

# GEO OCEAN II

Offshore Survey & Support Vessel



GEOMATICS ENGINEERING SOLUTIONS



## SUPPORT ACTIVITIES / VESSEL CAPABILITIES

Geo Ocean II can accommodate in total 23 persons (crew + Passengers/Surveyors) has an Azimuth thruster and great survey room facilities. The vessel is capable of serving the offshore industry in various tasks, such as:

- Site investigations
- Guard vessel
- Diving & ROV support
- Geophysical surveys:
  - multibeam
  - singlebeam
  - high resolution seismic
  - side scan sonar
  - magnetometry
- Cable & Pipe route surveys
- Bottom and sediment sampling
- Density and shear strength measurements
- Anti oil spill
- Seabed sampling and environmental surveillance.



## TECHNICAL SPECIFICATION

### General

Name	M/V Geo Ocean II
Flag	Luxembourg
Port of reg.	Luxembourg
Classification	DNV-GL - Unrestricted Navigation
Call Sign	LXHX
Construction	Totally rebuilt in Denmark 2006

### Dimensions

Overall Length	39,90m
Length p.p.	32,25m
Width moulded	9,45m
Depth moulded	4,75m
Draught max.	5,30m
Gross Tonnage	424,0 GT
Netto Tonnage	149,6 NT

### Accommodation

5x1 persons  
 9x2 persons  
 Galley / Provision  
 Mess room  
 Dayroom  
 Dressing room  
 Laundry  
 Hospital  
 Gymnasium  
 Survey room with survey desk and 19" computer racks.  
 All accommodation new - fitted year 2006

### Safe Manning

1 Captain, 1 Navigator, 2 Deck hands, 1 Engineer.

### Performance

Service speed	10 kts
Max. speed	11 kts app.
Range (service speed)	App. 7000 nm

### Bunkers

Fuel	87.81 tonnes.
Freshwater	44.79 tonnes.
Luboil	1,25 tonnes
Reverse osmosis plant MT4500 capacity 4.5 m <sup>3</sup> /day at 25 °C seawater.	

### Sanitary installations

Osmosis black and grey water treatment plan MBR BG-G.

### Propulsion

B&W Alpha 23-30 1100 BHP Pitch propeller  
 2 x 275 KW Volvo TAMD121A  
 1 x 210 KW Volvo TAMD120  
 aux. Engines.  
 Electrical capacity available for client: App. 150 kW / 2 x 125 A

Main engine and aux. engines installed year 2006  
 1 x 280 KW. Bow azimuth – aquamaster UL381/2875  
 Driven by a Volvo TAMD122A 280 KW  
 1 x 250 HK Ulstein Stern Thruster – electric driven

### Power supply

380V/50 Hz 230V/50 Hz  
 2 x 125 Amps. on aft deck and in survey room.

### Deck equipment

NOREQ 6,4m FRC fitted with 2x60Hp outboard engines  
 1 x EFFER 20000 marine crane. Capacity 2.440 kg at 8 m. reach. Maximum capacity 1530 kg at 10.3 meter. Mounted with winch.  
 1 x Vest A-frame aft SWL 2.5 t. Equipped with 2.5 t. winch.

### Free deck space

Aft deck 7m x 7m = 49m<sup>2</sup>  
 Boatdeck 16m x 5 m = 80 m<sup>2</sup> and stowage position for 1 x 20' container.

### Navigation / communication equipment

2 x Furuno Raster-scan ARPA Radar 32 mile  
 Furuno GPS  
 Penta electronic seamap  
 JRC AIS  
 Sailor VHF DSC  
 2 x EPIRP  
 SART  
 Furuno colour echosounder  
 Furuno satellite compass  
 A2 Radio station Sailor  
 GSM mobile telephone  
 Fleet 33 phone, high speed data and fax.  
 (Xantic e-mail facilities).