

Product Comparison Guide



	DEFENDER	ALLY	PRO 5
			
Release Year	2017	2024	2019
Description	Modular, configurable 7 thruster/6 DOF ROV with many expansion options and strong current-handling capability.	Modular 4 thruster /4 DOF submersible designed for power and lift with an upgrade path to Defender.	Modular 3 thruster /3 DOF successor to VideoRay's original Pro-series ROVs.
Topside Power	Yes	Yes	Yes
Subsea Battery	Yes	Yes	No
Lights	2 x 7600 lumens	2 x 7600 lumens	2 x 7600 lumens
Camera	4.7k - Sm 4.7k Smart Camera / AI / ML Processor Rear-facing camera Perception Accessories: Voyis, Vaarst Camera	4.7k - Sm 4.7k Smart Camera / AI / ML Processor	4.7k - Sm 4.7k Smart Camera / AI / ML Processor Rear-facing camera
Weight	38lbs	35lbs	26lbs
Size	71cm x 40cm x 24cm	Round Float: 64.1 x 30.5x 30.5cm Square Float: 64.1 x 38.1 x 30.5cm	51cm x 33cm x 26cm
Degrees of Freedom (DOF)	6 DOF: Surge, Heave, Yaw, Sway, Pitch, & Roll	4 DOF: Surge, Heave, Yaw, & Sway	3 DOF: Surge, Heave, & Yaw
Depth Rating	300m Standard Config, 1,000m Deep Config	300m	300m
Max Speed	Thrust: Forward 26.7kg Reverse 15kg Lateral 8.6kg Surface 23.1kg Dive 12.9kg Knots: Forward: 4 Vertical: 0.8m/s Sway: 1	Thrust: Forward 16.8kg Lateral 6.1kg Surface 9.5kgd Knots: Forward: 4 Vertical: 0.8m/s Sway: 1	Thrust: Forward 20.3kg Knots: Forward: 4.4

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Bollard Pull	52lbs	50lbs	50lbs
Max Tether Length	1.5 Km: Subsea Batteries w/ Fiber Optic Tether 1.2 Km: Topside Power w/ Hybrid Fiber Optic Tether 500 m: Subsea Batteries w/ Expeditionary Copper Tether 450 m: Topside Power w/ Performance Tether (PPT)	500 m: Subsea Batteries w/ Expeditionary Copper Tether 450 m: Topside Power w/ Performance Tether (PPT)	450 m: Topside Power w/ Performance Tether (PPT)
Software Operating System	Greensea IQ	Greensea IQ	Greensea IQ
Manipulator - Std. Integration	2-Function (Open/Close/Rotate)	2-Function (Open/Close/Rotate)	2-Function (Open/Close/Rotate)
Integrated USBL(s)	Blueprint Subsea Seatrac Lightweight	Not yet available	Blueprint Subsea Seatrac Lightweight
Integrated DVL(s)	Nortek DVL500 Compact	WaterLinked A50	N/A
Integrated Scanning Sonar(s)	Tritech Micron	Not yet available	Tritech Micron
ROV GPS/GNSS Receiver	Yes	No	No
Max Lifting	22lbs in gripper	21lbs in gripper (on swinging mount -center lift) - 3lb spring	
Max Retrieval Weight	+100 lbs	+100 lbs	+100 lbs
Other Supported Accessories <i>*Sensor data does not display in Greensea IQ interface and requires external laptop</i>	Atlantas Marine Cyclone CP * Cygnus Ultrasonic Thickness Gauge* Impact Subsea FMD * Zero Point Titan ECS Viper Alford's REDS Acoustic firing initiation Cavitation Mount YSI EXO2 Multiparameter Sonde*	Additional factory integrated sensors not yet available	Atlantas Marine Cyclone CP * Cygnus Ultrasonic Thickness Gauge* Impact Subsea FMD * YSI EXO2 Multiparameter Sonde*
Website: VideoRay.com	/Products /Mission-Specialist-Defender	/Products /Mission-Specialist-Ally	/Products /Mission-Specialist-Pro5