2026 Product Comparison Guide

VideoRay
AN AVS COMPANY

MISSION SPECIALIST SYSTEMS

	_WRAITH EXPEDITIONARY	_DEFENDER	_ALLY	_PRO 5
				
RELEASE YEAR	2025	2017	2024	2019
DESCRIPTION	Modular, configurable 10 thruster / 6 true DOF ROV with expeditionary platform and powerful navigation capabilities	Modular, configurable 7 thruster / 6 DOF ROV with many expansion options and strong current-handling capability	Modular 4 thruster / 4 DOF ROV designed for power and lift with an upgrade path to Defender ROV	Modular 3 thruster / 3 DOF ROV successor to VideoRay's original Pro Series ROVs
TOPSIDE POWER	No	Yes	Yes	Yes
SUBSEA BATTERY	Yes	Yes	Not currently available	No
LIGHTS	Selectable spot/flood LED 2 x 7600 lumens	Selectable spot/flood LED 2 x 7600 lumens	Selectable spot/flood LED 2 x 7600 lumens	Selectable spot/flood LED 2 x 7600 lumens
CAMERA	Ultra 4k Smart Camera NVIDIA Jetson Orin NX Processor, 1 TB SSD	Ultra 4k Smart Camera NVIDIA Jetson Orin NX Processor, 1 TB SSD Opt. rear-facing camera Perception accessories: Voyis & Vaarst Cameras	Ultra 4k Smart Camera NVIDIA Jetson Orin NX Processor, 1 TB SSD	Ultra 4k Smart Camera NVIDIA Jetson Orin NX Processor, 1 TB SSD Opt. rear-facing camera
BASE WEIGHT	99.8 kg (220 lbs)	17.2 kg (38 lbs)	13.6 kg (30 lbs)	11.8 kg (26 lbs)
DIMENSIONS	131.2 x 77.6 x 34.3 cm (51.7 x 30.6 x 13.5 in)	71.1 x 39.4 x 23.8 cm (28.0 x 15.5 x 9.5 in)	64.1 x 30.5 x 30.5 cm (25.3 x 12.0 x 12.0 in)	51.5 x 33.0 x 25.7 cm (20.3 x 13.0 x 10.1 in)
DEGREES OF FREEDOM [DOF]	6 DOF: Surge, Heave, Yaw, Sway, Pitch, & Roll	6 DOF: Surge, Heave, Yaw, Sway, Pitch, & Roll	4 DOF: Surge, Heave, Yaw, & Sway	3 DOF: Surge, Heave, & Yaw
DEPTH RATING	1,000 meters	300 m std configuration 1,000 m+ deep configs	300 meters	300 meters
THRUST	Forward: 36.3+ kg Reverse: 18.0 kg Lateral: 9.4 kg Surface: 36.4 kg	Forward: 23.6 kg Reverse: 15.0 kg Lateral: 8.6 kg Surface: 23.1 kg	Forward: 16.8 kg Reverse: 15.0 kg Lateral: 6.1 kg Surface: 9.5 kg	Forward: 20.3 kg Reverse: 13.0 kg
SPEED	Forward: 4.3 kts Vertical Heave: 1.0 m/s Vertical Transit: 2.0 m/s Sway: 0.9 kts	Forward: 3.8 kts Vertical: 0.8 m/s Sway: 0.9 kts	Forward: 4.0 kts Vertical: 0.8 m/s Sway: 0.9 kts	Forward: 4.4 kts Vertical: 0.8 m/s

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BOLLARD PULL	36.4 kg	52lbs	50lbs	50lbs
MAX RANGE	Up to 450 m with Performance Tether (PPT) Up to 1.5 km with Fiber Optic Tether and Subsea Battery Power	Up to 450 m with Performance Tether (PPT) Up to 1.5 km with Fiber Optic Tether and Subsea Battery Power	Up to 450 m with Performance Tether (PPT)	Up to 450 m with Performance Tether (PPT)
CONTROL SOFTWARE	VideoRay MissionLink	Greensea IQ	Greensea IQ	Greensea IQ
MANIPULATOR	2-Function	2-Function	2-Function	2-Function
INTEGRATED USBL	OceanComm M3	Blueprint Subsea Seatrac	Not yet available	Blueprint Subsea Seatrac
INTEGRATED DVL	WaterLinked A125	Nortek DVL500 Compact	WaterLinked A50	No
INTEGRATED FL SONAR	Blueprint Oculus Multibeam	Blueprint Oculus Multibeam Tritech Gemini Multibeam	Blueprint Oculus Multibeam	Blueprint Oculus Multibeam
INTEGRATED SIDE SCAN SONAR	Not currently available	Marine Sonic ARC Scout MKII *Available 2026*	No	No
ROV GPS/GNSS	No	Yes	No	No
MAX LIFT PILOTING	36.3 kg (80.0 lbs) manipulator payload	9.5 kg (20.9 lbs) manipulator payload	10.0 kg (22.1 lbs) manipulator payload	1.4 kg (3.1 lbs) manip payload
MAX RETREIVAL	>100 lbs	>100 lbs	>100 lbs	>100 lbs
SUPPORTED ACCESSORIES*	Factory-integrated accessories and sensors not yet available	Cathodic Protection Gauge Ultrasonic Thickness Gauge Flooded Member Gauge Water Quality Sonde NDT Cleaners Industrial Cutter 3 to 7-Function Manip MCM/UXO	Factory-integrated accessories and sensors not yet available	Cathodic Protection Gauge Ultrasonic Thickness Gauge Flooded Member Gauge Water Quality Sonde
WEBSITE VideoRay.com	/Products/Mission-SpecialistWraith	/Products/Mission-SpecialistDefender	/Products/Mission-SpecialistAlly	/Products/Mission-SpecialistPro5

* *Some sensor data does not display or record in Greensea IQ interface and requires an external PC; contact VideoRay for more information.*

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