

Open Ocean Survey Vehicle



Phantom[®] HD2

- Dependable ROV for offshore inspection and light work tasks
- For use in moderate currents to depths of 1000 ft (300 m)
- Accommodates cameras, sonar, tracking, manipulators and custom tooling

The Deep Ocean Advantage

- Well established company with over 20 years of experience & supply to the ROV industry.
- Over 450 ROV systems delivered.
- Broad international customer base, with clients in over 30 countries.
- Applications:
 - Military, customs & police.
 - Search & recovery.
 - Nuclear & hydro-electric plant integrity.
 - Offshore oil & gas
 - Scientific research
 - Underwater filming
- Strong, resilient and rugged system design.
- Dedicated customer service & support.
- Internationally acclaimed products.
- Ability to integrate tooling & sensor packages

Phantom[®] HD2 Applications

- Outfall/Intake inspections.
- Jack-up and template inspections.
- NDT inspections.
- Mooring and anchor chain monitoring.
- Telecommunication cable inspection.
- Mine countermeasures.
- Body and evidence recovery.
- Oceanographic survey.
- Fisheries research.
- Environmental surveys.
- Marine archeology.

Features

- Superb video quality, $\pm 90^\circ$ camera and light tilt
- Hardwired Phantom control system — easy to troubleshoot and add accessories
- Shock-mounted full perimeter stainless steel crash frame for rugged protection and durability
- Interchangeable components with DOE Phantom Spectrum vehicles
- Enhanced vehicle stability with low center of gravity and torque-balanced horizontal thrusters
- Can be simply up-graded to **Phantom HD2+2**



Specifications

General

Weight:	91kg	(200lb)
Operating depth:	300m	(1000')
Overall length:	1400mm	(55")
Overall width:	686mm	(27")
Maximum height:	673mm	(26.5")

Performance - forward thrust

Normal:	25kg	(56lb)
Full:	36kg	(80lb)
Lateral thrust:	7kg	(15lb)
Vertical thrust:	7kg	(15lb)
Payload (with lateral thruster fitted)	4kg	(10lb)

Power requirements

Input Voltage:	100-250vac
Frequency:	50/60Hz
Power Rating:	4.5kva
User Power Available	
– Instrumentation:	24vdc @ 6A
– Auxiliary Power:	80vdc @ 0.6A

Lights: Tungsten-halogen 2 X 250 Watt. 3 settings

Camera

DOE 18:1 optical zoom high-resolution color camera.
PAL/NTSC >470 Lines— 1/3" CCD.
Sensitivity 1 Lux @ f1.4
Auto-iris, wide angle lens, viewing angle 7–58°
Auto/Remote focus select.
External motorized camera tilt $\pm 90^\circ$
Built-in video switch for 2nd Camera
1,000 m rated, recessed and hardened port

Instrumentation

Fluid-gimbaled fluxgate compass: Accuracy: $\pm 3^\circ$
Electronic depth gauge: Accuracy: $\pm 1\%$ fsd.
Auto heading, auto depth: Standard
Audio feedback of ROV condition.
Leak detector.
Onscreen graphic video display.

Standard Umbilical Tether

Lengths: 169m (550'); 338m (1100'); 646m (2100')
Diameter: 20mm (0.8")
Weight in fresh water : Neutral

Options

- Easy up-grade to HD2+2. Thrust:91kg/200lb.
- Sonar
- Navigation and tracking systems
- Additional cameras & lights.
- Set additional buoyancy. +3kg/6.6lb payload.
- Customized versions available.
- DOE single function manipulator.
- Sensor packages.
- Additional components on request