

General

Multipurpose research vessel designed for fisheries acoustic research, oceanographic, hydrographic and geological investigations as well as buoy/deepwater mooring and ROV operations

Designed to meet the noise requirements of ICES CRR Report 209

The vessel is fitted with:

- Retractable drop keel
- Dynamic positioning (DP1)
- Capacity to carry 7 x 20ft laboratory containers
- Deep water and shallow water Multibeam
- USBL

Main features

Length o.a65.5m

Beam15m

Draught5.8m

Gross tonnage.....2425T

Net tonnage727T

Lloyds classificationDI00AI ICE CLASS ID + UMS + SCM DP (AM)
Multipurpose Research Vessel

Maximum speed16 knots

Service speed≤10 knots

Endurance35 days

Safety.....Complies with IMO, Lloyds, and all national and international requirements

Accommodation 35: 20-22 scientists, 13-15 crew, depending on operational requirements.
Scientists' quarters: 9 double berth cabins,
4 single cabins all en-suite

Propulsion (Diesel-electric)

Engines2 x Wärtsilä 9L20, 1620kW/1000rpm, 690Vac
1 x Wärtsilä 6L20, 1080kW/1000rpm, 690Vac

DC Drives2 x Indar DC electric motors (each 1500kW, 0-180rpm)

Bow thruster700kW Gill Jet, omni-directional

Stern thruster400kW

Navigation and communication

DP SystemKongsberg SDP-10 (DP1)

Depth measurementSkipper GDS 101, Furuno FCV 1200L Echo sounder

GPS2 x Simrad MX500 DGPS

Radar.....Furuno ARPA "S" band, 2 x ARPA "X" band

AutopilotRobertson AP9 MK3

Speed Log.....Skipper EML224 dual Axis Log

AISFuruno FA-150

Watch AlarmNavitron NT991 BNWAS

Gyro compass.....Robertson RGC 12

Fiberoptic gyro with motion referenceiXBLUE Octans

Navigation systemDual Kelvin Hughes ECDIS, Maxsea, OLEX plotter

Data communicationSeatel Satellite Broadband system
2056kbps/512kbps, Iridium

VoiceGSM phone, VOIP system utilizing seatel broadband system, GMDSS Radios

Workboat

6.1 Metre rib with twin 60 hp engines
Suitable for inshore research activities, buoy maintenance etc.
Launched with a heave compensated davit

Facilities

Dry laboratory75m². Workstations for EM1002/ EM2040/ EM302, EA600, QINSY Navigation Software, Sonardyne Ranger USBL, ADCP, EK60, C-Nav DGPS, Seapath 330+, K-Sync. CTD, CCTV and ECDIS monitors, chart table and storage

Wet laboratory70m²: wet/fish lab, chemistry lab and water lab. Conveyor/fish sorting system, freezer room, refrigerators, weighing scales, LAN connections. 6 gas lines, Fume hood, Water Purification system, Glassware dryer

Container laboratories ..Capacity to carry 7 x 20ft containerized labs. Support systems: 220VAC, 400VAC (300kW), LAN, phone, seawater, freshwater, waste drain

Workshop Lathe, milling & drilling machine, hydraulic press, band saw, welding machine, workbench with vice, portable power tools, comprehensive tool kit.

Communal areas.....Scientists' office/meeting room. Two lounges with Sky+ TV, DVD, VCR. Gymnasium, sauna

MedicalHospital room with hospital bed and basic medical facilities

Deck equipment

Deck area.....165m², Non-slip painted steel

A-frame, aft25T SWL, 4m outboard and 4m inboard reach. 10.5m clearance from deck

ROV A-FrameRemovable 10T ROV A Frame with rotating docking head

ROV WinchRemovable ROV Winch with 3000m of 31.7mm umbilical

T-Frame, starboard.....10T, 3m reach

CranesMidships: 16TM, 2T hook load
Forward: 1.5T at 10m / Aft: 6T at 15m

Permanent Scientific Equipment

General

Motion reference systemKongsberg Simrad Seapath 330+
A0 printerHewlett Packard, Designjet 1055C,
for chart production

Laminar flow fume hood.....Interflow BV, ST-12 Special

Underway data loggingNOAA Scientific Computation system (SCS)

USBL No. 1iXBLUE GAPS

USBL No.2Sonardyne Ranger 2

Weather systemBATOS II

Weighing scales.....Pols, P-60, 1 x 60kg

Weighing scales.....Pols, P-15, 3 x 15kg

Marine biology & fisheries research

Fluorometer (underway)Turner, model 10-AU 005

Net monitoring system.....Scanmar ScanBas

Physical/chemical oceanography

ADCP, hull mountedRDI Ocean Surveyor 486P/50

CTD and rosette sampler2 x SBE 911 CTD with SBE 32 carousel, 24 position

Water samplers48 x OceanTest, Niskin type, 10 l

Moving vessel profilerBrooke Ocean Technology, MVP200, CTD & SVP

Winches

CTD winch6T winch fitted with 7000m of 8.1mm ø wire, SWL: 1.9T
Heave compensation system. Cable weight 226kg/km

General purpose winches (x2)(1) Starboard side fitted with 2700m of 9.98mm SM Fibre optic and copper cable. Cable Weight: 322kg/km, SWL: 1.5 T

(2) Aft Facing 20T winch fitted with 3500m of 14mm Dynex, SWL: 4 T, (Cable can also be routed via starboard T Frame)

Gilson winches (x2).....13T fitted with 80m of 28mm Dynema SK75 synthetic rope

Hydrographic winchFitted with 1500m of ø 12mm Dynex Cable, 3T SWL

Net drum winch.....45T on main deck, capacity 10m³

Net sounding winch.....6T winch fitted with 4700m 11mm Coax cable SWL: 2.4T

Pelagic net drum winches (x2)17T each, on forecastle deck, capacity 8.75m³ each

Trawl winches (x2).....Split trawl winches: 34.5T each, fitted with 4900m of 26mm wire

ThermosalinographSeabird, SBE21, with temperature sensor SBE38

TI 20 Hull mounted temperature probe

Water Supply.....Smart2Pure water filtration system

Acoustic surveying

Headline Color video sounderFuruno FCV 1100L

Low-frequency scanning sonarKongsberg Simrad SP70

Multi-beam echo sounder No 1Kongsberg EM302 1x2 degree (Full Ocean Depth)

Multi-beam echo sounder No 2Kongsberg EM 2040 0.7x 0.7 degree

Multi-beam echo sounder No.3Kongsberg EM1002

Survey Navigation Package.....QPS QINSy 8.0

Primary PositioningC-Nav 3050 with Z for tidal corrections.

Secondary PositioningSeapath 330+

Single-beam echo sounder

(scientific).....Kongsberg Simrad EK60: 18, 38, 120, 200kHz

Single-beam echo sounder

(hydrographic).....Kongsberg Simrad EA600: 12, 38, 200kHz

Sub-bottom profileriXBLUE Echoes 3500 T7 Full Ocean Depth, Hull Mounted Delph Acquisition System

Sound Velocity profilerAML SVPlus

Multibeam SV Probes1 X Valeport for EM302, AML Smart SV&T for EM1002, AML SV for EM2040.

N.B. These specifications are subject to change without prior notice. The details are believed to be correct but cannot be guaranteed.