DEEPOCEAN

MOHICAN

SPECIFICATION SHEET



OBSERVATION CLASS ROV - MOHICAN

KEY FEATURES

- MANOEUVRABILITY
 - HIGH THRUST BOTH AXIAL AND LATERAL
 - SIX BRUSHLESS DC THRUSTERS WITH SUBATLANTICS STATORSHIELD™ TECHNOLOGY AND DYNAMIC VECTORING
 - PROPULSION SYSTEM ALLOWING IT TO WORK IN HIGH CURRENT CONDITIONS
- TECHNOLOGY
 - MOHICAN USES A 3000 V, 400 HZ POWER TRANSMISSION SYSTEM FROM SURFACE TO ROV RESULTING IN A SMALL TETHER AND MAIN LIFT UMBILICAL
- EXTERNAL EQUIPMENT
 - TOOL SKID, MANIPULATOR, TORQUE TOOL AND FMD OPTIONS CLASSIFICATION
 - INSPECTION, OBSERVATION, SEARCH, SURVEY AND LIGHT WORK

GENERAL	
DEPTH RATING	2000 msw
POWER REQ.	380-440VAC 3-phase 50/60 Hz @ 25 amps
DIMENSIONS	
LENGTH	1.15 m
WIDTH	0.77 m
HEIGHT	0.80 m
WEIGHT IN AIR	290 kg
BUOYANCY	Three easily lifted modules with closed cell micro-spheres rated to 2000 msw

PERFORMANCE	
SPEED	
FORWARDS	3.5 knots
BACKWARDS	3.5 knots
VERTICAL	3.5 knots
LATERAL	2.0 knots
TURNING RATE	180 deg / s
THRUSTERS	4 x Sub-Atlantic SPE180 Horizontal thrusters in vectored configuration & 2 x Sub-Atlantic SPE180 vertical thrusters vectored outwards
THRUST	
FWD/BWD	110 kg
VERTICAL	110 kg
LATERAL	110 kg
PAYLOAD	35 kg
VEHICLE POWER OUTLET	Transformer box provides 320 V DC power outlet to drive external equipment up to 7.5 kW

STANDARD EQUIPMENT	
TMS	
MANUFACTURER/TYPE	Sub-Atlantic - Type 1
WIDTH	1.074 m
LENGHT	1.609 m
HEIGHT	1.632 m - 2.032 m (adjustable)
WEIGHT	580 kg in air
DESIGN CRITERIA	Designed to 2 Te SWL @ 3G
TETHER LENGTH	Up to 400 m of 16 mm Tether
REQUIRED POWER SUPPLY	8 kVA
LIGHTING	4 x 250 W Halogen lamps, dimmer controlled on 2 circuits

CAMERA FACILITIES	Tilting bracket for mounting two cameras (SIT size) and lamp Tilt position angle on video overlay	
ELECTRONIC POD AND TELEMETRY		
TELEMETRY SYSTEM	Fibre optics system providing 3/6 x video, 4 x RS232 and 2 x RS485 and optional ethernet	
COMMUNICATION	1 x RS485 channel. Uplink / downlink includes 8 analogue channels and 16 digital switch channels all with 12bit resolution	
HOUSING	All electronics are located in a single aluminiumalloy housing rated to 2000 msw Housing end incorporates all electronic connectors for the various ROV components and optional sensors	
ALARMS	Vacuum and water ingress alarms	
SUPPORTS A RANGE OF SENSORS AND EQUIPMENT, TYPICALLY		
Cameras, sonars, oceanographic sensors		
Small hydraulic and electric manipulators		
Tool Skid, torque tools, FMD too inspection equipment	ols, cleaning and jetting tools and	
Various sizes and configuration	s available	
SCU (SURFACE CONTROL UN	IIT)	
2 x 15" Colour Monitors		
Light Dimmers		
Automatic depth and heading o	ontrol (altitude optional)	
Tether / umbilical turns counter		
Video Overlay system		
Earth leakage protection system	n	
HCU (HAND CONTROL UNIT)		
2 x control joysticks		
Light dimmer controls		
Camera and tilt controls		
Digital switches		
Dynamic vectoring control		
Auto-function control		
Joystick trims		
Thruster power trims and isolations		
TMS tether pay in/out		

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