

Passagemaker LRC65 specifications

Description

The design of the LRC65 passagemaker by Dennis Harjamaa (NZ) of Artnautica Yacht Design, was finished in August 2021. It is a CE-A certified, self-righting long-range cruising boat, equally at home coastal sailing or crossing an ocean.

The designer has kept the hull as narrow and low volume as he thought he could get away with while making the boat feel considerably more generously proportioned than the LRC58. The hull's length is 20 m, and it is 5 m wide, including the rub rails. This still allows the boat to fit into European harbours easily and sail the French canals to or from the Mediterranean besides passage-making.

The extended wheelhouse roof makes it possible to install 16 solar panels (169x105cm) for a yield of 6,8 kWh (and counting). Using walk-over panels on the foredeck an extra 1 kWh can be added for a total yield of 7,8 kWh.

The alloy weight estimate is 8.2 tonnes, compared to 5 tonnes for the LRC58. The displacement will be 22-25 tonnes depending on her payload.

The aft deck ends with a bike locker (2 bikes). This locker can also be used to store dive gear.

With her fuel tanks topped off, clean bottom, and sailing 9,8 knots on average her range is 4000 nm. Slow down to 8 knots and her range extends to 6000 nm with a 5% reserve. Slow down to 3 knots, switch to electric drive — and with sufficient sunshine — her range extends to unlimited.

LRC65-01 has splashed in October 2023. LRC65-02 is under construction at Aluboot, The Netherlands.

Accommodations

The layout comprises a master and guest cabin both with ensuite bathroom. In the front, a small lounge is positioned, and a twin single-bunk sleeping cabin. This area can be reconfigured as a crew cabin with an ensuite head and shower.

The guest cabin downstairs has more than generous standing headroom at the entrance. The guest cabin either comprises twins or a double bed.

Under the galley are a spacious basement with a battery compartment, room for air conditioning units, an extra fridge/freezer, and extra storage possibilities.

The workshop/utility space is quite big. Access to the workshop/utility space is from

the cockpit, with generous standing headroom. There is also internal access to the engine room through the day head shower in case of the twin-engine setup.

LRC65' main dimensions are 20m (65.8') LOA, 5m (16.4') Beam, 1.15m (3.8') Draft; Airdraft 5.7m (18.7'), 4.7m (15.4') with the VHF antenna down and 3.5m (11.5') with mast down (folded forward; manually operated).

Mechanical Equipment

- Main engine: Iveco N40, 110 kW (147 HP) @2,800 rpm, 4 Cylinders, 3900 cc with a Helseth 3H60-830 HS CPP, with reduction ratio 3,82:1, Propellor diameter 830 mm or
- John Deere 225 HP 4045AFM85 (M4) @ 2,600 rpm, 4 Cylinders with a Nogva HC-168 CPP with reduction ratio 2,95:1, Propeller diameter 850 mm
- # Of propeller blades 3
- Secondary Alternator 100 AMP 48V
- Bow thruster: Side-Power SEP300TC 300KG/48VDC proportional with remote control
- Stern thruster (retractable): Side-Power SRVP300-48VDC with remote control
- Quick 19 or 25 Gyro stabilisation, Active fins or MagnusMaster rotors
- Lecomble + Schmitt steering arrangement
- Two helms (wheelhouse + cockpit)
- Tender 4,25m (14')

Tanks

- 6950 ltrs Fuel (1830 gallons)
- 2600 ltrs Water (680 gallons)
- 200 ltrs Blackwater (63 gallons) self-draining by gravity (2)
- Greywater (optional)
- Tank levels monitored by BEP Marine sensors and/or Victron Cerbo GX

Electrical Equipment (power & lighting)

- Victron Quattro 48VDC/10000 Inverter/charger
- Victron 3600W I Auto 115/230VAC I 32/16A Isolation transformer
- Victron BMV-712 Smart battery monitor
- Leakage test lamp unit
- MG Systems Service batteries 560Ah@48VDC (23 kWh effective)
- Victron 200Ah@24VDC navigational battery
- Victron MPPT Controllers (2)
- Solar 420Wp panel (16x)
- Quick dimmable led lighting
- Wesem Bow, Stern, and Sides floodlight
- All 12VDC, and 24VDC system devices have their own dedicated DC/DC converter to avoid ground loops

Galley Equipment

- Siemens iQ700 multi-function 47 ltrs electric oven
- Siemens iQ700 induction cooktop (3 zones)
- Bosch 137 ltrs 90W fridge
- Inventum 131 ltrs 40W freezer (next to the guest stateroom)
- Miele Washer + Dryer (workshop/utility room)
- Schenker Zen Twin 200 24V Digital Watermaker (ER)

Deck & Hull Equipment

- Spade or Rocna 80 kg anchor, 100m of 13mm G40 chain
- Maxwell RC12-12 48VDC Anchor winch with remote control and chain counter
- Bilge pumps alarm/automatic/manual (6x)
- Crash bilge pump (18,000 ltrs per hour)
- Deckwash pump
- Separate fresh water pumps for galley and bathrooms
- Deck shower (hot/cold)
- Emergency (manual) tiller
- Lewmar Ocean hatches + sky/mosquito screen
- Freeman hatches anchor bin + swim platform
- Maxwell VW10-10 48VDC Mooring winch aft
- Ultrasonic antifouling

Navigational Systems

- ICOM GX2200 DSC VHF
- Furuno 4G DRS4D-NXT Radar
- Furuno DRS6A-NXT Radar
- Furuno TZTL16F Chart plotter
- Furuno MCU-02 Pointing device
- Furuno GP39 GPS
- Furuno SC-33 GPS compass
- Furuno 711C Autopilot (wheelhouse, cockpit helm)
- Furuno DST200 Depth sounder
- Airmar WX200 Wind instrument
- Windows 10 Fanless PC running Navigation, and Maretron N2KView software
- Class A AIS transponder
- Nemo NMEA 0183/N2K multiplexer
- Navtex

Antennas

- VHF
- Navtex
- 5G LTE
- Furuno Satellite compass

- GPS-AIS
- Furuno GPS
- Starlink internet

Safety

- Ocean Signal rescueMe Epirb1 406MHz
- Passive/active radar reflector
- Smoke and CO alarm in staterooms (Google Nest)
- Fire extinguisher (dry powder) in the workshop/utility room, Maus XTIN in staterooms, and wheelhouse (galley)
- Mabo Flamark or Firepro automatic fire extinguisher's in the ER
- Life raft: Sea-Safe 8P Self righting life raft
- Ocean Signal PLBs
- VHF plus navigational lights have their own dedicated battery

Additional Equipment

- Axis PTZ Wheelhouse IP camera
- Axis Engine room IP camera
- Stern camera
- Pepwave LTE Router (5G sim 8x) + AP + Netgear switch
- Maretron IPG100 + N2KView software for viewing vessel's parameters over the internet
- Kahlenberg Horn
- Kabola diesel heater + hot water
- Samsung UE32 TV with TV lift
- Victron Cerbo GX approachable via VRM portal for viewing/controlling vessel's power parameters over the internet
- Window blinds on all hull and wheelhouse windows except on the front and aft wheelhouse windows
- Wiper on the front middle wheelhouse window
- Starboard and port side wheelhouse roof awnings

Miscellaneous

The LRC65 is CE-A certified. For more detailed or supplementary information contact us at info@artnautica.eu.