

GEO OCEAN V

Hybrid propulsion Offshore Survey Vessel



SUPPORT ACTIVITIES / VESSEL CAPABILITIES

GeoOcean V is a multi-disciplined Offshore Survey Vessel fitted for Geophysical and Geotechnical survey work. She is permanently equipped with specifically selected survey equipment to serve the offshore industry.

The hybrid propulsion makes her an efficient platform for a wide variety of survey operations.

TECHNICAL SPECIFICATION

General

Name	Geo Ocean V
Flag	Luxembourg
Port Registry	Luxembourg
Call Sign	LXGV
IMO Number	9668544
MMSI:	253754000
Classification	LLOYDS - HULL - MACH
Vessel Type	Survey Vessel SV
Special Service:	Fire fighting ship / Fire fighting 1 Waterspray / Oil Recovery / Stand by rescue
Unrestricted navigation	AUT-UMS - ALM - DYNAPOS-AM/AT-R; SDS

Dimensions and Construction

Length overall:	53.80 m
Breadth moulded:	13.00 m
Depth:	6.30 m
Max / Design draft:	4.80 m / 4.00 m
Deadweight: (approx @ max draft)	1,360 mt
Bollard pull @ Diesel - mechanical mode:	40 mt
Bollard pull @ boost mode:	50 mt
Gross / Net tonnage:	1,358 / 407
Builder	Grandweld Shipyards, Dubai
Year	2013

Accommodation

Total Berths	24 persons
Single cabins	2 x 1 person 1 sickbay cabin
Double cabins	11 x 2 persons
Offices	1 x Dedicated Online 1 x Dedicated Offline / Conference room
Other Facilities	Mess room, 2 day rooms, laundry, galley, dry provisions, freezer & cargo reefer rooms (+4°C & -21°C), stores, crew changing, Survey room.

Capacities

Deck area: (5 mt/m ²)	(23,00x10,20 m) approx. 230 m ²
Max Deck cargo:	205 mt
Domestic MDO: (@ 97 %)	276 m ³
Cargo MDO / Cargo HFO: (@ 97%)	70.8 m ³ / 894.4 m ³
Deliverable MDO / HFO cargo:	950 m ³
Fresh water	121 m ³
Ballast water:	519 m ³
Lub oil:	10 m ³
Thermal oil:	4 m ³
Cargo slops:	10 m ³

Delivery Rates

Cargo HFO / MDO:	2x 200 m ³ /h at 60 m
Cargo MDO:	50 m ³ /h at 60 m
Cargo fresh water:	50 m ³ /h at 60 m
Ballast / Fire pump:	.75 m ³ /h at 50 m
Bilge system:	75 m ³ /h at 50 m
Main cargo fuel oil tanks equipped with heating system to accept optional charterer supplied, plug and play 500 kW thermal oil heater (capable of heating 895 m ³ HFO from 35°C to 50°C in less than 72 hours).	

MACHINERY & PERFORMANCE

Propulsion - Machinery

Main Diesel engines:	2x 1,575 bhp
Auxiliary Diesel generators:	3x 550 kW
Electric motor plant:	2x 350 kW
Main propulsion:	2x Hybrid propulsion package on CP propellers
Bow tunnel thrusters:	2x 300 kW
Emergency generator:	1x 95 kW

SPEED & CONSUMPTION (@4,00m design draft)

Diesel—Mechanical mode:	11.8 t/day @ 11.0 knots
Diesel—Electrical mode:	3.0 t/day @ 6.0 knots
Boost mode:	15.4 t/day @ 11.5 knots
6t/day	

EQUIPMENT & ELECTRONICS

Deck Equipment

Windlass:	1x 10 mt pull @ 11 m/mn
Capstan (2 variable speeds):	5 t @ 15m/mn & 10 t @ 10 m/mn
Towing hook:	70 t SWL
Knuckle boom deck crane (electro-hydraulic):	3 mt @ 12 m
One A-frame / davit for Workboat:	10 t lifting capacity @ 30 m/mn

Special Equipment:

- Permanently mounted 5T A-Frame
- Two survey moonpools
- Blister and moonpool for seismic instruments, storage reel cradles,
- Basket for towing rope (200m of 80mm/ MBL 137 t), TS DIP winch.
- Main deck pre-structured to receive foundation for streamer winch based on 20' ISO container (weight: 40 t).
- Reefer sockets for containers.

Electronics

NAVIGATION

- 2 radars with ARPA, 1 DGPS, 1 gyrocompas,
- 1 magnetic compass, 1 autopilot, 1 echo sounder, 1 speed log, 1 ECDIS. Loading software.

COMMUNICATION

- 1 radio system compliant with GMDSS A3 rules:
- 2 VHF, 2 Inmarsat C, V-Sat, MF radio system, Navtex with printer,
- weather fax, AIS.
- 1 EPIRB, 1 Fleet broadband 500, 1 Inmarsat mini-C, 2 VHF, 2 UHF. 4 portable UHF, 3 portable VHF, Intercom & Public address system.

Safety Equipment

- Life saving arrangement, 6 liferafts with capacity 12 pers.
- 1 fast rescue boat (6 pers) outboard engine 25 hp with davit.

Survey Sensors

Survey grade GPS:	Trimble BD982
Multibeam echosounder:	Hull mounted Dual head R2Sonic 2024
Single beam echosounder:	Kongsberg EA440
Sound velocity profiler:	Valeport Swift SVP
USBL	Kongsberg HiPAP 351P
Side scan sonar:	Edgetech 4200
Seismic:	Innomar Medium SBP