

RV GUNNERUS - LNVZ

Multipurpose research vessel for Norwegian University of Science and Technology (NTNU)

Name	R/V GUNNERUS
Owner	Norwegian University of Science and Technology (NTNU) Faculty of Natural Sciences and Technology
Designed by	Polarkonsult AS, Norway
Built by	Larsnes Mekaniske Verksted, Norway
Delivery year	2006
Port of Registry	Trondheim, Norway
Classification Society	Norwegian Maritime Directorate

Main dimensions

Length over all	(Loa) 31.25 m
Length between pp	(Lpp) 28.90 m
Length in waterline	(Lwl) 29.90 m
Breadth middle	(Bm) 9.60 m
Breadth extreme	(B) 9.90 m
Depth mld. Main deck	(Dm) 4.20 m
Draught, mld	(dm) 2.70 m
Mast height / antenna	14.85 / 19.70 m
Dead weight	107 t

Class, Service Area

Range	Coastal areas out to 20 nautical miles from the coast (Liten Kystfart) Designed and built according to European trade.
Class Notation	DNV + 1A1 + Ice C + E0 + R2 Cargo ship

Deck equipment, scientific equipment and lab facilities

Trawl winches	2 x Mjosund 6 t, (wire D=14 mm, L=1000 m).
Net drum	Mjosund 5 m ³ , D=2000mm, d=320mm
Main deck crane	Palfinger 14 m / 35 tm
CTD crane	HIAB/Mjosund, 5 m / 3.3 tm, Water sampler wire 5 mm/750m CTD wire 6,5 mm/750 m.
Stern mounted A-frame	6 t, hydraulic.
Hydraulic diving platform	500 Kg, 1,5m x 0,8m.
Hydraulic aggregate	Mjosund 110 kW
Capstan	Mjosund 8t/220bar, D=410, d=320, L=300
Anchor winch	Mjosund 2 drums, 20 m/min, 2 x 12,5m ø 22mm K2 chain/ 210m ø22mm. wire
Compressed air	Atlas copco compressor
Workdeck	75 m ²
Wet lab	13.9 m ²
Dry lab	11.8 m ²
Computer lab	11.2 m ²
Container attachment:	5, 10, 15 & 20 feet alongside or 20 feet abeam.
CTD	Saiv
CTD	Sealogger 25, Seabird electronics inc.

Watersampler system	Carousel water sampler, 12 x 2,5l bottles. Seabird electronics inc
Workboat	Polarcirkel 560 Work, Yamaha 80hp

Capacities

Crews cabins / berths	6 / 11
Daytime personnel capacity	25 incl. crew
Deadweight	107 t
Deck load	45 t
Fuel oil	44 m ³
Fresh water	11 m ³
Water ballast	62 m ³
Cargo hold	42 m ³
Galley	4,5 m ²
Mess, conference and dayroom	32 m ² With 46" LCD monitor.

Machinery: Diesel electric propulsion

Main electric propulsion	1000 kW (Siemens 2 x 500 kW)
Main generators	3 x Nogva-Scania 450 kW
Bow tunnel thruster	1 x Brunvoll 200 kW
Speed at 100% MCR	12,6 kn
Cruising speed	9,4 kn
Gear	2 x Finnøy
Rudder	2 x Rolls-Royce, Ulstein Hinze Rudder FB-H 1200
Steering gear	2 x Rolls-Royce, Tenfjord SR562-FCPX2

The diesel electric system has been specially designed for low hydroacoustic noise levels.

Diesel generators are mounted on a common double elastic frame and one of the generators are mounted in a noise dampening hood for special low noise mode.

Navigation, communications and electronic equipment

Dynamic Positioning system	Kongsberg SDP-11 / cPos
DP - Reference systems	GPS Kongsberg Seatex DPS 232 HPR, Kongsberg transponders. Kongsberg Seatex RADIUS
Heading, Attitude and Positioning Sensor	Kongsberg Seapath 300
Acoustic positioning system	Kongsberg HiPAP 500
Motion reference unit (MRU)	Kongsberg Seatex
Autopilot	Simrad AP50
Compass, magnet	Nautisk service NS 150-A
Compass, gyro	Simrad GC80 / 85
Bearing repeater	Simrad DR76
Differential positioning sensor	Kongsberg DPS 232
Heading, attitude and positioning sensor	Kongsberg Seatex Seapath 300
GPS	Furuno Navigator GP-90
Radar	Furuno FAR 28x7 / FAR 21x7
Log	Furuno Doppler speed log DS-80
Echo sounder	Furuno FCV-1200L. 38, 50, 200 kHz – 2000m
Echo sounder, multibeam	Kongsberg EM 3002s
Catch monitoring system	Simrad PI54

Chartplotter 1	Telchart (AIS)
Chartplotter 2	Olex (Installed AIS, HT, SB, ITI, MBES)
Chartplotter 3	Olex LT (Office version)
AIS	Furuno FA-150
Navtex	JMC NT900
GMDSS console	
VHF fixed radio	Sailor
VHF handheld radios	Jotron
UHF handheld radios	Icom
Satellite phone	Sailor
Internet in sea	ICE & Telenor mobilt bredbånd
Internet at pier Trondheim	Wireless broadband NTNU.

Safety

MOB boat, inflateable craft	Narwhal 6 persons SOLAS aproved, Propulsion Mariner 20 Hp
Rescue boat davit	Ned Deck Marine
Life rafts	2 x 25 men each
Survival suits	25 Stearns model ISS-590i
Life jackets	Seamaster – 1983, SOLAS Approved
Work vests	25 Regatta
EPIRB	Jotron
SART	Jotron
Aircraft beacon	Jotron
Fire alarm system	Minerva Marine T1008
Fixed system	Engine room, CO2
Fire suit	Draeger
Search light	Tranberg
SAR	SECurus prototype, Apto maritime (Under construction)
Day and night vision	SECurus prototype, Apto maritime (Under construction)
Oil spill monitoring	SECurus prototype, Apto maritime (Under construction)

Details are believed to be correct but not guaranteed