DEEP OCEAN
ENGINEERING

PHANTOM®
S-SERIES

*Phantom® S-Series shown with optional upgrades

Phantom® S-Series ROV

The Phantom® S-Series is a portable high performance ROV that combines superior power, telemetry, and payload with ease of use, ruggedness and reliability. It delivers a powerful overall performance envelope and versatility compared to other vehicles of its class.

It comes equipped with high performance Tecnadyne® thrusters, providing significant control and propulsion in current to maneuver with authority in all directions. The user adjustable thrust vectors give the S-Series agressive lift capabilty and a depth rating up to 1,000 meters.

The Phantom® S-Series systems also include a one-year warranty.

Thruster Configurations

S6: 4 vectored horizontal, 2 vertical

S8: 4 vectored horizontal, 2 vertical, 2 aft

- Easily maintained
- Cost effective, powerful and portable
- Highly reliable magnetically coupled brushless thrusters
- Minimum training required for operation

The Deep Ocean Engineering Advantage

Deep Ocean Engineering, Inc. is a USA based manufacturer of powerful, expandable, rugged underwater and surface drone vehicles, headquartered in Silicon Valley, California. Deep Ocean has been in operation for over thirty-five years and has sold over 600 ROV systems in over thirty countries worldwide. Our internationally acclaimed system designs are strong, resilient, and rugged with the ability to integrate tooling and sensor packages. Our dedicated customer service, support, and technical training is unparalleled.

RUGGED EXPANDABLE POWERFUL

PHANTOM® S-FAMILY

STANDARD	
Length	1360 mm
Width	860 mm
Height	740 mm
Depth Rating	1,000 m
Chassis	Black Polypropylene Frame, non-conductive/non-corroding

CAMERA/LIGHTING	
Camera	Sony HD camera standard (1920x1080) Rear/auxiliary camera optional 30x optical zoom; 12x digital zoom with image stabilization Horizontal field of view: 65° Lux: .01 White balance and advanced image adjustments
Camera Tilt	Front mounted on mechanical tilt unit (+/-90°), tilts with light and optional sonars
Lighting	30,000 lumens on 2 fully dimmable circuits

UMBILICAL	
1,000 m standard length, upgradeable upon request	
Fiber	0.5" diameter 115 lbs / 1,000 ft 2 single-mode fibers Neutrally buoyant in freshwater, slightly buoyant in saltwater Breaking strength: 2,100 lbs Minimum bend radius: 4.5"

S-SERIES*	S6	S8
Forward Thrust	297 lbs (134.7 kgf)	507 lbs (230 kgf)
Lateral Thrust	297 lbs (134.7 kgf)	297 lbs (134.7 kgf)
Vertical Thrust	197 lbs (89.4 kgf)	197 lbs (89.4 kgf)
Speed	3.5 kts	4.0 kts
Power	17 KVA	23 KVA
Weight	350 lbs (158.8 kg)	390 lbs (176.3 kg)

NAVIGATION
Precision tilt compensated three axis digital magnetometer 0.3°RMS repeatability, 20Hz update rate
Yaw rate gyro for robust auto heading and vehicle stablization
Optional: Autonomous Systems, Inertial Navigation System (INS), Doppler Velocity Log (DVL), GPS, acoustic USBL Tracking, Multibeam Sonar, and many others

**Values based on full power data, specifications subject to change 20190730*

Applications

- Drill Support
- Pipeline inspection, routing, and survey
- Energy - hydroelectric dams, offshore wind turbines, pipelines
- Law Enforcement - hull inspections, mine hunting
- Infrastructure - visual leak detection, ultrasonic thickness detection, cathodic protection probe, flooded member detector
- Area mapping, seismic survey research, seabed sample collection
- Science - Archaeology, Geology, Biology
- Aquaculture

Control System

The Phantom® S-Series ROV comes equipped with a control system and an option of either a laptop or rack mount display. The topside control system performs auto heading, depth, altitude, as well as optional station keeping. Minimal training is required for operation.

Deep Ocean Engineering also designs and manufactures ancillary equipment, including manipulators, cable cutters, cable reels (manual and powered) and various other tools. Deep Ocean works closely with most third-party tooling and electronic equipment manufacturers to ensure that its ROVs and USVs can accomodate necessary components to get the job done.

2403 Qume Drive
San Jose, CA 95131, USA

www.deepocean.com

P: 408-436-1102
F: 408-436-1108
sales@deepocean.com