



SINGLE 4 FUNCTION MANIPULATOR INSPECTION ROV



ROV General Specifications:

Depth Rating 3300 ft. (1000m) standard
 (deeper options)
 Payload 30 lbs. (15 kg)
 Height 18 in. (457 mm)
 Length 60 in. (1524 mm)
 Width (forward) 36 in. (914 mm)
 (aft) 48 in. (1219 mm)
 Weight in Air 550 lbs. (250 kg)

Maximum Static Thrust:

Forward 230 lbs.
 Reverse 150 lbs.
 Lateral 110 lbs.
 Vertical 230 lbs.

Maximum Velocity: (100 ft. tether excursion)

Forward 3.08 m/s (6 kts)
 Reverse 2.05 m/s (4 kts)
 Lateral 1.54 m/s (3 kts)
 Vertical Up to 3 m/s
 Turning Rate 120° per second max.

Surface Control Unit:

Height 12.28 in. (312 mm)
 Width 16.50 in. (419 mm)
 Depth 22.25 in. (565 mm)
 Weight 291 lbs. (132 kg)
 SCU Power Requirements 220 VAC 3Ø 25kw

Tether Dimensions:

Tether (standard length–live boat mode) 3300 ft. (1000 m)
 Diameter..... 22.5 mm (.886 in.)
 Weight in Air 345 lb/kft (513 kg/km)
 Weight in Seawater 71 lb/kft (106 kg/km)
 Breaking Load 2500 lbf (11.2 kN)

Thruster Technology:

5 x Brushless DC motors with internal drive modules.

Chassis:

T6061 Aluminum

Buoyancy:

1000m Syntactic Foam (standard, deeper options available)

Hand Control Unit:

Height 3.25 in.
 Width 8.5 in.
 Length 12.0 in.
 Weight 5.0 lbs. (2.27 kg)

Hand Control Functions:

Thruster Control: Fore, Aft, Lateral, Vertical (Normal),
 Vertical (Pitch), Rotate
 0-100% Gain Control on Port, Stb. & Lateral
 0-100% Gain Control on Verticals
 0-100% Gain Control on Forward Bias
 Auto Depth, Auto Heading, Auto Altitude
 Thruster enable/disable
 Normal/Pitch Mode Switch
 Cameras: Pan, Tilt, Zoom & Focus on Colour Camera
 Pan, Tilt Fixed Focus Colour Camera
 Manipulator Colour Camera
 Remote Control for aft 360° Colour Rotate
 Camera
 Manipulators: Swing Left/Right
 Arm Up/Down
 Jaw Rotate CW/CCW
 Jaw Open/Close
 Lights: 2 x LED Light potentiometers 0-100% intensity

Remote Hand Control Unit:

Height 2.25 in.
 Width 7.75 in.
 Depth 4.75 in.
 Weight 1.0 lbs.

Remote Hand Control Functions:

Thruster Control: Fore, Aft, Lateral, Vertical, Rotate, Thruster
 Enable/Disable Switch. Lights: On/Off (Full Intensity)

Sonar:

MS 1000 Sonar Head

Modular Components:

Telemetry Can, Power Can, Capacitor Bottle, HPU,
 4-Function Valve Pack

Navigation:

Gyro/Fluxgate Combination w/pitch & roll.

Lighting:

5 x LED High Power Light Systems

Auto Functions:

Auto Depth, Heading & Altitude

Cameras: 4

Sony Color Zoom, Focus, Pan & Tilt
 Low Light Colour, Pan & Tilt
 Rotary Color 360° Viewing
 Colour Manip Camera
 Cameras on two Video CCT's (any combination of two cameras can
 be viewed at any time)

Additional Vehicle Function:

Pilot-controlled vehicle pitch