

PHANTOM® I-1650 USV

POWERFUL • EXPANDABLE • RUGGED

The Phantom® I-1650 USV is a powerful, 1.65m, remotely controlled, battery-powered unmanned surface vessel designed and manufactured by Deep Ocean Engineering to conduct measurements of currents, bathymetry and discharge with ADCPs.

The advanced technology of the Phantom® I-1650 USV can be equipped with GPS, depth sounder, sonar and a variety of sensors, and is hand-built with a rugged, lightweight hull constructed of carbon fiber.

The standard Phantom® I-1650 USV utilizes two DC outdrives and is capable of achieving speeds up to 5m/s (10 knots). The electronics compartment is spacious and accessible, and the vessel is portable and easily deployable.

The Phantom® I-1650 USV includes a one-year manufacturer's warranty.



APPLICATIONS OF THE PHANTOM® I-1650 USV

The Phantom® I-1650 USV is designed for use in numerous applications on the surface of waterways, including water quality, bathymetry, discharge, port security, river and shallow water surveys.

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.

VEHICLE SPECIFICATIONS*

Length	1650mm (5.41ft)
Width	695mm (2.28ft)
Weight	22kg (48 lbs)
Chassis	Carbon Fiber or Non-Corroding Aluminum Alloy
Payload	20kg (44lbs)
Top Speed	5m/s (11mph)
Survey Speed	2-3m/s (4.5mph-6.7mph)

STANDARD FEATURES

IP HD Camera
Remote Controlled Measurements
Dual Outdrive Motors
Integrated Moon Pool for ADCP Measurements
Modular Design

INTEGRATION OPTIONS

Customizable for Multiple Sensors

ELECTRICAL SPECIFICATIONS*

Range (in proper conditions)	Up to 2km (1.24mi.)
Battery Life @ Top Speed	1 hr
Battery Life @ Survey Speed	4 hrs
Antenna	Omni-directional
Radio Frequency	2.4 GHz
Remote Control Command & Data Link	WiFi in 2km range
Instrument Power	NiMH

APPLICATIONS

Port Security
Harbor Inspections
Lake and River Surveys
Bathymetry
Scientific Research
Water Quality Surveys
Discharge

* Specifications subject to change