



# **INVENTORY LEEN 56**

STANDARD SPECIFICATIONS INDICE: APRIL 2021 Document non contractual



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## 01. Conception

#### LEEN trimarans are designed for long voyages.

The choice of the trimaran is essential to benefit from the undeniable advantages in terms of seaworthiness, large available living space and a hull with very low drag, allowing to consume much less diesel than monohulls or catamarans.

For the LEEN 56 we propose a hybrid propulsion (*in option*):

- 1 central engine CUMMINS 305hp QSB 6.7 intermediate duty, transmission in shaft line,
- 2 electric motors (*option*) in the side floats, transmission in line of shaft ensuring the redundancy of the principal engine, allowing a more precise and quiet maneuverability in the port, in the anchorages, or to cruise in natural reserves.

# 02. Technical specification

Overall length	17,10 m   56 ft
Beam overall	8,25 m l 27.07 ft
Draft approx.	1,30 m   3.87 ft
Displacement light (classic version)	22 T (approx)
Full load displacement	32 T (approx)
Fuel tank	5000 L l 1352 USG
Water tank	825 L I 263 USG
Engine power	305Cv Cummins QSB6.7
Naval Architect & Designer	Nivelt and Frutschi
Certification	CE ICNN

## 03. Construction

- > Vacuum-infused composite sandwich
- > Quadriaxial fibreglass with Kevlar® reinforcement for sections under the waterline
- > White isophthalic gelcoat
- > Vinylester resin anti-osmosis primer
- > Isophthalic polyester infusion resin
- > Antifouling epoxy primer for tropical waters



## 04. Bridge

- > Portuguese bridge
- > Bulwarks in polyester
- > Sidewalks covered with synthetic teak
- > Access to sidewalks by a door in the wheelstation
- > All-round handrail on sidewalks
- > 6 hawseholes
- > Synthetic teak deck (option)
- > Anchor stop
- > Electric windlass with remote control connected in the anchor locker (24V)
- > Windlass control and chain counter located at the main helm station as well as at the flybridge helm station
- > Anchor locker accessible via deck hatch
- > 2 x fender lockers
- > 8 mooring cleats

# 05. Swim platform / alongside boarding

- > Hot/cold shower on central hull
- > Folding stainless steel ladder
- > 2 access levels to the vessel in alongside berthing position, via the rear float transoms

## 06. Cockpit fittings

- > Cockpit in synthetic teak (option)
- > Large outside sofa
- > Table
- > 3 guest seats
- > Stairway access, with synthetic teak steps, to the flybridge
- > Rear enclosed with a safety guard rail
- > LED lighting in cockpit ceiling

## 07. Access to/from cockpit

- > Access to the storage garage or to the cabin n°5 (optional)
- > Access to the storage garage or to the cabin n°6 (optional)
- > Access to the three-rear transom of each hull
- > Access to the sidewalks protected by the Portuguese bridge



## 08. Flybridge

- > Stairway access, with synthetic teak steps, from the cockpit
- > Control panel with a second set of control for the main engine as well as for each of the two electric engines
- > Seat at the helm
- > Composite roof on poles with mountings for antennas and radar (option)
- > Bar with sink, tap and waste bin (kitchen fully equipped in option)
- > Balustrade inox
- > Windshield
- > Dinghy lifting system (hydraulic crane in option)
- > Dinghy craddles

#### 09. Saloon

- > Access through a large sliding glass window
- > Table
- > Large bench seat to starboard
- > Central aft access with stairs to the guest suite aft center hull
- > Forward central access with stairs to guest suite forward central hull
- > Galley on port side with serving bar
- > 3 guest armchairs
- > Synthetic weave floor
- > Electrical outlets

#### 010. Kitchen

- > Kitchen with bar
- > Stainless steel sink with mixer tap and spray hose
- > Oven with grill
- > Induction hob
- > Extractor hood
- > Work top
- > 1 x 130 L fridge
- > 1 x 160L fridge / freezer
- > Wastebasket, drawers, and storage cabinets
- > Ample storage space
- > Synthetic flooring
- > Electrical sockets



#### **011.** Wheelhouse

- > L-shaped sofa
- > Coffee table
- > 180° forward view
- > Synthetic flooring
- > Electrical sockets
- > Control panel with:
  - electric controls for the main engine
  - controls for the two electric engines (option)
- > Overview of information relating to propulsion systems
- > Compass
- > 2-person bench seat at the helm
- > Windscreens in safety glass
- > Fully adjustable anti screen condensation system using ventilation
- > Sets of washer/wipers
- > Electrical sockets (110V / 220V / USB)
- > Door access to starboard deck

#### 012. Master stateroom – main deck

- > Direct private access to/from the saloon
- > Double bed facing out 1,80m x 2,00m
- > 2 reading lights
- > Bedside tables with storage
- > Additional underbed storage
- > Panoramic windows with blinds and opening portlights
- > 220V or 110V and USB outlets
- > Synthetic flooring

### A. Master stateroom – Dressing room (main deck level)

- > Direct access from Master stateroom
- > Large wardrobe, cupboards with shelves
- > Storage cabinet
- > Desk and storage with mirror (or storage space in replacement)
- > Design desk chair
- > 220V and USB outlets



#### B. Master stateroom – En-suite bathroom

- > Private access by staircase directly from the Master stateroom
- > Separate shower 1,20m x 0,80m
- > Separate electric toilet
- > 3 sinks
- > Bathroom storage cabinet
- > Shelves
- > Black water tank

#### 013. Area - Aft central hull

- > Area with accommodations up to the client wish specified on the order:
  - Vast storage area
  - As a cabin (option)
- > Note: As a cabin:
  - 2 single bunk beds
    - Upper bed: 2,00m x 0,90mLower bed: 2,00m x 1,40m
  - Closet with storage space
  - Separate shower room with toilet, washbasin and shower with cabinet
  - Opening hatch with blind
  - Access via deck hatch
  - Black water tank
  - Synthetic woven flooring

## 014. Guest suite - Port-side float

- > Direct private access to port-side hull via staircase from the saloon
- > Access can be closed off by a sliding door
- > Double bed 1,50m x 2,00m
- > 2 reading lights
- > Bedsides tables with storage
- > Large wardrobe with shelves
- > Panoramic windows with blinds, hatch, and opening deck level hatch
- > Bathroom with shower, sink, and storage places with shelves and mirror
- > Electric toilet
- > Black water tank
- > Electrical sockets (USB and 110V or 220V)
- > Synthetic woven flooring



#### 015. Guest suite - central hull

- > Double bed 1,80m x 2,00m which can be converted into 2 singles on demand
- > 2 reading lights
- > Large closet
- > Shelves
- > Dressing wardrobe
- > Bedside tables with storage
- > Additional underbed storage
- > Panoramic windows with blinds, hatch, and opening deck level hatch
- > 220V or 110V and USB outlets
- > Adjoining bathroom
- > Washbasin
- > Separate shower
- > Electric toilet
- > Black water tank
- > Synthetic woven flooring

## 016. Cabin – rear port float

- > Vast storage area (standard)
  - Access via deck hatch
- > As a cabin (option):
  - 1 single bed 0,70m x 2,00m
  - Cabinet storage
  - Bathroom with cabinets, electrical toilets, shower, and sink
  - Black water tank
  - Access via deck hatch
  - Synthetic woven flooring

## 017. Cabin – rear starboard float

- > Vast storage area (*standard*)
  - Access via deck hatch
- > As a cabin (option):
  - 1 single bed 0,70m x 2,00m
  - Cabinet storage
  - Bathroom with cabinets, electrical toilets, shower, and sink
  - Black water tank
  - Access via deck hatch
  - Synthetic woven flooring



#### 018. Technical areas

The technical equipment of the LEEN 56 is distributed according to 3 specialized areas following a real coherence of operation.

#### A 12 m<sup>3</sup> thermal area dedicated to the main motorization:

- Diesel tanks for a total of 5000 L
- 1 main engine Cummins QSB 6.7
- Power: 305 CV
- Direct transmission by shaft line on high efficiency fixed propeller
- 1 engine battery alternator
- 1 48V alternator

Insulated and ventilated space equipped with thermal probe and camera.

# A technical space of 10 m<sup>3</sup> dedicated to the storage of technical equipment, energy management and water management:

HYBRID VERSION (OPTIONAL)

- > 1 Mastervolt 48V lithium main battery (common reserve for propulsion and service) of 22kWh
- > 1 Mastervolt gel "buffer" battery pack in 24V (exclusive to the service) of 200Ah
- > 1 Generator of 17,5 kW
- > 1 set of 50A 220/48V Mass Mastervolt chargers
- > 1 set of Mastervolt 48V/220V converters
- > Electrical boxes
- > Fresh water tank of 825 L
- > 1 Water heater 75L each per exchanger and 220V
- > 1 Pressurized water group
- > 1 Watermaker 200 L/h in 220V (optional)
- > 1 Washing machine (optional)
- > 1 Central air conditioning unit (optional)

Insulated and ventilated space equipped with thermal probe and camera.

#### Two compartments dedicated to the auxiliary motorization in the side floats:

2 Bellmarine DriveMaster electric motors (optional also requiring the generator option)

> Power: 2 x 15 kW = **30 kW** 

> Torque: 95 N/m

> Direct transmission by shaft line

> Variprop propellers with feathering

In case of any doubt or misunderstanding, the French version will prevail.













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