

eNovus

The next generation electric work class ROV

The eNovus is a compact work class ROV powered by an environmentally-conscious electric propulsion system that includes state-of-the-art control electronics and intelligent diagnostic system.

Tooling support versatility has been increased by including an integrated power and control system for next generation electric tools and dedicated hydraulic power units (HPUs) for traditional tools and work class manipulators.



FEATURES

Electric propulsion system with intelligent diagnostic system

135 kW electric tooling capacity

Remote Piloting and Automated Manipulator Control (RPACT)

Vehicle specifications	
Weight in air	7,500 lb / 3,400 kg
Dimensions (LxWxH)	8.5 x 5 x 6 ft / 2.7 x 1.6 x 1.8 m
Depth rating	Up to 16,500 ft / 5,000 m
Payload	500 lb / 227 kg

Vehicle power/performance	
Electric supply	235 hp / 175 kW
Propulsion	(4) Vector horizontal motors (3) Vertical motors
Thrust	
Forward/reverse	8.5 kN / 1,850 lbf
Lateral	8.5 kN / 1,850 lbf
Vertical	8.0 kN / 1,800 lbf

Vehicle manipulators	
Manipulators (2)	Atlas 7-function proportional control T4 SC or Hybrid
Wrist camera assembly	Light, laser, and camera
Dedicated manipulator HPU	4.5 kW / 6 hp with 4 gpm @ 3,000 psi

Electric tool control	
Power	135 kW / 180 hp
Data interface	Fiber, ethernet, and RS232
Tooling control pod	(2) 10 kW (380 V DC @ 25 Amp) (2) 2.5 kW (48 V DC @ 50 Amp)

Hydraulic tool control	
Dedicated tooling HPU	26 kW / 35 hp with 10 gpm @ 3,000 psi
10 Station valve pack	Proportional pressure Proportional flow Bi-directional valves

Vehicle cameras/lighting	
Cameras	Standard Definition (SD) High Definition (HD) 3D HD (optional) 4K UHD (optional) Supports up to 8 cameras
Lighting	Up to 8 x 200 W (high intensity LED)

Vehicle control/navigation	
Automatic control	Autonomous control of the ROV Hands-free piloting Fly-by-wire station keeping system Auto heading, depth, and attitude Cruise control Remote piloting from onshore
Heading and attitude sensors	Survey-grade gyro Backup flux gate compass
Depth sensor	High-resolution digiquartz Backup analog depth sensor
Navigation sensor	Doppler velocity log
Obstacle avoidance sonar	Kongsberg 1071 or 1171 Tritech SeaKing

Vehicle optional power/data interfaces	
Data links	Multiple RS232 (RS485 optional), Ethernet, optical fiber
Power	24 V DC and 110 V AC

Tether Management System (TMS)	
Type	Side entry cage or top-hat
Propulsion	2 x horizontal or 4 x vectored for station keeping
Electric supply	86 kVA electro-optical
Electro-optical tether	Up to 5,000 ft / 1500 m
Cameras	Up to 4 CCD cameras
Lighting	Up to 4 x 200 W (high intensity LED)

Manipulator Tool Changer (optional)	
Supports subsea mateable electric and hydraulic tools	
Electrical interface	RS232 600 V DC 480 V AC (single or three phase)
Hydraulic interface	(4) pressure balanced couplers
Visual automation	(4) lights (2) lasers