

## PHANTOM® L SERIES

## POWERFUL • EXPANDABLE • RUGGED

The Phantom®L6 is the newest in the next generation of proven, reliable underwater robotics pioneered by Deep Ocean Engineering in its manufacture of remotely operated vehicles (ROV), built in the USA for nearly four decades.

The advanced technology of the Phantom® L6 ROV platform introduces a high-performance, inspection-class ROV that offers powerful maneuverability and lift, incorporates an open architecture to integrate a wide variety of sensors, and is hand-built on a rugged, resilient, non-corroding polypropylene chassis that can accommodate heavier payloads.

The Phantom®L6 is designed with four vectored horizontal and two vertical Tecnadyne® thrusters, which provide significant control and propulsion in current. The dual vertical thrusters provide aggressive lift capability.

The standard Phantom®L6 includes high-performance, magnetically coupled brushless thrusters, HD camera, LED lighting, auto heading, auto depth, control console and power unit, and a 300m copper umbilical. Options available include upgraded umbilicals, cameras, lights, multi-beam scanning sonars, manipulators, GPS, INS, DVL, and navigational software.

The Phantom®L6 includes a one-year manufacturer's warranty.



## APPLICATIONS OF THE PHANTOM® L6 ROV

The Phantom® L6 is an inspection-class underwater remotely operated vehicle, designed for use in numerous applications across a spectrum of industries, including military/homeland security, law enforcement, science, municipalities, oil and gas, surveying, dam inspections, infrastructure inspections, and cinematography (for details, please visit our website at [www.deepocean.com](http://www.deepocean.com)).

## 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 the technology capital of the world, Silicon Valley, California. Its legendary Phantom ® lines of ROVs and USVs, many of which have been in use around the world for decades, are integrated with the latest digital technology and the highest quality components available in the market today, including thrusters, cables, sonar, cameras, lighting, navigation software and power.

PHANTOM® L SERIES	
Depth rating	500 m (1640.42ft); 800 m (2624.67ft) optional
Length	1066.8 mm (42 in)
Width	800.1 mm (31.5 in)
Height	571.5 mm (22.5 in)
Weight in air	97.5 kg (215 lbs.)

THRUSTERS/PERFORMANCE	
Configuration	4 vectored horizontal, 2 vertical
Thrust*	Forward thrust- 68.0kgf (151 lb) Lateral thrust- 39.0kgf (87 lb) Vertical thrust - 49.0kgf (108 lb)
Speed at Surface	3.0 knots
Thrusters	Magnetically-coupled brushless

CAMERA/LIGHTING	
Camera	Sony HD camera standard (1280x720) Rear/auxiliary camera optional 30x optical zoom; 12x digital zoom with image stabilization Horizontal field of view: 65° Lux: 1.4 Capable of white balance and advanced image adjustments
Camera Tilt	Front mounted on mechanical tilt unit (+/-90°)
Lighting	Front facing LED lights (14,000 lumens standard)

UMBILICAL	
Umbilical	300m standard length (upgradeable upon request)
Copper (Standard)	0.75" diameter 179 lbs. /1,000 ft. Neutral in freshwater; slightly buoyant in saltwater Breaking strength: 5,000 lbs. Minimum bend radius: 9"
Fiber (Upgrade)	0.5" diameter 115 lbs. / 1000ft. 2 single-mode fibers Neutrally buoyant in freshwater, slightly buoyant in saltwater Breaking strength: 2100 lbs. Minimum bend radius: 4.5"

POWER	
Max power output	9.0kW
Universal input	90-250 VAC, Single phase
300 VDC to ROV	

STANDARD	
Flotation	Neutrally buoyant in water - configurable flotation and ballast weights
Frame	Open frame design to easily add auxiliary sensors
Auto Functions	Heading, depth, trim (speed)
Heading Accuracy	+/-0.05°
Depth Accuracy	+/-0.25% FSS

OPEN ARCHITECTURE	
Integration	Open architecture allows integration of wide variety of sensors. Other sensors available upon request (sonar, fiber-optic gyro, altimeter, etc.)

\*Values based on full power data  
20170330 - Specifications subject to change