

MISSION SPECIALIST Wraith



VideoRay
AN AVS COMPANY



Mission Specialist ROV systems are rugged enough to work anywhere, delivering the portable, reliable systems you need to handle tough jobs in challenging environments.

The Wraith is the new flagship of the Mission Specialist line of submersibles, with capabilities far above and beyond any ROV in its class. With its 10 powerful thrusters, it can navigate and hold at any attitude during operations - including unlimited degrees of pitch and roll, upside-down, straight up/down, and sideways - giving the pilot the unique ability to perform difficult tasks without limitations.

Wraith's true six Degrees-of-Freedom (DOF) control also allows for direct-to-target transit to expedite prosecution with a mighty 80 pounds of forward thrust in any attitude. This advanced thrust technology eliminates the need for drop weights or extended dive/surface time when deploying in extreme depths.

And like all Mission Specialist submersibles, the Wraith utilizes interchangeable, modular, and reliable components that comprise a single, intelligent network, providing an extremely flexible and customizable platform that can be easily adapted to target-specific missions. It is this flexibility that sets the Mission Specialist ROV series apart from current technology in the industry.

_Specifications

[ELECTRICAL]

POWER REQUIREMENTS	Universal input 47-440Hz, 85-264VAC, 500W
POWER MODULE	400 VDC
POWER OUTPUT	12 VDC/120 W, 24 VDC/200 W, 48 VDC/6 kW
SUBSEA POWER	Mission Specialist Subsea Batteries (6) 6kW instantaneous power 2kW Hours total power
FEATURES	Power Control/Monitoring

[CONNECTIONS]

5-PIN	48 VDC - Thruster/LED RS-485
9-PIN	12/24 VDC - Accessories 100Mbps Ethernet RS-485
TYPE ST	Fiber Optic

[ENVIRONMENTAL]

DRY WEIGHT	99.8 kg (220 lbs)
DIMENSIONS LxWxH	131.2 × 77.6 × 34.3 cm (51.7 × 30.6 × 13.5 in)
DEPTH RATING	1,000 m Standard
TRANSPORT	Hard-sided, watertight case

_Modules

[ULTRA 4K SMART CAMERA]

PROCESSOR/STORAGE	NVIDIA Jetson Orin NX/1 TB SSD
OPTICAL SENSOR	1/2.3"
RESOLUTION/FOV	12.3 MP/180°v, 150°h, Digital Pan/Tilt/Zoom

[THRUSTERS]

HORIZONTAL (4) VERT/LATERAL (6)	Oil-filled brushless with quick-change propeller, programmable
THRUST	Forward 36.3+ kg (80+ lbs) Reverse 18 kg (39.6 lbs)
VELOCITY	Forward: 4.2 kts, Lat: 0.9 kts, Vert: 1.5 m/s
LIFTING	36.3 kg (80lbs)

[LIGHTING]

LED LIGHT ARRAYS (2)	Individually controlled spot and flood arrays, 38 W max each, 3,000 K CCT, 80 CRI White 7,600 total lumens/module
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[IMU]

ATTITUDE & HEADING REFERENCE SYSTEM (AHRS)	9 DOF & magnetic compass, pressure-based depth sensor, 100 Bar/400 bar optional, 0.2° Static Roll/Pitch, 0.5° Dynamic Roll/Pitch, 18°/h gyro bias stability, 1.0° Yaw
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_Workhorse Splashproof Controller

[FEATURES]

COMPUTER/PROCESSOR	Dell Latitude 7230 Rugged Extreme/ 12th Gen Intel® Core™ i5-1240U, vPro®
MEMORY/STORAGE	16 GB: 2 × 8 Gb/500 GB SSD
DISPLAY	12" Touchscreen WVA FHD (1920×1200), 100% sRGB AntiGlare, Outdoor Viewable
PROTECTION	IP65 Controller & Console
TRANSPORT	Hard-sided, watertight rolling case

_1.5 km Fiber Optic Tether Reel

[FEATURES]

CAPACITY	1,500m Fiber Optic Tether
MECHANICAL	Manual reel with removable handle
TRANSPORT	Hard-sided, watertight case w/ removable wheels

