Iceberg

110' (33.83m) CIRCA MARINE

| LOA:      | 111' 0" (33.83m) |
| Beam:     | 21’ 10" (6.65m)  |
| Min Draft:| Min 4’ 11” (1.50m) |
| Max Draft:| Max 4’ 11” (1.50m) |
| Speed:    | Cruising 12 knots  |
|          | Max 15 knots      |
| Year:     | Mfg-2014          |
|          | Model-2014        |
| Builder:  | CIRCA MARINE      |
| Type:     | Motor Yacht       |
| Price:    | approx. ($7,992,233 USD) |
|          | 6 750 000 € EUR   |
| Location: | Italy             |

Proud Member of Worth Avenue Yachts LLC - Palm Beach

Worth Avenue Yachts LLC - Palm Beach
150 Worth Avenue, Suite 136
Palm Beach, Florida 33480
United States

+1.561.833.4462
www.WorthAvenueYachts.com
<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tr>
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ICEBERG is the first and only FPB 97 series passage maker motor yacht designed by Dashew Offshore in the United States and built in New Zealand by Circa Marine. She is a true expedition yacht with a proven résumé designed for the adventurer who truly wants to explore the far reaches of the oceans in comfort, safety and functionality.

ICEBERG was launched in spring of 2014 and, as of November 2019, has completed 51,687 nautical miles (at 12 knots) of blue water cruising. She has cleared into 16 different countries including, New Zealand, Australia, Tonga, French Polynesia, west coast of the U.S. from San Diego to Seattle, Canada, Panama, Bahamas, Caribbean Windward Islands, the east coast of the U.S. from Florida to North Carolina, Bermuda, Azores, Netherlands, Gibraltar, Spain, France, and Italy. ICEBERG has made the passage from South Pacific up to the Caribbean, along with two total Atlantic Crossings. She is currently still in service.

The first FPB (Functional Power Boat) was the 83’ prototype WIND HORSE, followed by the 64 series, of which there are now eleven. ICEBERG, a 111’ model launched in 2014, is the largest of the fleet. All are designed based on principles originally applied to the iconic Dashew designed circumnavigation sailing yachts, which include Deerfoot, Sundeer, and Beowulf. All are ideally suited for short-handed cruising comfortably over long distances, efficiently and safely.

At a cruising speed of 12-13 knots an FPB 97 averages 312 miles a day on passage, and has a range of 3,926 nm. Diesel fuel capacity is 24,160 litres/6,382 gallons, and freshwater storage is 10,050 liters/2,655 gallons with an onboard water maker to make up to 264 liters/70 gallons per hour. The fuel and water are stored low in the hull for ballast, contributing to stability and self-righting capability. Power is provided by 2 x 500hp John Deere engines. Hydraulic Naiad stabilizers contribute to the smooth ride, even in rough seas.

The rugged aluminum exterior belies an elegant, comfortable interior that contains a master suite, a double guest cabin, a triple bunk guest cabin, and a double bunk crew cabin aft. There are 4 heads with showers, a steam room in master, an office, and a full electrical/control room with large fridge and freezer in aft end of center line hallway.

The main deck saloon offers a large fully equipped kitchen to port, and a bar with cocktail cupboards to starboard. In addition, this area boasts double sinks, induction cooktop, convection oven, icemaker, dishwasher, washer/dryer units, and oversize refrigerators and freezers. The roomy saloon features an 8-seater dining table, with a large couch to starboard. A lift up flat screen TV sits to port for comfortable viewing from couch/ hydraulically extendable day bed. This area has a panoramic view of the sea through continuous wrap around windows on all four sides, as well as a navigation station with a full complement of electronics. All around an exceptional area for comfortable family living.

The huge walk-in engine room is a mechanic's dream, accessible from aft deck and aft end of interior hallway. Great space around systems, along with a large workbench and exceptional tool storage.

The exterior features a fly bridge with comfortable seating, a hydraulically controlled dining table that can turn into a full or half day bed with side coffee table, 360deg views and your main helm station. The strata glass clears are all openable for fresh air and visual awareness, with wing stations to port and starboard which give extra visibility for docking or access to high commercial wharfs. There is a stationary bicycle aft and room for a work out center.

The aft deck has a comfortable seating area for 8 with under counter freezer and drinks fridge, and a spacious day head. To starboard, you will find two storage lockers and a garbage compactor.

Moving further aft there is room for onboard storage of a 3.2m/10.5 ft inflatable tender which can be launched by the lifting boom on the port side. To starboard a C type davit is provided for safe and speedy launching of the 6m/19.7 ft David de Villiers - Circa Marine built matching aluminum tender. There is also a barbeque, and kayak storage on the C-davits. This complete aft deck can be covered overhead and on the sides with a shade cloth system, providing full sun cover for all angles.

A 4.3m long swim platform 15cm off the waterline creates a beach club style feel. Its integrated folding stern pulpit also act as a large dive ladder, easily deployable and retrievable on large recessed hinges. Large storage lockers x 3, passerelle, Glendinning electric shore power reel, gasoline jerry can x 2 storage, stabilizer fin and roller track for small tender storage, a warm water shower are all neatly located on aft bulkhead to starboard of the steps.

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Forward on the main deck is a spacious lounging trampoline and sunshade awning for added comfort within bow area. Foredeck area is accompanied by an extra 4 storage lockers, 1 designated and vented for gasoline fuel storage of 156 litres/41 gallons in jerry cans. One oversized hatch into forepeak for motorcycle or large equipment storage, and one daily service hatch provide great access to forepeak. A removable manual crane also services this deck for equipment, motorcycles or small tender.

**ACCOMMODATION**

**Summary of Accommodation:**

- Interior finish is sapele mahogany, crown cut with a varnished satin finish and no grain fill.
- Ultra leather headliners and saloon windowsills in polar white.
- Lower level berths and companionway cabin coverings are in bone in colour from MDC walls.
- Heavy traffic durable laminate floors throughout from Project floors-Plankwood- Light collection.
- Saloon dining and sofa material- ultra suede indigo.
- Saloon dining and sofa owners covers in 3 colours - grey, white, blue, burgundy- natural cotton.
- Master cabin sofa in ultra suede Amethyst.
- All counter tops are Hi-macs solid surface Genova.
- Aft cockpit cushions in red and tender cushions are grey. Both are executed in Sunbrella.

**Description of layout:**

The saloon is also known as the Great Room, with 360 degree views of the outside. From aft there is entry into the Great Room and to port you find the galley. This is equipped with Hi Macs Solid surface arctic white counter tops and the interior is executed in mahogany trim. The fridge and freezer are in solid stainless steel. There are useful bar seats at the galley.

Forward of the galley is a large dining table that was hand crafted for ICEBERG by Mario Marinkovich and it is made of 3,000-year-old Kauri wood. 8-people are comfortably seated here. Opposite to starboard is a large sofa, which can also double as a day bed. This is a great place for relaxing and enjoying life at sea. Forward is a helm station for rough weather use or for during long passages. Opposite the galley is a wine and cocktail bar with icemaker and washing machine beneath. Forward are steps down to the lower accommodation.

ICEBERG has large portlights in the hull. In the turn of the stairs is a small seating area. The steps lead down to the lower deck lobby. This houses a comfortable office area with MAC computer and printer and room for books. Opposite this is a large cleaning cabinet.

Moving forward, there is a watertight door into the master cabin. This is a very large and spacious cabin with a large centerline double berth and lots of storage. There is a large sofa, which converts into a large bed for family use. There is also a great dressing room area as well as a separated steam bath and another compartment with heads and shower. A deck to deckhead mirror on the forward bulkhead can be opened to reveal another watertight door, which opens to reveal the forward lazarette for the yacht.

**Main Storage Forward**

This fantastic space has an access hatch that is large enough to accommodate a motorcycle but for normal daily access there is a Lewmar deck hatch. The area is well laid out and there is a useful storage system for parts that are all labelled and catalogued. Beneath the floorboards, the bilge area is of huge volume and is great for longer-term storage of ship’s and personal items.

There are hanging bars for dive gear, wetsuits, life jackets and so on. There is a rack system for paddleboards, surfboards, kite boards and other yachting gear on the port side, which can be folded flush to the yacht’s side if the area is needed for additional spare part storage.

This area has the following equipment -

- Bowthruster and manifold.
- Bauer Junior 2 dive compressor.
- Air horn compressor and tank.
- A California air tools compressor for ship’s air system.
- Furuno forward facing sonar.
- An auxiliary diesel bilge/fire pump.
An electric diaphragm bilge pump designated to forepeak.
An additional hydraulic bilge pump for the master cabin and forepeak.
Forward master cabin air conditioning raw water and glycol circulation pumps.
Master cabin toilet vacuum pump and tank, with separate black water storage tank.
Master cabin black and grey water tank discharge pumps.
Master cabin grey water tank.

VIP Cabin (Port):
This comes with a Queen sized berth with masses of drawers for storage and a nice bedside table. There is a comfortable en-suite heads compartment with good shower, storage, WC and basin.

Triple Cabin (Starboard):
A great children’s cabin that could be adjusted for more mature visitors if required. There is an inboard single bunk and outboard single berth – ideal for small people. There is lots of storage space and a very good shower room. The cabin also has a large horizontal porthole so light floods in.

There is a door aft of this that leads into the crew area.
The crew cabin has generous upper and lower berths with a porthole and storage cupboards. There is a full standing wardrobe and drawers for storage aft of the cabin entrance. There is an en-suite shower with heads with film separation between them.

Opposite the crew cabin there is an extra-large refrigerator and freezer which are side loaded.

**ELECTRICAL ROOM**
To port is the electrical room. This has the yacht’s electrical panels, both AC and DC, shorepower selection switching, generator controls, battery charger controls and bilge and tank pump switches. Outboard are electrical components, air conditioning fancoil and compressor with the refrigeration compressors and controllers, solar panel controllers, main start and stop for the engines and the yacht’s monitoring screen and components and the Victron battery charger and inverter units. This area also doubles as a crew mess and has an electric plate for making hot drinks and the like.

**ENGINE ROOM**
Behind the electrical room, through a watertight door is the engine room. The engine room may be accessed through an aft hallway watertight door or from an aft deck Lewmar hatch, thus giving crew access to the interior of the yacht without interrupting guests, and quick direct access from the crew cabin. The engine room is large and is well laid out with plenty of workable space between the different systems. From the forward bulkhead working aft, the starboard side forward bulkhead holds the 24v Victron battery charger, alternator regulators, alternator noise filters, alternator selection switches, ac/dc converters, and parallel battery switches for main engines and generators.

To starboard is the toilet vacuum system, main engine exhaust manifold and the shower head and exhaust mixing box, starboard fuel day tank and Racor fuel filters with manifold, fuel polishing manifold and transfer pumps. Also air conditioning, raw water and glycol circulation pumps, and an extra large work bench with tool chests. Further to starboard and aft is the dinghy davit hydraulic power pack, and diesel Kabola heating system with expansion tank, together with the generator gas and water separation box and generator discharge valving.

Along the aft engine room bulkhead is the steering system with plenty of great access, for rams, pumps, autopilot manifolds, and emergency steering setup and equipment. The black water tank and its discharge pumps and valves are also in this area. The 24kva Charles marine transformer is on the aft bulkhead.

Port side aft working forward, you will find the fresh water pump, house water filters and valving manifold, sink and small workbench, grey water discharge pump, fresh water maker system, main engine exhaust manifold, showerhead and mixing box.

On the port side is the day tank with port Racor filters and fuel manifold system, toilet vacuum system, the Naiad stabilizer header tank and manifolds, and the air conditioning, raw water and glycol loop pumps.

The engine room is equipped with a hydraulic bilge pump that services engine room and annex, and 2 electric diaphragm pumps that have separate forward engine room pickup lines.

ICEBERG is powered with 2 John Deere prime movers on John Deere tractor engine blocks, and 2 Cummins/Onan generators. She has a total of 4 alternators which can maintain the house load whilst underway, which means that there is no need to run generators on long passages.

**EXTERIOR**
On deck there is an aft cockpit with a table that seats 8 people. The trash compactor is stored there, as well as the beach storage locker and there is a BBQ and overhead bimini. To port there is a day head.

Finished with teak decks and teak trim this is a large and spacious area, which is the heart of the yacht. There is the
helm station with all navigation controls and this is located aft, giving a large entertaining area forward with a teak table that seats 8 and which will hydraulically lower to provide an enormous sunbathing area. The side clears can be removed and the area is fully air-conditioned and heated.

There are side-opening doors either side with access to the solar array on top of the matrix deck and on the great room deck head.

Another area that deserves a mention is the foredeck where there is trampoline seating making a lounging area with a fully covered awning in front of the great room. This is a great place to relax when aboard ICEBERG.

The bathing platform provides a beach style experience sitting only 24cm/9” (approx) off the waterline. With a length of 4.3m/14 ft and width of 3.90m/12.8 ft, it is narrowest forward at 2.3m/7.5 ft. It creates great access for swimming and the easy deployment of toys. The aft rail drops to provide a sturdy stern ladder. The smaller dinghy can also be easily stored here for local cruising periods – it has a retractable roller system to make this an easy process. Of course, there is a shower, storage and it is a very usable and practical addition particularly for those who enjoy watersports.

**Deck Equipment**

**General:**

- Deck wash: Hot and cold spigots on port and starboard wing stations, foredeck, aft deck, and swim platform.
- Stainless deck stanchions with stainless lifeline system.
- Boarding gates port and starboard, mid ship gates, fly bridge wing station gates, & passerelle from swim platform.
- Aft deck custom built 2 electric BBQ.
- Includes 2 x flopper stoppers for use at anchor, and Kolstrand trolling stabilizers for use in the event of main stabilizer failure. All deployed from the booms on separate pennants with rope clutches.
- 4.3 m/14 ft above water line swim platform with integrated folding stainless steel dive ladder that doubles as stern pulpit, no lifting, no fuss system.
- Aft deck freshwater shower (hot and cold with mixer valve).
- Convenient kayak storage over starboard side C type davit.
- Manual removable crane on foredeck, C-type davit for large tender, overhead boom for inflatable dinghy, roller track system for inflatable dinghy on swim platform.

**Anchoring & Mooring Equipment:**

- Primary ground tackle consists of 150KG/330 lb Rocna anchor with 107 meters/351 ft of 13mm/0.5 inch A7 DIN76 Type A Galvanized chain.
- Maxwell VWC4500 24 VDC windlass with chain counter and Maxwell controls at fly bridge, main helm, wireless remote, and wired foot pedals.
- Fortress FX55 and 2 x F125 anchors for kedging/storm use with 120 meters/394 ft of hi modulus line.
- Foredeck x 2 Lewmar self-tailing #48 winch for hoisting dinghy, or mooring line support.
- Aft deck x 3 Lewmar self-tailing #48 winch for deploying flopper stopper booms, hoisting dinghy, or mooring line support.
- Full assortment of 1’ high modulus and 7/8 inch dual braid lines for docking & other uses.
- Galerider storm drogue and Parachute anchor.
- Full assortment of mooring lines and inflatable fenders.
- 2 x 8mm/.3 in - 3m/9.8 ft stainless steel chain with shackles.

**Covers, Canvas & Cushions:**

- 3 different natural cotton colored covers (white, grey, navy blue) for all interior seating including the day bed.
- Seat and table covers for saloon and fly bridge.
- Crew covers for saloon and fly bridge.
- Helm chair covers for saloon and fly bridge.
- Hatch covers.
- Tender covers.
- Kayak covers.
Winch covers.
BBQ Cover.
Radar & antenna covers.

**Tender & Outboard:**

- 6m/19.6 ft David de Villiers - Circa Marine built custom aluminium tender with closed cell EVA foam with PE coating full rub rail system, ICOM VHF radio, Simrad NSS, Evo 2 GPS. 70hp Yamaha outboard (2014). Bow and stern anchors, large under seat cooler, 3 x 24ltr/6.3 gallon fuel tank removable jerry cans. Full collapsible bow dodger for rough/rain weather, and self-draining deck system.
- AB 10 AL inflatable dinghy, aluminum bottom 20HP Yamaha 4 stroke (2014). Inflatable dinghy can be stored on main deck, swim platform, or foredeck.
- Overhead booms support launching of inflatable dinghy from main deck. Roller track system on swim platform for easy slide in and out deployment with removable manual crane for foredeck.
- Launch and retrieve large tender via custom C - type hydraulic davit, with wireless remote, which is a simple one-person operation.

**Safety Equipment:**

- Aft deck safety netting and gates.
- Switlik SAR 6100 1- 6 person canister life raft x 2.
- Emergency ditch bags x 2 in fly bridge.
- Emergency ditch bag x 1 in 6 metre/19.7 ft tender.
- Winslow 60SLOP- 6 person super light life raft for large tender.
- Crewsaver Premier PFD's with lights x 2 in each cabin, plus additional 8 on fly bridge.
- Inflatable life jackets- (Burnsco CWX 150) x 2 , Baltic Winner 275 x 2.
- Flares-1 white comet handheld, 2 red comet handheld, 4 red comet parachute.
- ACR global fix Ipro 406mhz Epirb - batteries replaced in 2019 (1 x mounted, 1 x ditch bag).
- ACR ResQLink Personal locator beacon x 1 for large tender.
- SART-Mcmurdo x 1.
- Dragger Parat C Smoke masks x 2 in each cabin.
- Baltic MOB device x 1.
- Backboard Stretcher.
- National Marine Digi + Doc Medical kit- 24hr medical support system.
- Zoll AED+ - AED unit.

**Fire-fighting equipment:**

- Fuel system, engine room air intake, and manual fire suppression system can all be remotely activated outside of engine room.
- First Alert (Atom Micro Photoelectric) smoke and fire alarms for all parts of the yacht.
- Carbon monoxide detector in engine room and forepeak sole audible units.
- Heat Sensor in forepeak linked to Maretron alarm system.
- NTM Sensors- Hydrogen gas sensor for battery bank audible alarm in electrical room.
- Fireboy heat detectors in engine room.
- Fireboy-Xintex ESC Series engine shutdown controller.
- Fire Extinguishers throughout- Quell 2kg/4 lb x 1(AB); Kiddie 6.8 kg/15 lb x 4 (ABC); Badger x42.5lb/19.3 kg (BC); Badger 5 kg/11lb x 3 (ABC).
- Hatz-Diesel/IPT Pump- Auxiliary bilge and fire pump, with 2.4m/7.8 ft spring hosed check valved pickup line, and 2"-5.6m/18.4 ft + 15m/49 ft fire hose with nozzle. Hard plumbed in forepeak for fire main.
- Fire Axe.

**CONSTRUCTION**

**Hull, Deck & Superstructure Construction:**
Basic hull and structure is welded aluminum including superstructure with two full watertight bulkheads and two half height water tight bulkheads.
Bottom is 12 mm/.5” aluminum plate
Integral aluminum tankage for water and diesel form a double bottom between the two full height watertight bulkheads.
19mm/.75” tempered windows.
X 6 Bomar hatches for excellent ventilation, natural light, and access.
XL wide port holes for natural light, equipped with blackout shields.
Matching grey tread master decking on exterior decks.
External handrails, stanchions and foremast of 316 L stainless steel.
C type Crane for easy launching and retrieving of 5.6m/18.4 ft 70 hp aluminum tender
Bow Crane for easy launching and retrieving of the rigid hull inflatable tender.
Mounts to accommodate 2 kayaks.
Swim Platform is 4.3m/14 ft long and 15mm/0.6” above water line for easy access to the water
New Zinks (2019).
Flopper stopper booms for at anchor stabilization also used for launching and retrieving inflatable tenders or other gear as needed

MACHINERY

Engine & Gearboxes:

- 2 x John Deere 6090 SFM85 – M4 rating – approximately 500 hp each (New 2017).
- Engine mounts- Rubber Design-TT Type 3 (New 2017).
- V-Drive - ZF325 IV 2.417 to 1 reduction transmission with Drive Saver (New 2017).
- ZF Controls throttle controls.
- All raw water-cooling needs served through copper nickel dual sea chests with clean out and isolation valves above the waterline, dual heavy duty strainers isolated by valves.
- Compressed air clean out ports on top of sea chests for easy cleaning of strainers.
- John Deere controls & monitoring system.

Maintenance & Performance: PROVISIONAL

- Max speed approximately 15 knots @ 2150 RPM.
- Cruising Speed 12-13 knots @ 1750 RPM.
- Fuel consumption @ 1750 RPM (12-13kts) = 80-90ltr/21-24 gallons per hour.
- Fuel consumption @ 1600 RPM (10-11kts) = 50-60ltr/13-16 gallons per hour.
- Cruising range @ 13kts - 3,926 nm.
- Cruising range @ 11kts – 4,429 nm.
- Cruising range @ 10kts – 4,832 nm.
- True Engine Hours: 2255 (18/Nov/2019).
- Engines serviced 2019. 2,000 hour service on both engines to include overhaul water pumps, check and adjust valve clearance, check crankshaft vibration damper. Oil Change and filters on both engines and gearbox.

Propulsion & Steering:

- Axial shaft seals installed during the re power (2017).
- Veenstra 30” 5 blade (2017) + 2 x original propellers remain as spares.
- PropSpeed to both props (Feb 2019).
- Shafts and propellers removed, aligned, and mechanical shaft seals replaced, (2017).
- Steering system – DC- Hydraulic - Dual rudder with dual, independent Lecomble & Schmitt steering cylinders and dual Leeson motors, with tie bar.
- Emergency steering systems- Lecomble & Schmitt manual Hydraulic wheel pump located on port aft deck, and block and tackle tiller arm setup for inside engine room.
- Rudder indicator and 4 auto pilot feedback units
Simrad Dual autopilot system.

**Other Mechanical Equipment:**
- Bow Thruster – Naiad Model 12HT proportional bow thruster
- Stabilizers- Naiad Model 525 with Datum control system with 13.5 square foot fins and adaptive control driven off the main engine. Serviced 2017.
- Reverse oil change system with Oberdorfer 24 Volt pump with valved manifold serving generator, main and main gearbox.
- C- Davit power pack electric hydraulic unit.
- Heinen & Hopman engine room intake, and exhaust fans. With Invertek Drive Auto Exhaust controls for manual and automatic functions.
- Bauer Dive compressor- Junior 2 model.
- Air compressor for ships air- California air tools and 4 gallon storage tank.
- Horns x 2- Kahlenberg air compressor 24V.
- Murphy gauges tied to Maretron system for main engine oil level, gear pressure, coolant temperature and coolant level.
- Very extensive complement of organized spares using the organizing application Sortly.

**ELECTRICAL SYSTEMS**

**Voltage Systems:**
- Victron Charger/Inverter units charge house battery banks from generator or shore power units, and invert DC house battery bank power to either 230v/115v AC Supply.
- 4 x 230v 5kw Victron charger/inverters for 230v domestic loads powered by the 24v DC battery bank.
- Primary 230v AC – All 240v 60hz loads run on 230v supply through inverter from house battery bank.
- 2 x 115v 3kw Victron charger/inverter for 110v domestic loads powered by the 24v DC battery bank.
- Secondary 120v AC – All 115v 60hz loads run on 115v supply through inverter from house battery bank.
- 3 x 280w Victron converters for 24v to 12v supply, powered by 24volt DC battery bank.
- Charles 24KVA ISO Shorepower Transformer (50 or 60 Hz).
- Generators Onan 21KW and 13.5 KW 60 Hz
- Inverter bypass switch for direct power from generator or shore power for both 230v & 115v services.
- Dual pole breaker & remote Blue Sea disconnects for all 24 Volt high amp DC circuits and devices.
- Two main power panels – AC and DC conveniently located directly outside ER.
- Perspex shield for 24v terminals below DC electrical panel.
- 115v, 230v, 24 volt,12v, and USB plugs are located strategically throughout the boat.

**BatteryBanks:**
- Emergency parallel switch for Starboard/Port battery banks for Main engines and generators.
- Emergency 12v converter bypass.
- Isolation breakers for each house battery bank group.
- Blue Sea systems 8248 DC multimeter & Victron energy BMV-700 battery monitor.
- Blue Sea systems 8235 DC voltmeter for 24/12v banks.

**BatteryChargers:**
- 4 x Victron charger/Inverter, Quattro 24v/5000va/120Amp- 230v 5kw (230vSupply).
- 2 x Victron charger/Inverter, Multiplus 24v/3000va/70Amp- 115v 3kw (115vSupply).
- 1 x Victron energy battery charger, Skylla-i 24v/80amp/3 outputs-180-265vac/45-65hz.(For all start batteries).
- 1 x Victron Autotransformer 120/240vac/32Amp (Cooktop/oven supply).
- 3 x Victron isolated DC/DC Converter, Orion-Tr 24/24-12 (12vSupply).
- 1 x Victron Inverter, Phoenix 24/ 800 (Spare).
Victron digital multi & Phoenix controllers for manual battery charger amperage adjustment for shore power, and generator charge outputs to house battery bank.

**Alternators:**
- 4 x Serpentine belt driven 28 volt Electodyne alternators on the main engines provide a combined output of (600 amps at 28v) through four heavy duty remote mounted rectifiers whilst underway. This is sufficient to run key 115v and 230v systems via the inverters whilst underway, and keep the battery levels charged without having to run a generator. Power management is, although, necessary with larger consumers like air-conditioning system, washer/dryer, and cooker/oven.
- 2 x Balmar max charge MC-624 multi-stage regulators. (2 alternators per regulator).
- 4 x Balmar Temperature sensor MC-TS-A.
- 4 x NewMar 150A Alternator noise filter. 150Amps, 6-48vdc.

**Solar Power:**
- 20 x Sunpower E20/327 solar panels have been added into the electrical system. 1.5KWh/54.7v @ full sun giving 27.4AH per panel. Total KWh for all 20 panels – 30 KWh.
- Outback power systems- Flexmax 80- power tracking/charge controllers x 5.
- This adds extra charge to the house battery banks. While the yacht is shut down for winterization or whilst crew and guests are away with minimal systems running, these panels will keep all battery banks within safe parameters.

**Generator:**
- 21 KW 60hz Cummins Onan Generator, approximately 5300 hours (Nov 2019).
- 13 KW 60hz Cummins Onan Generator, approximately 4570 hours (Nov 2019).
- Cummins Onan Monitoring and alarm control panels.
- Centek 1020250 water/exhaust separator.
Shore Power:
- Incoming shore power is isolated via a Charles Industries 24kva single phase isolation transformer.
- Shore power connection point on the aft deck accepts either 32 amp or 100amp 115v/230v inputs (50 or 60 Hz).
- 100amp Shore power cord is on a powered extension and retracting Glendenning cable handling system.
- Full set of shore power cords, plugs, and international adapters.

PLUMBING SYSTEMS

Fresh Water & Water Heating System:
- 1 x 230v Gianneschi Tipo Jet 4BM E fresh water pump (New 2017).
- Accumulator Tank-Puffer Headhunter PT-102 100PSI.
- Fresh water maker-Aqua Whisper II Model -70 gallon per hour RO water maker. Primary sand filter, 5 micron media filter, oil/water separator filter for sea water supply. A PH neutralizer, charcoal filter, 5 micron filter and UV sterilizer further filter water before running to tanks
- Additional ships filtration system- 5 micron charcoal filter with UVMAX F4+ sterilization light.
- Jabsco DC Fresh water manifold transfer pump to transfer between tanks or to prime the water pump.
- 5 micron drinking water filter, and Jabsco pump for galley drinking water tap.
- Jabsco Accumulator tank for galley and bar sink service.
- 150 litre/40 gallon cylinder water heater tank with 2 x 3,000 watt SureCal immersion heaters.
- Grundfos submersible hot water circulation pump plumbed into hot water loop.

Bilge Pumps:
- 2 x Winsmith 917mwu 20ltr/5 gallon 56c- diaphragm 24vDC bilge pumps – 2 x in engine room picking up port and starboard,. 1 x forepeak pickup.
- 2 x Pacer SE2FB hy-hydraulic centrifugal damage control pumps (driven by main engines) 1 x engine room and electrical room pickup points. 1 x forepeak and master cabin pickup points.
- 6 x Whale Gulper 320 24vDC bilge pumps for port and starboard master cabin, port and starboard coffer dams and port and starboard in the aft cabin.
- Hatz-Diesel/IPT Pump- Auxiliary bilge and fire pump, with 2.4 metre/8 ft spring hosed check valved pickup line, and 2"- 5.metre and 15 metre/50 ft soft discharge line.
- Rule-Mate 500 GPH bilge pumps in aft swim platform lockers.
- High water bilge alarm on Maretron vessel monitoring system.
- Bilge pump controls located in electrical room.

Tankage
- Pressure sensors for level indicator for freshwater, grey/black water, and diesel tankage. All tank levels are monitored on the Maretron vessel monitoring system.

Fuel:
- Fuel Capacity is 24,160 liters/6,382 gallons in two centerline main tanks, 2 wing tanks, and 2 day tanks.
- Tanks are integral to the yacht and are fabricated of aluminum.
- 2 x Oberdoerfer high capacity fuel transfer pumps- 1 x N994 AC, 1 x N992 DC.
- Fully valved manifold to tanks and polishing system for both pumps
- Diesel polishing system- 3 x Racor (751000MAX 30 micron) filter/water separator, System allows clean transfer from tank to tank via valved manifolds.
- Pure fuel technology- PFO+ 034 unit to further clean, sterilize, reduce moisture, and eliminate all types of diesel bug is plumbed in aft Racor filters.
- 2 x Racor fuel filters (751000MAX 10 Micron) for each main engine and generator. Manifold for Kabola and Webasto Airtop heaters plumbed into Racor filtration system.
- Day tank topped up automatically with pump running, low level, fill level, and high-level alarms. 230v or 24v pump selection with auto or manual settings.
- Macnaught DM100 fuel flow meter- pumped into fuel manifold
Valved crossover line between starboard and port day tanks.

Sludge line valves on day tanks.

**Fresh water:**

- 10,050 litres/2654 gallons in 4 integral aluminum tanks plus a separate 50 litre/13 gallon polyethylene galley tank for filtered drinking water.

**Grey/Blackwater holding tanks:**

- Blackwater – 2 PVC tanks aft approximately 340 litres/90 gallon capacity each – one serving the port side guest and day head, and one serving the starboard side guest and crew head. One PVC tank in the forepeak of approximately 400 litres/106 gallons serving master cabin.
- Grey water – One aluminum integral tank approximately 1400 litres/370 gallons in engine room serving entire yacht minus the master cabin. One aluminum integral tank approximately 800 litres/211 gallons serving the master cabin.
- Whale Gulper IC – 20 litre/5 gallon min pumps for all showers and sink drains, with whale IC two way manifold.

**NAVIGATION EQUIPMENT**

- Integrated Simrad Navigation system.
- Simrad MO24” touch series Monitors x 4 in flybridge x 2 at the Saloon Helm.
- Simrad NSO II processor x 2 flybridge, and x 1 Saloon helm.
- Simrad OP40 push button GPS control x 2 flybridge, x 1 Saloon helm.
- Flir M-625L, controls in flybridge and saloon helm.
- Simrad Halo Pulse Compression Radar.
- Simrad 4g broadband radar.
- Simrad AP 70 Auto Pilot, 2 independent Units for redundancy. 2 displays on flybridge and 1 at the lower helm.
- Simrad FU 80 auto pilot joystick. 1 x Fly Bridge, 1 x lower helm.
- Simrad S35 steering lever and RF45X rudder Feedback unit for backup/emergency direct non follow up hand steering.
- Simrad RS 90 VHF radio x 2 Flybridge, x 1 lower helm.
- Simrad HS35 VHF radio wireless handheld in lower helm.
- Simrad MX510 Navigation system AIS & GPS.
- Furuno LCD searchlight forward facing sonar CH-270.
- Simrad NSS EVO2 GPS display. 1 in Master Stateroom, and 1 in Crew Room.
- Simrad HS70 GPS compass.
- Magnetic Compass Plastimo Contest 130.
- Depth Sounders Airmar DT800 Transducer x 2 Forward / x 2 Aft.
- Paddle wheel Airmar DST800 transducer x 2 Forward

**Communications Equipment:**

- Sailor 500 Fleet Broadband
- Iridium Pilot x 1 (antenna needs replacement).
- Iridium Extreme 9575 handheld satellite phone.
- Pepwave Max Mobile Router + cellular antennas x 2, Also acts as WIFI router.
- Mitel 3300 CX II – Ship’s onboard phone system, located in all cabins & common areas.

**Security:**

- Intruder alarms for all interior hatches and doors linked to Maretron system.
- Swann NVR8-7200 Security camera video recorder- 2 x aft deck and cockpit, 2 x forward. mast, 1 x forepeak, 1 x engine room, 1 x flybridge.
- Engine room and forepeak hatches have interior security bars.
- Watertight door from master cabin into the forepeak has interior locking system.

**DOMESTIC EQUIPMENT**
• Asko full size washer and dryer.
• Dyson Animal DC44 vacuum system x 4 throughout the yacht.
• Miele Portable S8000 series vacuum.

**Galley:**

• Miele KM 6381 4 burner induction Cooktop (2017).
• Miele 230v Master Chef 27” single oven.
• Bosch 800 Series fully Integrated Dishwasher.
• Fisher & Paykel HC90DCXB1 FP AA galley extraction fan.
• Frigoboat custom Refrigerator 24x29x36) Freezer(24x25x26) In Galley.
• Frigoboat custom Refrigerator (30x30x22) Freezer(30x30x43) Aft guest hallway.
• All Fridge/Freezers have Frigoboat evaporators 380F & 24v Danfoss Compressors K50F.
• Keel cooling & heat fin extraction for all fridge compressors.
• Guardian coastal climate controllers for fridge/freezer compressor controls.
• U-Line Icemaker ULN-SP18WH-20.

**Heads/Shower:**

• SeaLand Vacuflush heads with SeaLand(SP TS24) diaphragm pumps x 5- valving to holding tanks, direct overboard discharge, or to shoreside pump out fitting.
• SeaLand SP TS24 Waste Discharge Pumps x 4 for overboard and shoreside pumping.
• Whale Gulper IC high capacity waste pumps x 8 for all shower and sink drains.
• Freshwater deck shower on aft swim platform with hot and cold mixer valve.
• Day head aft cockpit with sink, and SeaLand Vacuflush head.
• Master cabin bathtub & shower combination with Mr. Steam MS-150-E steam bath generator.

**Heating & Ventilation:**

• Marine Air Systems x 5 - 240v independently controlled air conditioning units, each unit independently cooled by 240v raw water pump. Two Units in saloon/galley, one unit in master cabin, and two units on the fly bridge.
• Marine Air Systems x 7 - 240v independently controlled keel cooled air conditioning units. 1 in each cabin. 1 in electrical control room, and 2 in saloon/galley.
• Marine Air Thermostat controller for each individual unit.
• Fan only and dehumidification modes in addition to cool.
• Vessel heating through Kabola KB 75 diesel heater
• Vimar Idea controls for Kabola heating system and fans in each cabin and saloon and flybridge areas.
• Webasto AirTop 5000 Diesel heater for flybridge heating with AirTop/EvoM controller.
• Electric cylinder controlled skylight hatches, with rain sensor for auto closer. 2 in Master, and X 2 in salon
• Exhaust fans in all heads.
• Complete set of sky light hatch covers, all hatches have integrated screens.
• Strataglass clears on fly bridge are 100% openable for complete ventilation.
• All interior spaces have exterior ventilation via a vent system that can easily be opened and closed internally providing, an excellent source of fresh air flow throughout the yacht
• An overhead and side sun shade awning system for complete aft deck coverage.
• Foredock sunshade awning that covers trampoline lounge area and forward saloon windows.
• Decent side deck overhangs for shade & rain cover on saloon windows.

**Entertainment:**

• Cisco network integrated with Mitel 3300CX II router to provide stored entertainment throughout the yacht.
• Synology Rack station RS818 for storage of vessel’s movies shows and music.
• SONOS smart stereo sound system to provide sound independently or as needed throughout the yacht.
• Master cabin– Sonos speakers x 2.
• Saloon- full surround sound – Sonos speakers x 2, sound bar, and Sonos subwoofer.
• Aft Deck – Polk Audio Marine Speakers x 2.
• Flybridge – Fusion Marine Speakers x 4.
• Additional 2 portable Sonos speakers for flexible use where needed.
• Saloon:
  1. Samsung 55” LED Smart TV.
  2. Apple TV.
  3. Samsung blue ray player.

• Master Cabin
  1. Samsung 46” LED Smart TV.
  2. Apple TV.

**Lighting:**

- Interior lighting is recessed warm white LED 24v i2systems light fittings.
- LED strip lighting throughout.
- Vimar dimmers for all overhead & strip lighting.
- Rigid Industries- forward, side, and aft deck 24v LED flood lights.
- Side deck, stairways, fly bridge beneath helm station, swim platform, and hallway LED courtesy lighting.
- Large forward and side facing LED 24v flood lights on foremast.
- 24v LED lights in engine room.
- Fly bridge and saloon helm station LED red chart table lights.
- Aqualuma Gen3 (series 12) x 4 white underwater lights.

**EXCLUSIONS**

*Exclusions include owner’s artwork and personal effects.*

**Disclaimer**

Specifications are provided for informational purposes only. Data was obtained from sources believed reliable but is not guaranteed by owner or brokers. Buyer assumes responsibility to verify all speeds, capacities, consumptions and other measurements contained herein and otherwise provided and agrees to instruct his agents to confirm such details prior to purchase. Vessels subject to prior sale, price and inventory changes and withdrawal from market without notice.
SALON LOOKING FORWARD TO HELM

SALON LOOKING AFT FROM HELM
ON DECK GALLEY LOOKING FORWARD

KAURI DINING TABLE
MATRIX DECK HELM LOOKING FORWARD

MATRIX DECK WORKOUT AREA
MASTER LOOKING FORWARD

MASTER HEAD
TRIPLE BERTH KIDS' ROOM

OFFICE
ENGINE ROOM LOOKING FORWARD

ENGINE ROOM LOOKING AFT
MAIN AFT DECK SEATING

AFT MAIN DECK LOOKING FORWARD