REMUS 130
Unmanned Underwater Vehicle

Third-Generation Portability With Proven Modularity

The REMUS 130 is the latest evolution of the REMUS 100 series, engineered to deliver enhanced underwater performance with maximum flexibility. Built on the same proven technology platform as the REMUS 300, it offers advanced capabilities and modular design at reduced cost and risk. Developed with internal funding, the REMUS 130 is tailored for customers seeking the long service life of REMUS UUVs with the open architecture and modularity of the REMUS 300 and REMUS 620 models.

REMUS 130 is powered by Odyssey™, a cross-domain asset management suite enabling collaborative autonomy across missions and platforms for enhanced operational efficiency and control.

Mission Applications

- **Mine Countermeasures (MCM)**
- **Search and Recovery (SAR)**
- **Rapid Environmental Assessment (REA)**
- **Marine Archaeology**
- **Offshore Oil and Gas Exploration**
- **Renewables**

REMUS 130 supports optional scalable, modular space for payloads for multiple missions including intelligence, surveillance and reconnaissance (ISR) and anti-submarine warfare.

Advantages

- Common technology platform for fleet interoperability
- Mature production line
- Cost-effective with long service life
- Supports customer-defined missions with scalable, modular payload space

Features

- Small-class, two-person portable
- 100-meter depth rating
- Up to 10-hour mission duration
- Max speed greater than 4.0 knots

Specifications

Vehicle Specifications: Three Rechargeable Battery Options	
Lithium-ion Battery Options	1.5 kWh Battery
Diameter	19cm (7.5 in.)
Length	2.03m (80 in.)
Weight	48.5kg (107 lb.)
Estimated Endurance*	10 hours
Maximum Range*	55km (29nm)
Recharge Time in Vehicle**	6 hours

Standard Specifications, Sensors and Payloads	
Depth Rating	100m (330 ft.)
Speed	0-4 knots (0-2.1 m/s)
Propulsion and Control	Direct drive DC brushless motor, open 3-blade propeller; Cruciform fin control (yaw and pitch)
Communications	WHOI micromodem 2.0 high frequency (20-30 kHz) acoustic communications; 2.4 GHz WiFi; Iridium (optional)
Antenna	GPS, WiFi, Iridium, LED status lights and visible and infrared (IR) recovery locating strobe
Navigation	iXblue Phins C3 Inertial Navigation System (INS); Garmin commercial or optional GB-Gram Military GPS; Long Baseline (LBL); DVL-aided dead reckoning
Doppler Velocity Log (DVL)	Teledyne 300 kHz phased array DVL capable of 200m bottom lock
Side Scan Sonar	Marine Sonics MK II Arc Scout 900/1800 kHz dual frequency; Resolution up to 5cm; Swath up to 160m
Other Sensors	NBOSI conductivity and temperature (CT) sensor; TE Connectivity depth sensor
Hard Drive	1 TB removeable solid state hard drive; Optional spare drives and data docking station
Warranty	Standard 1 year warranty; Warranty options available
Software	Vehicle Interface Program (VIP) for mission programming and post-mission analysis
External Connections	Gigabit ethernet; Vehicle power/charging (110/220V)
Tracking	Ranger & VIP software via towfish communications; Mission monitoring; Re-direct, loiter and abort commands
Safety Features	Ground fault detection; Leak detection; RJE International emergency locator beacon; Health status
Operations	Capable of operating multiple REMUS vehicles simultaneously
Auxiliary Equipment	Ranger and towfish; Ruggedized laptop; Hub box; Transit case with shock absorbent mounting; Lightweight, wheeled cradle; Vehicle maintenance cradle, Operations and maintenance spares
Iridium Communications	Iridium capable with encrypted Iridium dial-up and SMS modem; Customer must provide SIM card

Optional Payloads, Equipment and Software	
Camera	HD color stills camera
Synthetic Aperture Sonar	Kraken Aquapix MINSAS 60 Interferometric Synthetic Aperture Sonar with bathymetry; Constant resolution of 3cm x 3cm processed in real-time; Swath up to 236m
Environmental Sensors	Seabird Scientific Eco Puck Triplet
HDK and SDK	Hardware Development Kit (HDK) and Software Development Kit (SDK) for integration of third-party payloads and autonomy
Software	SeeByte SeeTrack and Neptune; REmote CONtrol (RECON); Reflection Post-Mission Analysis
Auxiliary Equipment	LBL transponders; Surface communications station; Extra hard drive and docking station; External battery charger**
NiMh Batteries	Nickel-Metal Hydride (NiMH) battery options

*At 3.0 knots (1.5 m/s) with standard sensors active
**Recharge time external to vehicle is 6 hours
** Bottom lock range value is based on theoretical maximum achievable range given ideal environmental and ocean floor conditions. Actual results may vary.

HII

About HII
HII is a global, all-domain defense provider. HII's mission is to deliver the world's most powerful ships and all-domain solutions in service of the nation, creating the advantage for our customers to protect peace and freedom around the world. As the nation's largest military shipbuilder, and with a more than 135-year history of advancing U.S. national security, HII delivers critical capabilities extending from ships to unmanned systems, cyber, ISR, AI/ML and synthetic training. Headquartered in Virginia, HII's workforce is 44,000 strong. For more information, visit: HII.com.