# VESSEL SEA SPECIFICATION SHEET

#### **GEO RANGER** HYBRID SURVEY VESSEL / ROV SUPPORT VESSEL



# CLASSIFICATION / FLAG / REGISTRATION

Vessel name	Geo Ranger
Owner	Geo Tender V B.V.
Flag	Dutch
Call sign	PHHV
IMO number	9885831
Port of registry	Eemshaven, the Netherlands
Built	2020
Builder	Royal Niestern Sander, The Netherlands
Range / Endurance	28+ days oshore in full operation
Classification	Lloyds Register, 100 A1, LMC, UMS, SSC Workboat, G4, DP (AM)

#### **GENERAL DIMENSIONS**

Length overall (excl. fenders)	41.20 m
Length overall (incl. fenders)	41.60 m
Length between perpendiculars	39.55 m
Length waterline	41.12 m
Breadth moulded	8.70 m
Draft	1.30 m
Depth to maindeck	4.25 m
Draft (design)	2.25 m
Draft (max)	2.40 m
Air draft	14.80 m
Gross tonnage	498 GT
Light ship weight	421 tons

#### ACCOMMODATION

Single cabins	3
Double cabins	9
Total accommodation	21 persons (incl. marine crew)
Comfort cabins	Each cabin provided with toilet and shower and indivi- dual controlled air conditio- ning unit
Facilities	2 x dayroom, mess room, gym, changing room, inter- net, TV, game console

# **MACHINERY / PROPULSION / DP**

Propulsion	Diesel
Generator sets	4 x Volvo Penta D13 (FE) prime power, 360 kW @ 1500 rpm, IMO Tier II 360 kW @ 1500 rpm, IMO Tier II
Stern Thrusters	2 x Veth Azimuth Thrusters (L-drive VL-400si) with D&A motor, 400 kW @ 1500 rpm
Bow Thrusters	2 x Veth Tunnel Thrusters (VT-180), 192 kW @ 1800 rpm
DP	DP 1 Kongsberg (K-POS DP11)

# **SPEED / FUEL CONSUMPTIONS**

Speed	max. 11,15 knots
Transit speed	10 knots
Standby in port	300 ltr/day
Sailing (survey)	1.000 ltr/day



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#### CAPACITIES

Fuel	68 m <sup>3</sup>
Fresh water	45 m <sup>3</sup>
Sewage sludge	3 m <sup>3</sup>
Black water	10 m <sup>3</sup>
Technical fresh water	103 m <sup>3</sup>
Fresh water generator	Geco Clan-In-Place unit type CIP-150 Model: 10689, capa- city 4.500 l / 24 h

### **SURVEY EQUIPMENT**

Multibeam (optional)	Kongsberg EM2040 Dual RX, 0.4x0.7 Moonpool Mounted (200/300/400 kHz)
USBL positioning	Kongsberg HiPAP 502, hydraulic Gate Valve, trans- ducer depth measurement
Gyro / Motion reference	iXblue Hydrins III
Current Profiler	NORTEK Signature 500 VM ADCP
Hydr. Positioning	Trimble SPS855, C-nav 3050
Moonpools	2 x 1200 mm square, hydrau- lic operated deployment systems, easy/quick and safe installation of equipment and cables
KVM System	G&D KVM matrix switch ControlCenter
Surveyroom	3 x Surveyor desk, 1 x DP desk, 19" rack, meeting table, view on work deck, cable boxes for easy and quick installation of additional equipment
Office	Separate oce with 2 x Sur- veyor desk, flex workspace for survey/crew in wheel- house
Sound Velocity Probe	Valeport Swift (optional)
Others	Geometry Report: Starmoun- tain, Easy Acces Survey Mast

#### MULTIFUNCTIONAL WORK DECK

Deck space	100 m <sup>2</sup> , executed with container ttings in different congurations. Deckload > 45T, 2T/m <sup>2</sup> – locally 3.5T/m <sup>2</sup>
A-frame	Height 7 m, SWL 8 tons, out- reach 4,25 m back- and 3,10 forward of rotation point, winch 4 tons rope length 40 m, combined remote control with deck crane, hydraulic power connection supplied by vessel for installation additional equipment with a capacity of 200 bar @60 Ltr/min.
Deck crane	HS Marine AK40/E4, max 13.45 m outreach, SWL 1790 kg @ 13.45 m / 5490 kg @ 5.30 m, combined remote control with A-frame
Moonpools	2 x 1200 mm square, hydrau- lic operated deployment systems, easy/quick and safe installation of equipment and cables
Provided power (for client equipment)	4 x 63 ampere (400V), 4 x 32 ampere (400V), 4 x 16 ampere (230V), 2 x 90 KVA (500V)
Other facilities	Grid of container ttings to install 10 ft / 20 ft containers, removable railings, fresh wa- ter tap, easy cable entry from work deck to technical room and survey room, frame for installation of winches

## **ENTERTAINMENT / LEISURE**

Gym
WiFi
SAT TV system + TV's (4x)
2 x dayroom, messroom
Game Console



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#### **NAVIGATION EQUIPMENT**

Kongsberg K-Bridge Integrated Navigation System
X-band radar, 25 kW, 1.8 m radar antenna
X-band radar, 10 kW, 1.8 m radar antenna
ECDIS (dual)
DGNSS/DGPS
AIS
Echo sounder
Speed log
Anemometer (2x)
GMDSS A2:
- Sailor 6222 VHF radio simplex w/DSC (2x)
- Sailor 6310 MF/HF DSC Class A
- NAVTEX Sailor 6391
EPIRB TRON 60S
SART TRON SART 20 (2x)
VHF radio EM stations SP3520 (3x)
VHF radios Motorola DM440 (2x)
VHF radio Portable ATEX VHF Motorola DP4401 (5x)
CCTV
Autopilot and Track Control System
Sound Reception System
BNWAS

# **COMMUNICATION / CONNECTIVITY**

VSAT	Intellian V100GX, Ku-band
LTE (3G/4G)	Poynting OMNI-291 Ultra-Wi- de Omni-directional Marine & Coastal LTE & WiFi antennes
WiFi	Throughout the vessel
TVRO / TV	Intellian T100w TVRO

#### **SUSTAINABLE FEATURES**

Diesel Electric propulsion, heat recovery system, low fuel consumption, low noise, full LED lighting. Possible to run on 100% bio-fuel (HVO).

#### **WE LISTEN THEN DELIVER**

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