

Survey Vessel GEO 1

The Global Force with a Personal Touch



EGS is an independent leading international group of marine survey companies which has offices in Asia, Australia, Americas and the United Kingdom. EGS provides global specialist multi-disciplinary support to the offshore construction, oil & gas, telecommunications, power, mining industries. The Group employs more than three hundred and fifty staff worldwide from the fields of surveying, oceanography, environment, engineering, electronics, geophysics and the marine environment.

- Conduct inshore and ultra shallow water survey (water depth 1m to 100m)
- Bathymetry survey by high resolution multi-beam echo sounder and dual frequency single-beam echo sounder
- Geophysical Survey by dual frequency Side Scan Sonar (SSS), high resolution sub bottom profiling systems and Magnetometer
- Robust positioning and attitude solution with Applanix POSMV Inertial Navigation System
- 'C-View Nav' computerized navigation systems
- Water quality sampling & oceanographic measurements
- Capable of sediment sampling by 2m Gravity Corer deployment
- Shallow water diving work support
- VHF communication facilities
- Automatic Identification System (AIS)

The EGS Group - Global Survey Specialists

*Australia, Brazil, Hong Kong, Indonesia, Malaysia, Philippines,
Singapore, Taiwan, Timor-Leste, United Kingdom, United States, Vietnam*

Survey Vessel GEO 1

NAME	GEO 1	PORT OF REGISTRY	Hong Kong
TYPE	Work Boat	OFFICIAL NO.	B143622
CLASSIFICATION	Class II	CALL SIGN	VR55861
BUILT	U.S.A.	MMSI NO	477 996 562

Dimensions

Length Overall	9.05 m
Beam	2.94 m
Draught	0.50 m
Gross Tonnage	5.00
Net Tonnage	1.00

Performance

Max survey speed	Up to 6 knots
Passage speed	25 knots

Stern and Overside Handling

Winch	250 kg
Crane	500 kg with winches to handle oceanographic seabed and seabed sampling equipment to 50m depths

Machinery

Main Engines	Volvo Penta / D4-300A-D Diesel
Auxiliaries	External Diesel Generator QEP S7— 6 kVa

Multi-beam Echo Sounder (MBES)

Model	R2Sonic Sonic 2024
Frequency	200-400kHz
Number of Beams	256
Max. Swath width	160°
Depth Range	0.5m - 400m

Single Beam Echo Sounder (SBES)

Model	Knudsen 1612
Dual Frequency	33/210kHz
Resolution	(<100m) 1cm
Interface	Digital
Depth Range	0.5—500m

Sub Bottom Profile (SBP)

Model	C-Boom LVB MK II
Energy Discharge	64 Joules per pulse
Central Frequency	1250 Hz
Resolution	Better than 50cm
Firing Rate	6 per second max
Adjustable working	450-550v dc



Magnetometer

Model	Geometrics G-882 Magnetometer
Absolute Accuracy	<3nT throughout range
Resolution	0.02nT P-P at 0.1 second sample rate

Navigation & Communications

Radar	Garmin GMR18 HD
VHF (Marine Radio)	Garmin i200
Echo Sounder	Garmin 5212

Side Scan Sonar (SSS)

Model	EdgeTech 4200 System
Dual Frequency	100/500kHz

Inertial Navigation and Attitude System

Model	POSMV Wavemaster
Position Accuracy (RTK mode)	Horizontal : +/- 8mm +1ppm Vertical : +/- 15mm + 1ppm
Roll & Pitch Accuracy	±0.02° (0.015° with PosPac Post processing)
Heave	5cm or 2cm for True Heave
Update Rate	Up to 200Hz
Interface	Ethernet

Heave Motion Compensator (for SBES)

Model	Kongsberg Seatex MRU-5
Range	±10m
Accuracy	5cm or 5%

Visit our website for more information:
www.egssurvey.com

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