting ports, view screen and touch-sensitive software.

The Oceanus topside control case powers up and is fully operational in less than 60 seconds and features a built-in control console with access to a AC power connection, tether connection port, USB ports (1 port dedicated to the Oceanus hand controller / joystick), MarineNav's Multi-Port, and at least one auxiliary port. Built-in safety features include a GFCI (Ground Fault Circuit Interrupter) / Circuit Breaker and Isometer.

The topside control case features two displays. A primary sunlight-readable, splash-resistant video monitor displays streaming video that is viewable in any light condition (15" TFT active matrix panel standard for the Mini and Pro ROV systems and a 18.5" TFT active matrix panel standard to both the Pro Plus and Ultimate ROV systems).A secondary 10.1" TFT touch-active matrix display is dedicated to MarineNav's proprietary touch-activated Flight Control System software, where all critical ROV readings are displayed in real-time. Make adjustments on-the-fly simply by selecting the desired module, make button selections or use on-screen sliders to change ROV settings.

A generous 500 GB Solid State Drive is built into the Mini/Pro topside case, enabling storage of hours of captured video (the Ultimate topside control case features a 1 terabyte SSD). Built-in HDMI video output offers the convenience of sharing streaming data to an external monitor. The Mini/Pro and Ultimate topside control case units include a wireless feature allowing for the broadcast of video to multiple devices simultaneously via integrated antenna. Broadcast to a remote web enabled device via a simple to use interface.

Visit our website, www.marinenav.ca or contact a sales representative for specifications of each ROV topside control case unit available.



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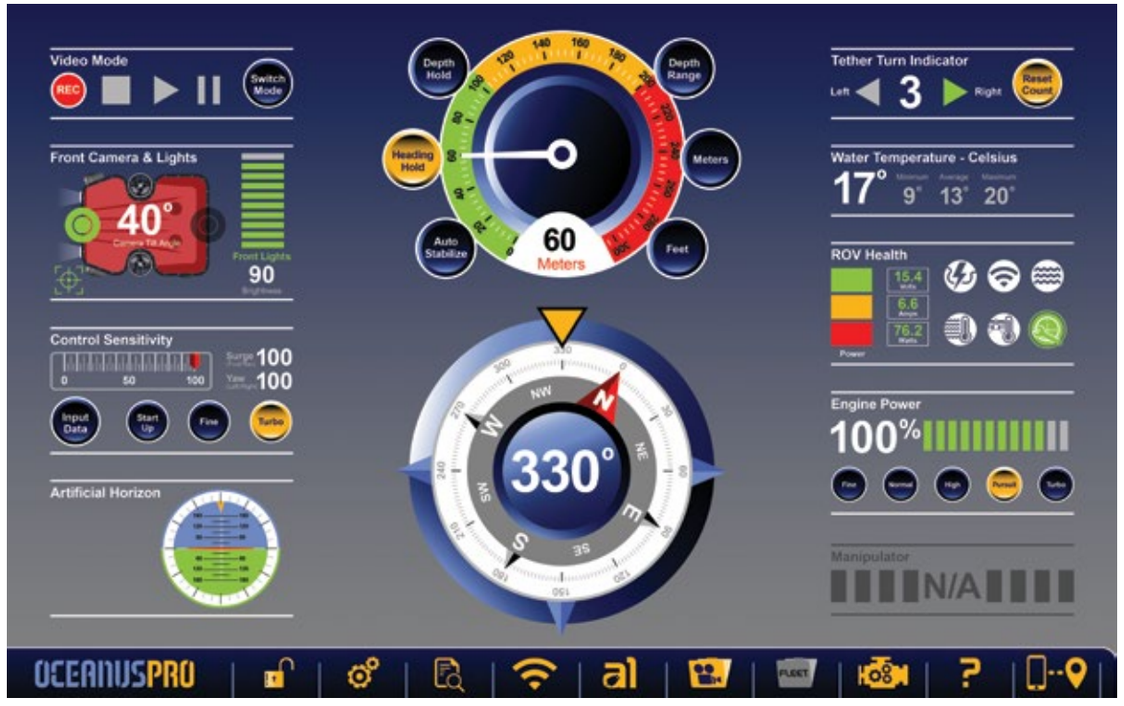


Proprietary FCS software makes ROV flying a breeze.

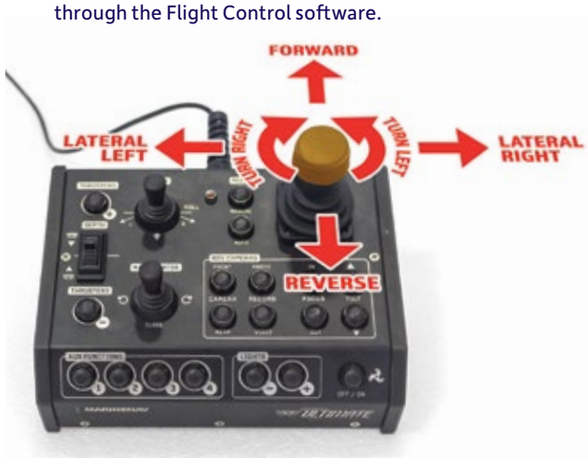
Our team of engineers and software developers worked closely to create the Oceanus FCS software (Flight Control System software). the FCS software creates an instinctive software environment which provides effortless piloting of the ROV.

Novice users to experienced pilots will appreciate the intuitive user interface that provides information on all functions of the submersible. MarineNav's touch-sensitive screen function allows the user to adjust ROV settings without interrupting the operation of the submersible.

- Controlled from a dedicated 10.1" resistive touch screen allowing video stream to be uninterrupted.
- Real time stream of data within the software interface and video monitor's HUD (Heads-Up Display).
- Lock ROV position by touch-command.
- Expand software modules and use sliders.
- Export dive history data to .CSV format file.
- Drag and drop file transfer interface.

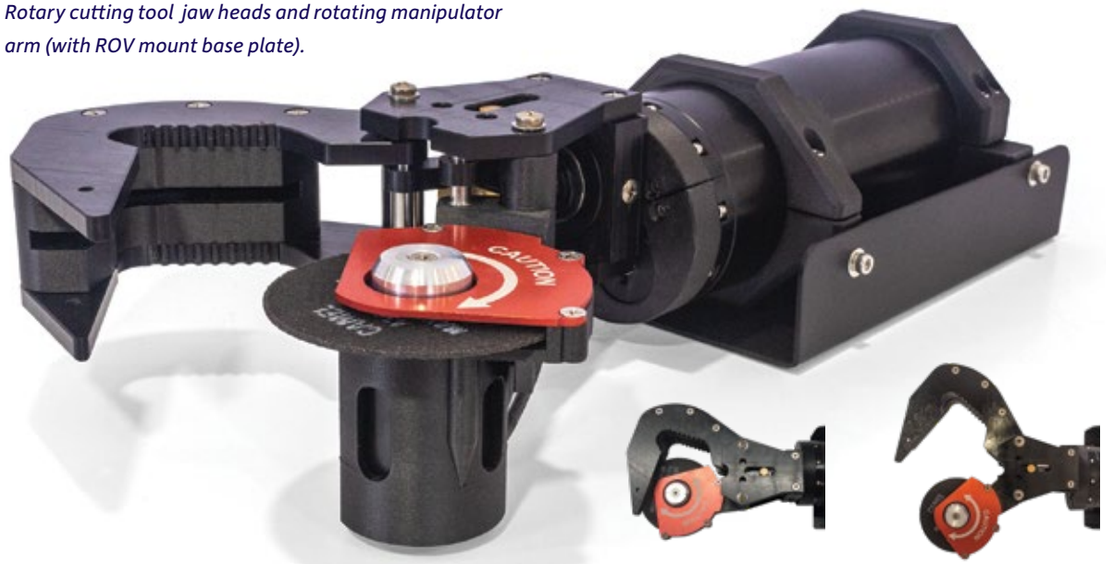
Responsive 3-axis hand-held controller.

The Oceanus joystick is a 3-axis hand controller featuring Hall-effect technologies providing trouble-free control of ROV motion. Directional joystick movements provide forward or rear thruster thrust, lateral left, or lateral right movement. The joystick head controls ROV left and right turn commands. A side mount dial controls the rate of ROV ascent and descent. Depth, camera tilt and manipulator functions are controlled by additional thumb wheels and joysticks while controller buttons provide easy access to frequently used ROV functions that can also accessed through the Flight Control software.



ROV accessories and parts

Rotary cutting tool jaw heads and rotating manipulator arm (with ROV mount base plate).

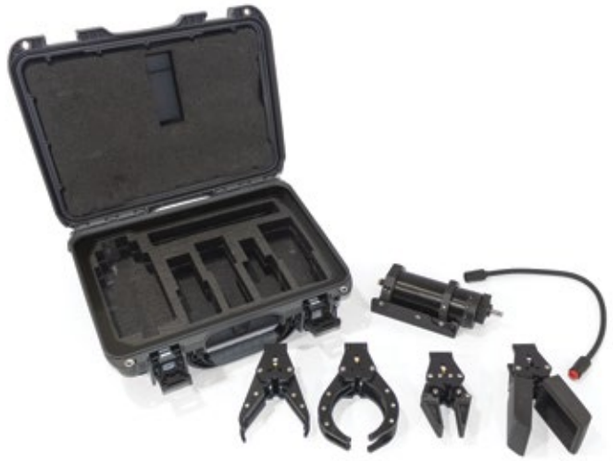


Our ROV systems support a wide range of third-party accessories, and we can design and manufacture bespoke ROV accessories for your industries need.

MarineNav produces a variety of ROV accessories to enhance the functionality of your selected ROV system. Working with our clients we have created custom built accessories suited to their industries specific need. MarineNav Ltd. Specializes in concept design, prototyping, and manufacturing, employing a staff of dedicated professionals with decades of accumulative experience. Contact MarineNav to discuss bespoke ROV accessories.

ROV manipulator arms.

Designed, engineering and manufactured on-site, MarineNav has developed a line of ROV manipulators and head attachments to perform essential tasks. From economical single-axis manipulators, to our complex rotating manipulators with interchangeable jaw-heads and cutting tools, there is a MarineNav manipulator guaranteed to work with your ROV system. All manipulators are manufactured to exacting standards using long-lasting marine-grade materials and are easily mounted to the ROV mount platform. Our proprietary software recognizes MarineNav 'smart' accessories when they are properly mounted, and all accessory control functions are accessible through the FCS software or by the hand controller button selection.



MarineNav's rotating manipulator with storage case, four interchangeable jaw heads and connecting cable.

On-site manufactured ROV accessories

- **ROV tether.** Available in negative or neutral buoyancy and manufactured to measured lengths. (Custom lengths upon request).
- **Tether deployment reels.** a selection of different tether deployment reels are available for easy storage and management of tether lengths. Integrated slip rings allow you to pay out only the length of tether needed, standard reel max 180m tether, other reels available that store up to 500m of tether.
- **Manipulator arms.** Single axis or rotating manipulators made to order with interchangeable jaw heads.
- **ROV fish scoop.** Provides simple retrieval of fish morts and other items using a dozer and clamp style attachment.
- **Gaff hooks / retrieval hooks.** A selection of different hooks / gaffs provide the means to attach to objects sub-sea.
- **Oceanus thruster guards.** Protect thruster blades by minimizing thruster intake of foreign matter when thruster engines are engaged.
- **Custom built external camera mounts.** Designed to work with your existing camera system.
- **Tube feet skids / wheel mounts.** Protect your ROVs tubular legs and skids by rolling across surfaces you come in contact with.

Third-party supported accessories.

Contact MarineNav regarding popular third-party ROV accessory options available to each class of ROV system we manufacture. Third-party accessories include;

- Sonar systems
- Metal thickness gauge
- Tracking and positioning systems
- Cavitation hull-cleaning systems.

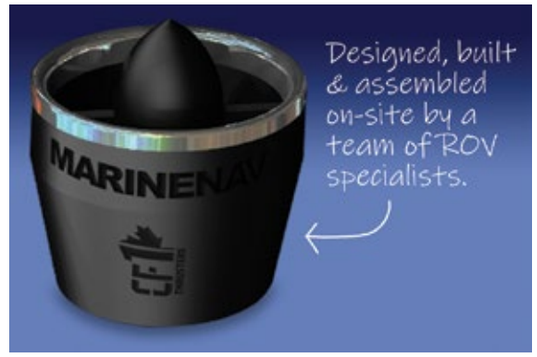
ROV replacement parts made to order

With all of our ROV systems designed and manufactured on-site MarineNav is positioned to provide an extensive range of ROV replacement parts that replace ROV modular components over normal wear. Many of MarineNav's replacement parts are easily replaced with a minimum requirement of time and tools. Our service department of knowledgeable technicians is available to offer technical support for specialized ROV parts replacement.

Visit our website at www.marinenav.ca to download a current list of available ROV replacement parts, or contact a MarineNav representative if you require a unique part.

Superior ROV parts built on-site. Unmatched customer support.

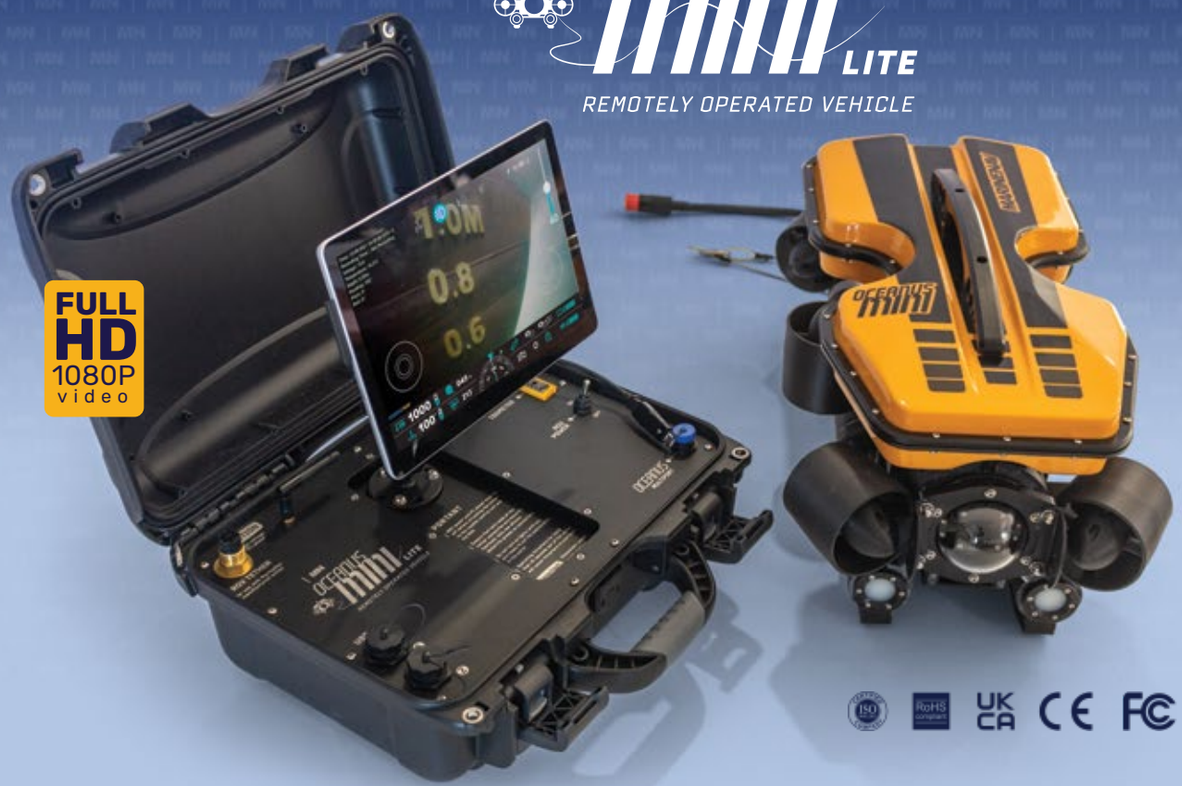
- **Quality Control is #1.** We have full control of our manufacturing and assembly.
- **Parts are always available.** We manufacture in-house and maintain an inventory of supplies of parts at all times.
- **Bespoke solutions.** We can modify, adapt and build almost anything our customers require.
- **Premium quality connectors.** We use sub-sea industry standard connectors, creating tethers and whips in house.
- **Knowledgeable service.** Speak directly with the people who designed, engineered and manufactured your parts firsthand.



MN

OCEANUS mini LITE

REMOTELY OPERATED VEHICLE



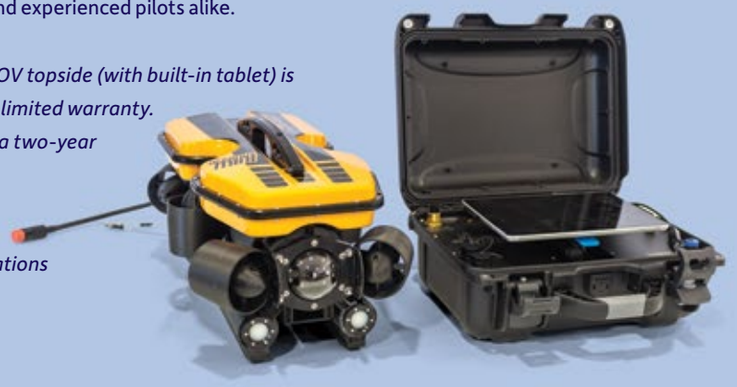
Our most affordable ROV system features a compact topside case with removable touch-sensitive PC tablet.

The Oceanus Mini Lite ROV system is independently certified to operate to a maximum standard depth of 305 m (1000 ft). This feature-rich inspection class ROV is ideal for vessel and infrastructure inspection, locating and assisting ghost gear retrieval or visually documenting evidence. A reduced footprint and ease of setting up, deployment and flying make this user-friendly ROV system the choice of novice and experienced pilots alike.

MARINENAV ONE YEAR limited warranty* *conditions apply

The Oceanus Mini Lite ROV topside (with built-in tablet) is protected by a one-year limited warranty. The ROV is protected by a two-year limited warranty.

Contact MarineNav for current pricing, specifications and availability.



With a redesigned topside weighing 7.39kg, the Oceanus Mini Lite is a capable introductory level ROV system.

Includes the Oceanus Mini Lite ROV, the Oceanus Mini Lite Topside Control Case with removable touch-sensitive PC tablet and a lite version of MarineNav's proprietary Flight Control Software.

Designed for the budget minded and adapted from the Oceanus Mini ROV system, the Oceanus Mini Lite ROV platform includes our versatile Oceanus Mini ROV submersible. Featuring the same high-end features, the ROV is manufactured to the same standards and undergoes the same strenuous testing as our Oceanus Mini ROV.

What distinguishes the Oceanus Mini Lite ROV system is a redesigned topside ROV control case that provides power to a rechargeable touch-sensitive tablet operating a lite version of our proprietary FCS software. The tablet is an all-in-one system that acts as the ROV's camera view screen and ROV hand controller. The lite version of our FCS software displays mission critical ROV readings and utilizes touch-sensitive sliders that allow pilots to change ROV settings on-the-fly.

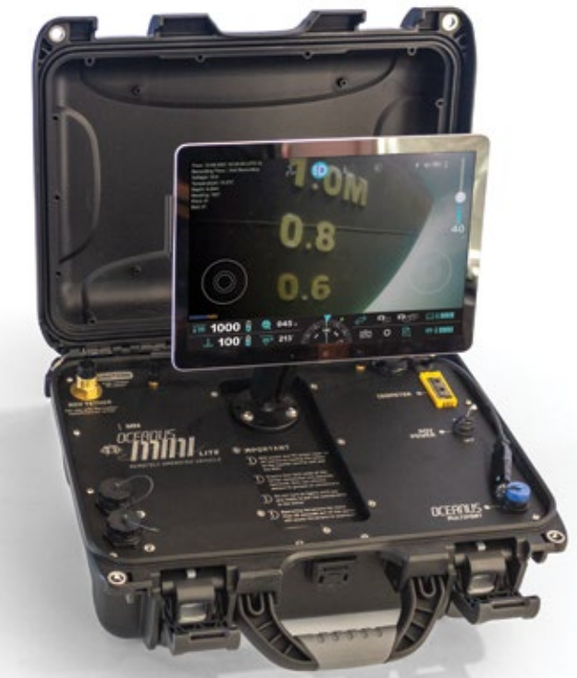
With an exterior measurement of 15.8" (L) x 12.1" (W) x 6.8" (H), the IP-rated topside case functions as the operational hub of the Oceanus Mini Lite ROV system. Outfitted with AC power in connection, topside to ROV tether connection, Isometer, 2 USB ports, PC tablet power cable, two built-in wifi antennae and the MarineNav proprietary Multiport connection port, the topside is feature-rich, making the Oceanus Mini Lite ROV system compatible with many Oceanus ROV accessories.

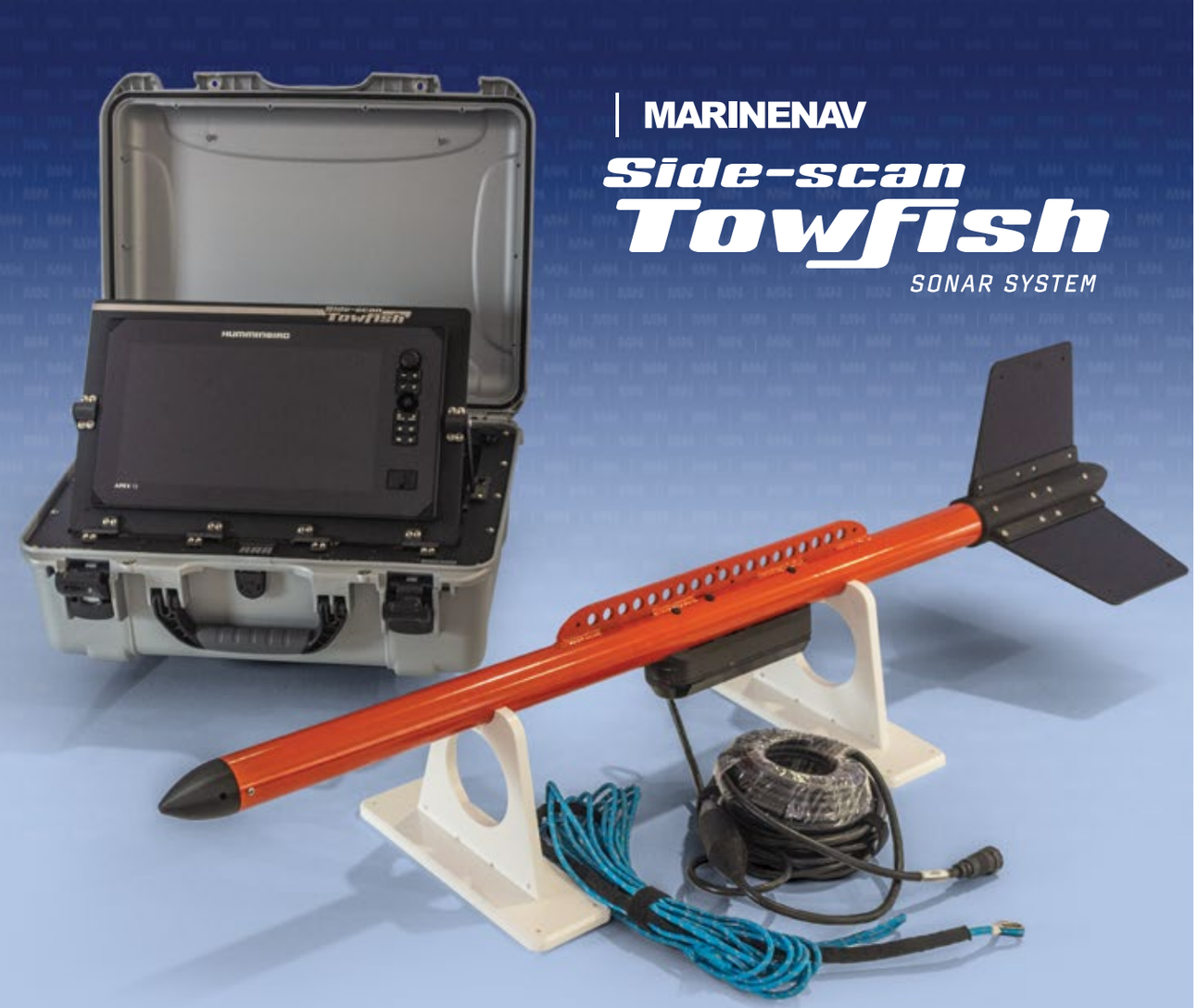
ROV Tether is sold separately. Contact MarineNav for current pricing, specifications and availability.

— introducing a MARINENAV NEW PRODUCT for 2023

Standard features include:

- ROV weight of 8.6 kg (19 Lb).
- Depth rating of 305m (1000ft).
- Up to 4 knot top speed (with performance float block).•
- Lateral axis ROV movement. Unparalleled control system and superior thruster performance delivers fully vectorized ROV maneuverability.
- 2 x 1500 lumen lights.
- 1080p high definition video, high definition camera with +/- 120° tilt functionality provides stunning image captures.
- Topside weight of 7.39kg (16.3 Lb).
- Topside features built-in removable touch-sensitive tablet with a 10" view screen and interactive sensors to control ROV movement.
- Topside features a built-in docking station to recharge the tablet's internal battery.
- Wireless communication between PC tablet and topside case to a range of < 25m.
- Oceanus multi port communication system allows rapid integration of third-party accessories, software and external processors.
- Power over tether design.



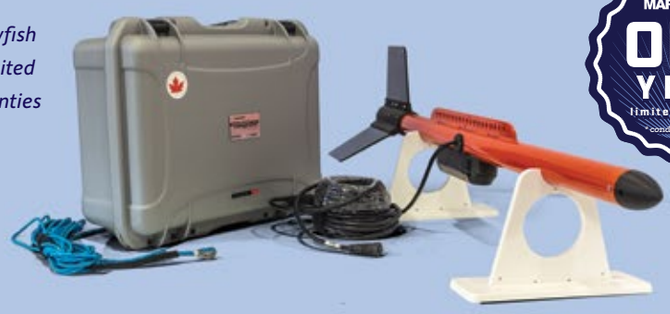


The Side-scan Towfish sonar system serves as a perfect complement to your ROV fleet.

Capable of wide-beam scans, the Side-scan Towfish sonar system replaces the need for destructive bottom dredging or expensive dive teams. MarineNav wide-beam scan sonar systems are ideal for preliminary assessment of potential target areas capturing anomalies that can be reviewed and marked with geo-markers for future ROV exploration.

MarineNav manufactured Side-scan Towfish components protected by a one-year limited warranty. Third-party component warranties available upon request.

Contact MarineNav for current pricing, specifications and availability.



MARINENAV ONE YEAR limited warranty* *conditions apply

Quick deployment and surveying capabilities. Choose between DC, AC or built-in battery source. Three adjustable sonar frequencies. Create waypoints and record GPS locations.

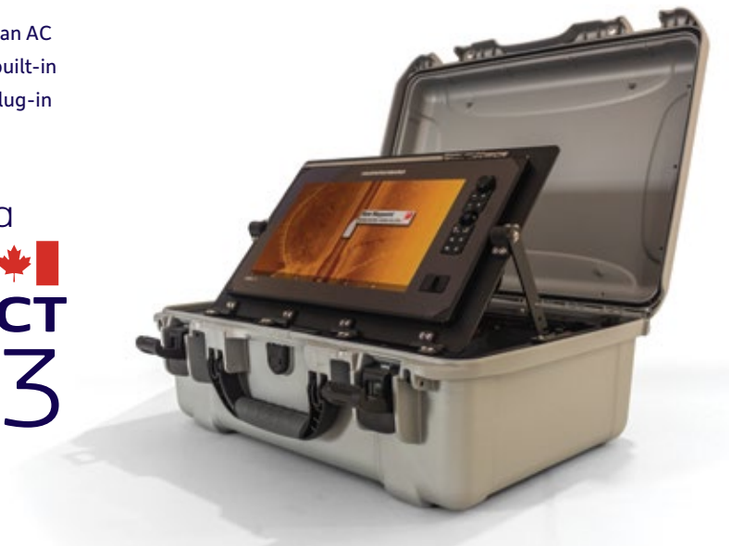
Includes a Towfish torpedo outfitted with sonar, one topside control system,45 feet connecting tether with strain relief cable, connecting carabiner and software license key.

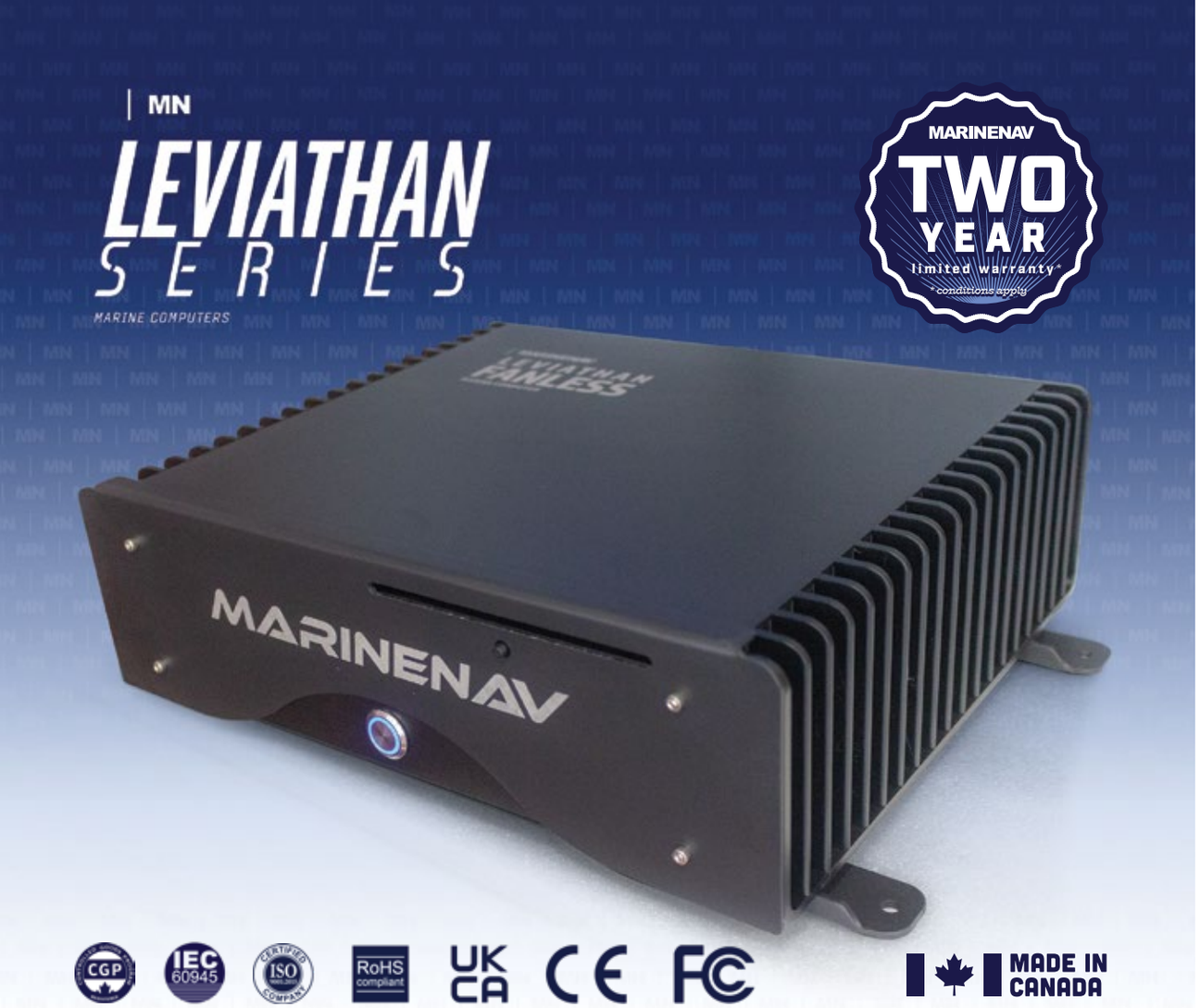
MarineNav's portable Side-scan Sonar Towfish system is a portable sonar that is easily transported and deployed to scan large areas of the seabed to spot anomalies, wrecks, ghost gear and other objects. The Side-scan Towfish sonar is connected by a strain relief rope and towed behind your vessel as it is in motion. Conduct a smooth survey of a target area simply by lowering or raising the sonar to a fixed depth, thus eliminating potential pitch and roll that may affect the quality of data capture. With GPS integrated into the topside case built-in screen, the Side-scan Towfish sonar can also be used as a chart plotter and is compatible with most marine map software, including Navionics, to provide detailed nautical navigation charts.

Standard features include:

- Quick deployment and surveying capabilities. Connect, power-up and deploy the tow-fish over the side of a boat or from a Davit and start surveying an area in under five minutes.
- Choose from a DC power source (9-36V DC), an AC power source (120/240V AC), or access to a built-in battery source (built-in connectors for two plug-in Dewalt brand batteries).
- Adjust sonar to three adjustable frequencies of 455Khz, 800Khz or 1.2Mhz. Higher frequencies provide more detailed seabed scans, while lower frequencies increase the sonar scan range. At 455Khz, the Side-scan Towfish scans up to 235m (800 ft) on either side of your vessel.
- Identify found objects and anomalies in real-time, and mark targets by creating touch-activated waypoints that record GPS coordinates. Review sonar sweep data frame-by-frame, fast forward, reverse and pause command functions allow users to focus on keyframes to assess possible anomaly targets. All recorded data is saved to the topside control system solid-state drive for future dive missions.
- Rugged construction, hard shell cases for ease of transport
- 45 ft length of connecting cable, strain relief rope and carabiner
- Control Tow Fish pitch and flight behaviour with the pre-drilled connecting plate with an array of attachment holes and adjustable ballast weight in the nose cone.
- View streaming data in real-time on a 13-inch multi-function display. Built-in software allows users to review data on the fly, pause, reverse or jump forward to view keyframes for potential anomalies.
- 32 GB data storage topside.
- The Side-scan Tow Fish includes a one-year limited warranty extended to all MarineNav-manufactured components within the system.

— introducing a NEW PRODUCT for 2023 MARINENAV





Leviathan series computers, the most reliable marine PC series on the market.

MarineNav's bespoke marine-grade computers are built rugged with a standard mean time before failure (MTBF) of over 100,000 hours. That is why our computers are the choice of mariners world-wide. Our products are found on luxury yachts, commercial fleet vehicles, scientific research vessels and trusted by international government agencies and naval fleets.

Our Leviathan computers are designed, manufactured and precision built at our facility in Prince Edward Island. Each computer undergoes a vigorous two-stage quality control check to detect potential issues before shipping. Our knowledgeable sales team will guide you through computer chassis choices, component selections and customized colour and branding opportunities.

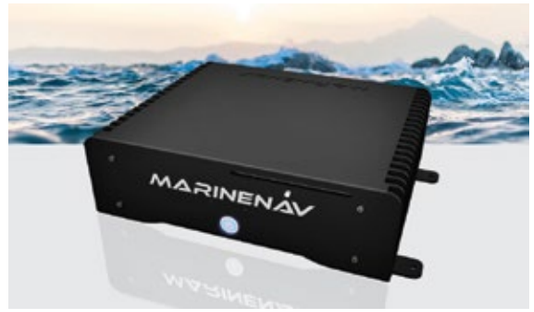
Rugged multi-layer vibration dampening and anti-shock technology are at the core of each system and all computers are finished in salt rated, UV protected marine-grade powder coating inside and out, and an easy-to-use built-in emergency backup system and a 2-year limited warranty protects your investment.*

Computer chassis options

Leviathan rack mount systems

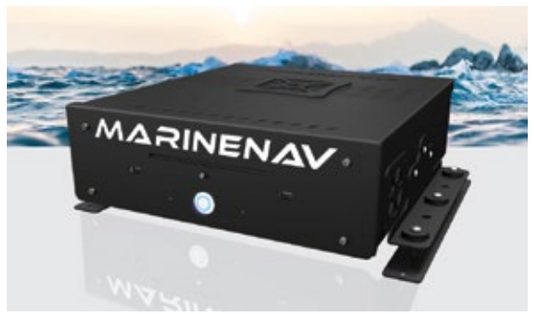
Rack mount installations are a convenient and versatile installation solution for almost any vessel. Built with proven industrial-grade hardware, these marine-grade computer systems will provide you with all the power you need for your vessel's navigation and system operations.

Common chassis sizes 2U, 3U & 4U (Larger sizes available)



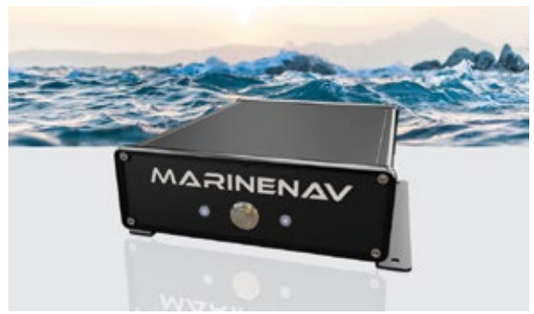
Leviathan fanless systems

All the power without any sacrifice of speed, plus the added benefit of no moving components. A perfect computer system for running radar systems, Integrated Bridge Systems (IBS), Electronic Chart Display and Information Systems (ECDIS), Dynamic Positioning Systems (DPS), and Voyage Data Recorders (VDR).



Leviathan surface mount systems

Surface mount computers offer our customers great flexibility when it comes to installation. These units can be custom mounted to a wide variety of locations on a vessel. Our multi-layer vibration dampening and anti-shock technology make these units very stable and unshakable. Built with proven industrial-grade hardware, these marine-grade computer systems will provide you with all the power you need for your vessel's navigation and system operations.

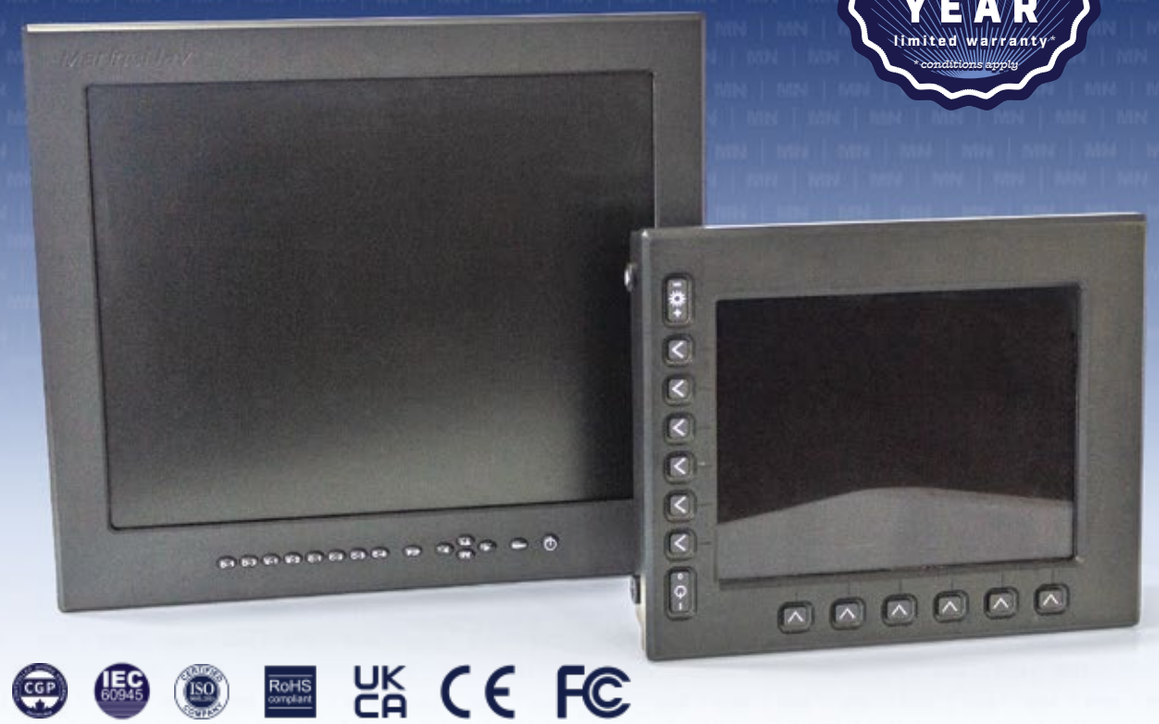


Leviathan mini systems

Perfect for law enforcement, search and rescue, and other fast rescue crafts (FRC) which are often challenged for space, the Leviathan Mini is capable of running vessel monitoring software, 2D and 3D navigation, vessel monitoring, and multimedia software.

MN

MARINE-GRADE DISPLAYS



Built in Canada & trusted by defense agencies worldwide.

MarineNav builds tough, true marine-grade displays capable of performing in the harshest environments on earth. Internationally known for their quality and reliability, our displays are precision-built from high strength marine-grade aluminum and finished in salt rated, UV protected powder coating inside and out. Developed to suit a variety of vessels from climate-controlled luxury yachting to more demanding IP65 rated open flybridge military/naval applications and everything in between, there is a MarineNav display suitable for your needs.

Standard features include one-touch input selection, dedicated backlit front controls that are easy to see and use, and one-touch red monochrome night mode ideal for low light conditions.

Our defence technology partners:

Raytheon Technologies

LOCKHEED MARTIN

RAFAEL ADVANCED DEFENSE SYSTEMS LTD.

CG Elite series

1000 - 2000+ nits brightness.
Available in 12", 15", and 19" sizes.

The CG Elite Series is our premium class of marine-grade LCD displays featuring optical bonded resistive touchscreen technology that performs even with gloves on. Seeing is believing with our high bright sunlight-readable display. Standard features include one-touch input selection, dedicated backlit front controls that are easy to see and use, and one-touch red monochrome night mode ideal for low light conditions.

Mariner series

300 - 1000+ nits brightness.
Available in 12", 15", 18.5", 19", 21.5" and 24" sizes.

Built on the same proven platform as our CG Elite displays, Mariner LCD displays offer excellent value and daylight readable performance. Our Mariner displays feature 300-1000 nits brightness. Standard features include one-touch input selection, dedicated backlit front controls that are easy to see and use, and one-touch red monochrome night mode ideal for low light conditions.

Mil-Spec series

0 - 1100+ nits brightness.
Available in 12", 15", and 24" sizes.

Bespoke marine-grade display solutions for Coast Guard, Defense & Law Enforcement sectors. Design and manufacture with confidence, MarineNav Ltd. Is a registered (CGP) Controlled Goods Program facility. Our fabrication facilities allow us to develop all aspects of your project in-house, which ensures complete control over the entire process. We can also accommodate meetings between your design team and our engineers and provide in-house product testing and trials. All MarineNav projects are developed in a fully confidential environment.

Never outsourced, the systems we sell are built and tested right here in our Canadian facility. All aspects of your project, from research and development to manufacturing, to after-care support are conducted from the same location.

Mil-Spec 24"
Our Mil Spec series is designed exclusively for the Coast Guard, Defence, and Law Enforcement sectors. Increased bezel depth, tough exterior construction, and EMI shielding makes these displays more robust than our commercial series and ideal for extreme environments. With anti-glare/anti-reflective front glass, wide dimming range and available red monochrome night mode, these displays are easily viewable in most conditions. Front accessible mounting hardware is provided for dedicated, mission specific installations.

Mil-Spec DU Series
Features an extremely durable front bezel constructed of heavy-duty marine grade aluminum.

These displays feature high bright 1100 nits brightness making them excellent for high visibility in sunlight. Standard features include dedicated backlit front controls that are easy to see and use, and one-touch red monochrome night mode ideal for low light conditions.

*All MarineNav displays come with a two-year limited warranty.**

Controlled goods designation.

The Controlled Goods Program (CGP) is a registration and compliance program that regulates access to controlled goods in Canada. Controlled goods are primary goods that have military or national security significance.

MARINENAV

BUILT NORTH ATLANTIC TOUGH.
TRUSTED EVERYWHERE.

Panmure Island Rd, Panmure Island, PE C0A 1R0
Tel: 902 838 7011 www.marinenav.ca
Fax: 902 838 2833 info@marinenav.ca

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.

** MarineNav's two year warranty is available when your MarineNav product is registered within the first year of purchase.*
For ROV warranty to be valid all scheduled ROV maintenance must be adhered to according to manufacturers guidelines. Limited warranty restrictions apply;

a) MarineNav Ltd warrants that tether supplied with ROV systems or supplied separately will be free from defects in materials and workmanship under normal use and service for a period of ninety (90) days from date of shipment.

b) MarineNav Ltd warrants that tether whips that were provided as part of an ROV system at time of original shipment will be free from defects in materials and workmanship under normal use and service for a period of six (6) months from date of shipment.

c) MarineNav Ltd warrants that thruster motors that were provided as part of an ROV system at time of original shipment will be free from defects in materials and workmanship under normal use and service for a period of one (1) year from date of shipment.
This does not include wearable parts such as propellers, which are considered a consumable item. Tampering, misuse and regular wear are not covered by warranties.

d) MarineNav Ltd warranties exclude corrosion that may occur on ROV metallic parts caused in part by improper cleaning and storage of ROV after each mission. Refer to your owner's manual for proper cleaning and maintenance of your ROV system.

• Maximum speed tests conducted with ROVs fitted with performance float blocks and absence of all ballast weights. Contact MarineNav for cost and availability of performance float blocks.

▼ Some accessories require use of the Marinenav Multi-Port communication system. Oceanus ROVs may exceed recommended depth ratings of some third-party accessories. Consult third-party manufacturer specifications for all accessories prior to use.

Proudly Canadian
MARINENAV **established 2005**

The Controlled Goods Program (CGP) is a registration and compliance program that regulates access to controlled goods in Canada. Controlled goods are primary goods that have military or national security significance.

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.

B-0024 MN Advantage-product overview-PR2