National Research Vessel
Celtic Voyager
Technical Specifications
**General**

Multipurpose research vessel suited to coastal research and offshore survey operations. Used for a variety of applications including fisheries research, environmental monitoring, seabed mapping, oceanographic, meteorological, weather buoy maintenance and student training.

- **Stabilisation tank**
- **Bulbous bow**
- **Acoustically insulated**
- **Main deck provided with matrix of stainless steel flush sockets**
- **Capacity to carry one 10ft container**

**Main features**

- **Length o.a.**: 31.4m
- **Beam**: 8.5m
- **Draught**: 4m
- **Gross tonnage**: 340T
- **Type**: Steel hull, multi-chined construction, single screw
- **Lloyd's classification**: 100 A1 Research Vessel, LMC
- **Speed**: 10 knots
- **Endurance**: 14 days
- **Safety**: Complies to IMO, Lloyd's, and all national and international requirements
- **Accommodation**: 15: 8 scientists, 7 crew. Scientists' quarters: 4 two-man berths
- **Deck area**: 35m²

**Navigation and communication**

- **GPS**: Simrad HSX50 Differential GPS, Furuno DGPS
- **Radar**: Koden MD6290P, Bridgemaster E1800PA
- **Navigational equipment**: Anschütz STD 20m
- **Gyro Compass**: Furuno SC50
- **Autopilot**: Robertson AP9
- **Speed Log**: Anemo Log
- **Electronic Charting**: Mapsa Time Zero
- **Electronic Charting**: OLEX Plotter
- **Navtex Receiver**: Furuno NX500
- **Radio**: Furuno SSB Transceiver + DSC watch receiver
- **AIS**: Furuno FA-100
- **Data**: Celltx Plus GSM (when in range)
- **Phone**: Celltx Plus GSM (when in range)
- **VSAT**: SeaTel 3011
- **SAT TV**: SeaTel Coastal 24 61cm dish
- **GPS**: Simrad Mx500 differential GPS

**Facilities**

- **Dry laboratory**: 21m². Workstations for EM3002/2040, ADCP, Seapath 330+/MRU5+. Data Acquisition System and winch controls, chart table and storage.
- **Wet laboratory**: 1.1m³ (wet bbl), 6m³ (chem). Stainless steel work benches, refrigerators, LAN connection, sea- and freshwater supplies.
- **Storage + freezer**: Additional 9m³ of laboratory storage space.
- **Electronics lab**: 1 electronics laboratory.
- **Containers**: Capacity to carry one 10T lab container.

**Navigation and communication**

- **Depth measurement**: Furuno FCV 291 Echo sounder
- **GPS**: Simrad HSX50 Differential GPS, Furuno DGPS
- **Radar**: Koden MD6290P, Bridgemaster E1800PA
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**Deck equipment**

- **Main propulsion**: Baudouin 26.2 655 KW
- **Side derrick, forward**: Hydraulically operated with one-luffing ram and one extension ram controlled as two separate functions. Length extended 3m, retracted 2m. Max static load at full extension 1,000kg.

**Permanent Scientific Equipment**

**General**

- **Motion reference system**: Kongberg Simrad, Sarsap
- **Underwater data logging**: NOAA SCS System
- **USBL**: IBL BLUE GPS, installed in dedicated retraction unit
- **Weather system**: Météo France BATOS Weather Station
- **Survey Navigation Software**: QINSY
- **Primary Positioning**: C-Nav 3050 with Z for tidal
- **USBL**: ixBLUE GAPS; installed in dedicated retraction unit
- **Water samplers**: 12 x 5l water samplers (Nansen type)
- **Sub-bottom profiler**: MRU5+ 330+/MRU5+ 4T
- **CTD winch**: Hydraulic winch with remote control. Fitted with 1,000m of 6.5mm wire
- **Aft starboard winch**: Small winch with a boom. Fitted with 300m of 4mm stainless steel wire
- **Cranes**: 19 T/m Guerra marine crane

**Navtex equipment**

- **Back-up echo sounder**: AML Smart SV
- **Forward Multi-beam echo sounder**: AML Smart SV
- **Mid Ships SV Probe**: AML Smart SV
- **Echo sounder**: AML Smart SV
- **ADCP**: RDI Ocean Surveyor 486P/50
- **CTD and rossette sampler**: 2 x SBE 911 CTD with SBE 32 carousel, 11 position
- **Water samplers**: 12 x 5l water samplers (Nansen type)
- **Hydro-Bios Transparent Plastic Nansen (TPN) bottles, 1.71
- **Thermosalinograph**: Seabird, SBE 21 and SBE38

**Marine biology and fisheries research**

- **Fluorometer (underway)**: Wetlabs Wecstar
- **Net drum**: MTL
- **Sorting table + Hopper**: MTL

**Physical/chemical oceanography**

- **ADCP (multibeam)**: RDI Ocean Surveyor 486P/50
- **CTD and rossette sampler**: 2 x SBE 911 CTD with SBE 32 carousel, 11 position
- **Water samplers**: 12 x 5l water samplers (Nansen type)
- **Hydro-Bios Transparent Plastic Nansen (TPN) bottles, 1.71
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N.B. These specifications are subject to change without prior notice. The details are believed to be correct but cannot be guaranteed.