



## Ocean Tech Services - Apache ROV



**The OTS - Apache Inspection Class ROV offers a truly versatile, professional ROV system suitable for offshore use. Its compact size provides a suitable platform for high quality video and sonar surveys all within a single lift container.**

**The ability to provide our clients with fast response times and quality video, makes the Apache ROV system a perfect fit for almost any inspection.**

The inclusion of the Apache ROV system has helped to expand the OTS suite of subsea equipment to the offshore industry. This compact system offers a “single lift” solution to insure quick response time with quality results. The ROV, Recording suite, Spares, and Launch and Recovery System all come packed in a single 10’ x 8’ container ready to be lifted aboard and begin operations with minimal setup.

The five AC thrusters provide this 1000 meter capable system the power to get to the work site while the high quality video system and manipulator are perfectly suited for inspection, diver safety, and survey work.

This ROV can accommodate a range of state of the art sensors; FMD (flooded member detection), sonar imaging, cable and pipe trackers, sonar packages, and tooling skids to expand the versatility of this ROV solution.



# OTS - Apache Specs

## PERFORMANCE / DIMENSIONS:

Depth Rating: 3280 fsw (1000 msw) standard  
 Payload: 55 lb (25 kg) lead ballast  
 Height: 24.4 in (620 mm)  
 Length: 35.4 in (900 mm)  
 Width: 27.6 in (700 mm)  
 Mass in air: 308.7 lb (140 kg)  
 Turning Rate: 120 degrees per second

### Thrust @ 0 Knots (bollard pull)

Forward: 110 lbf (50 kgf)  
 Reverse: 87 lbf (40 kgf)  
 Lateral: 65 lbf (30 kgf)  
 Vertical: 65 lbf (30 kgf)

## CONTROL SYSTEM:

This system incorporates a Surface Control Unit (SCU) which communicates with the vehicle's electronics housed in a one-atmosphere enclosure located on the vehicle.

The SCU incorporates:

- Pilot's control console and joystick
- Light dimmers
- Automatic depth and heading control
- Earth leakage protection system

The Apache vehicle electronics are housed in an aluminum one-atmosphere enclosure, incorporating the thruster drive systems, light dimmers, telemetry system, compass, depth transducer, tilt, and camera controls. The housing also has spare electrical connectors to provide power and control for user interfaced equipment.

ROV power requirements: 440 VAC 3 phase and earth, 50 / 60 Hz, 10 kVA

## PROPULSION SYSTEM:

The vehicle is propelled by four Sub-Atlantic thrusters incorporating AC electric motors, arranged in the following configuration:

- 2 x single propeller thrusters mounted longitudinally
- 1 x double propeller thruster mounted laterally
- 1 x double propeller thruster mounted vertically

Power to each thruster is through an integral lead and molded plug for attachment to the electronics enclosure.



## TELEMETRY SYSTEM:

Downlink / uplink - 8 analog channels, 12 bit resolution and 16 digital switch channels  
 Telemetry baud rate - 57.6 kbps  
 Communication like provided by RS 485 communications

Spare Communication - One RS-485 and one RS-232

## LIGHTING:

3 x 220 VAC, 250 Watt halogen lamps, dimmer controlled, and mounted on the frame and camera tilt unit rated to 48 Nm torque.

## CAMERAS, SONAR and DVR:

- 1 x Remote Ocean Systems high resolution color zoom camera
- 1 x DeepSea Power & Light Wide-I camera
- 1 x Tritech Micron Sonar
- 1 x DigitalEdge Subsea DVR, 2ch with video overlay

## LAUNCH AND RECOVERY SYSTEM (LARS):

Integral Davit System:

Winch: 1,150 ft (350m) of free fly tether  
 Safe Working Load: 440 lb (200 kg)  
 Operation: Electric Winch

The integrated davit Launch and Recovery System is purpose built into the container ensuring minimal setup time.

## CONTAINER:

The container is designed to provide a safe and protected working environment during operations. Comprehensive spares kits are included as part of Ocean Tech's standard package.

Height: 8.5 ft (2.6 m) Length: 10.0 ft (3.0 m)  
 Width: 8.0 ft (2.4 m) Weight: 9,800 lb (4,375 kg)

## FREE SWIMMING ROV SYSTEM:

This ROV system is a fully electric, small, compact, high performance, Professional system which can be used for a variety of underwater tasks including observation, survey, and diver monitoring to name a few.

[www.oceantechusa.com](http://www.oceantechusa.com)

All specifications are subject to change