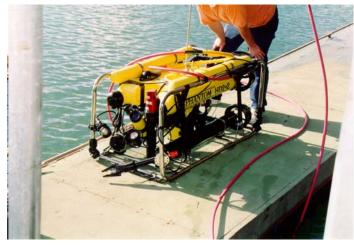


Strong Current Capability Workhorse





Phantom® HD2+2

- Dependable ROV for offshore inspection and light work tasks
- For use in moderate to strong currents to depths of 300m (1,000 ft.)
- 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 460 ROV systems delivered.
- Broad international customer base, with clients in over 30 countries.
- Diverse industry applications:
 Military, customs & police
 Search & recovery
 Survey & inspection
 Nuclear & hydroelectric
 Offshore oil & gas
 Scientific research
 Underwater filming
- World class engineering and R&D
- Solutions oriented customer service support
- Rugged reliable products, easy to use & maintain
- Ability to integrate tooling & sensor packages

Phantom® HD2+2 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, ± 90° camera 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.



Specifications

Weight:	120kg	265 lb
Operating depth:	305m	1,000ft
Overall length:	1400mm	55"
Overall width:	686mm	27"
Maximum height:	673mm	26.5"
Maximum height:	673mm	26.5

Performance - forward thrust:

Normal:	68kg	150 lb
Full:	91kg	200 lb
Lateral thrust:	7kg	15 lb
Vertical thrust:	7kg	15 lb
Payload (with lateral thruster fitted)	4kg	10 lb

Power requirements

Input Voltage: Frequency: Power Rating:	100-250vac 50/60Hz 6kva
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 ±90°
Built-in video switch for 2nd Camera
1,000 m (3,300 ft) rated, recessed and hardened port

Instrumentation

Fluid-gimbaled fluxgate compass. Accuracy: ± 3° Electronic depth gauge. Accuracy: ± 1% fsd. Auto heading and auto depth Audio feedback of ROV condition Leak detector Onscreen graphic video display

Standard Umbilical Tether

Lengths: 168m (550'); 335m (1,100'); 670m (2,200')
Diameter: 20mm (0.8")
Weight in fresh water: Neutral

Options

- Cable reels and slip-ring units available.
- 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

