

Omni Maxx

Deepwater observation and inspection system

The Omni Maxx ROV is a true deepwater observation and inspection system. The stand-alone system is a further development of our satellite ROV system, Sea Maxx. The Omni system includes a tether management module with a 820 ft / 250 m cable.



FEATURES

Powerful, stand-alone system

Stunning, high-resolution HDTV

Depth rating: 10,000 ft / 3,000 m

Stunning, High-Resolution HDTV Imaging

The Omni Maxx is equipped with an advanced undersea HDTV camera optimized for wide angle close-up inspection and able to zoom and obtain high fidelity detail. Images are recorded, without loss of quality, by a high-resolution digital video recorder.

Upon completion of ROV operations, the customer is provided with full-resolution, digital HD video and still images.

Digital Images

The high quality optics of the HD camera allow operators to obtain visually stunning, 2.0 megapixel digital images. Digital photos can be captured at anytime during operations, with or without ROV sensor data overlay.

Precision Sensor Suite

The Omni Maxx is equipped with a state-of-the-art digital pressure and heading sensor suite allowing for precision operations. All ROV sensor data is overlaid on the pilot's HDTV monitor and displayed on the CPU monitor video dashboard.

The Omni Maxx is gyro-stabilized (1 degree) in heave, pitch, roll, and yaw. It maintains level orientation during manipulator arm and lifting operations and can be operated in stabilized pitch orientations (nose up/nose) of -60° to $+60^{\circ}$.

Optional

- » Scanning sonar
- » Articulated manipulator arm



Technical data:

Depth Rating

Depth	10,000 ft / 3,000 m
Optional depth	13,000 ft / 4,000 m 24,600 ft / 7,500 m (in development)

Size

Height	20 in / 51 cm
Width	31.5 in / 80 cm
Length	50 in / 127 cm

Vehicle Weight

In air	595 lb / 270 kg
In water	Positive 2.5 lb / 1.1 kg

System Weight w/Tether Management System (TMS)

In air	2,200 lb / 1,000 kg
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Payload

44 lb / 20 kg in seawater
User adjustable w/ lead weights

Speed

Forward	4.9 ft/sec / 1.5 m/sec
Lateral	3.2 ft/sec / 1.0 m/sec
Vertical	1.6 ft/sec / 0.5 m/sec

Thrusters

Forward	489 N
Lateral	410 N
Vertical	275 N

Camera Sensor

HD camera 1920 x 1080i superwide 3.8x zoom
110° FOV @ full wide
0.1 lux light sensitivity
Optical glass dome port
HD-SDI fiber optic video link
Tilt: Up +45° Down -90°

Heading Sensor

3 VectorNav* miniature AHRS (Attitude Heading Reference System) and IMU (Inertial Measuring Unit) sensors

Depth Sensor

± 1 ft resolution at 10,000 ft

Lighting

2 x 200 W LED lights
Variable intensity with diffusers

Vehicle Power

2300 V AC 50/60 Hz 8 kW Peak

Tether Cable

Size	0.575 in Ø
Length	820 ft / 250 m
Breaking strength	3500 lb / 1587.6 kg
Positively buoyant	.004 lb/ft

* The VN-100 Rugged is a miniature, high-performance Inertial Measurement Unit (IMU) and Attitude Heading Reference System (AHRS). Incorporating the latest MEMS sensor technology, the VN-100 combines 3-axis accelerometers, 3-axis gyros, 3-axis magnetic sensors.



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