

Spectrum®

Light electric work class ROV

Spectrum® represents a new generation of Oceanengineering light electric work class remotely operated vehicles (ROVs) with deepwater capabilities up to 10,000 fsw / 3,000 msw.

Reliable and easily maintained, Spectrum provides a compact, high thrust, cage-deployed system designed to accommodate light underwater intervention tasks in support of oil and gas drilling, construction, and production activities.



FEATURES

Field proven and ultra-reliable

High powered

Easily maintained

Spectrum®

Light electric work class ROV

The Spectrum® ROV is a light work class ROV and is combined with our purpose-built ROV control system, OPAC (Oceaneering Power and Control), which includes the latest technology and onboard diagnostics. The OPAC system provides additional redundancy by being directly interchangeable with the control systems of other OII ROVs including **Magnum®**, **Millennium®**, and **Maxximum®**.

Spectrum® can be fitted with a skid-deployed five-function manipulator and is capable of operating light tools including AX/VX ring tools, trash pumps, CP probes, and light survey sensors.

Vehicle specifications	
Weight in air	693 lb / 315 kg
Dimensions (LxWxH)	8.5 x 5 x 6 ft / 2.6 x 1.5 x 1.8 m
Depth rating	Up to 10,000 ft / 3,000 m
Payload	132 lb / 60 kg

Vehicle power / performance	
Electric supply	440V - 480 V AC, 3 phase 50 / 60 Hz
Propulsion	6 x CTE02 440V AC 4 x vector horizontal motors 2 x vertical motors
Thrust	Forward / reverse 110 kgf Lateral 73 kgf Vertical 45 kg

Vehicle manipulators	
Manipulator (1)	5-function hydraulic (Option with 2)

Vehicle cameras / lighting	
Cameras	1 x wide angle low light 1 x color CCD 1 x color zoom CCD 2 x black and white CCD aft 1 x HD (optional)
LED Lighting	4 x 3,200 Lumens

Vehicle control/navigation	
Automatic control	Auto heading, depth, and attitude
Navigation sensor	Tritech SeaKing Sonar (or equivalent)

Umbilical	
High-strength, armored, optical/electrical/mechanical	
1,969 ft / 650 m, small footprint configuration	
Additional payload for deployment/recovery of subsea equipment	
Longer umbilical lengths, up to 6,500 ft / 2,000 m, available	

Subsea Deployment Cage	
Dimensions (LxWxH)	6.2 ft x 3.9 x 7.9 ft / 1.9 x 1.2 x 2.4 m (max)
Weight (excluding tether)	In air: 2,425 lb / 1,100 kg In water: 1,080 lb / 490 kg
Hydraulic power unit	2,400 W electric motor
Tether	820 ft / 250 m
Camera	1 x black and white CCD
LED Lighting	2 x 3,200 Lumens

Deployment System	
Example	Winch and compact A-frame
Dimensions (L x W)	14.6 x 7.9 ft / 4.5 x 2.4 m
Weight (with cable)	26,455 lb / 12,000 kg

Control and Workshop Van	
Dimensions (L x W x H)	14.8 x 7.9 x 9.2 ft / 4.5 x 2.4 x 2.8 m
Weight	17,637 lb / 8,000 kg
Options	Stacking and positive pressure vans

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