Large yacht

Large yacht

A luxury yacht is filled to the brim with electrical equipment. Critical equipment for sailing usually runs on DC, the bigger appliances will take AC. In general, air conditioning is the biggest consumer of power. Washing machines, dryers and desalination plants are also big power users. Bigger yachts use all imaginable electronics, driving up the consumption even further.

In the marina, the yacht will be plugged into three phase shore power. The boat"s engines can provide at least part of the power while sailing. Often they"ll need the assistance of (multiple) generator(s) or batteries to keep everything running. Solar panels can"t supply all the energy needed, but they can help save on fuel costs for the generators.

Large yachts are often equipped with two generators. The main generator covers all the power you"ll need to throw a big party. A smaller second generator (in hybrid combination with the batteries) could be used with less people on board, a super silent version could power the air conditioning at night when it"s hot out there, or the floor"s heating when it"s cold.

There is more to a Victron BatteryProtect. Built-in shutdown delays ensure vital electronics aren"t disconnected in error, i.e. when starting an engine causes a short drop in voltage. It will also automatically reconnect everything when the battery is sufficiently recharged.

The Cyrix BatteryCombiner is the only safe way to connect the house battery to the starter battery (to start your boat"s engines). With a BatteryCombiner you can charge the house battery from the alternator without running the risk of draining the starter battery (which always should be ready to go). When other sources of power are available (eg. shore/solar/generator power), the Cyrix BatteryCombiner will allow bi-directional charging from the house battery to the starter battery.

When the Voltages of the starter and house batteries are the same, use a Cyrix: its current rating should be equal or bigger than the current rating of the alternator. If the house battery is Lithium and the alternators Amperage is smaller than the house battery, or when the Voltages of the starter and house battery are different: use a DC-DC converter or Buck-Boost.

Battery management systems take excellent care of Lithium batteries, protecting the individual cells of LiFePO4 batteries against over voltage, under voltage and over temperature and will shut down or reduce charging (VE.Bus products only) or disconnect the loads when this occurs.

Victron Energy also offers full flexibility when it comes to selecting a third-party off-grid battery bank (and their BMS) of choice. A large number of well supported Lithium battery manufacturers can be easily integrated through the use of a mandatory GX-device. This flexibility enables our customers to perfectly

match their off-grid needs for their unique power situation. When working with unsupported brands, a Victron Energy Battery Monitor is required to pass on accurate state of charge readings to the wider system.

Keeping grips on all the systems on board can be a hassle. The solution: tie everything together in a single boat network using NMEA communication standards. Your boat network can include navigation equipment, tank senders, battery monitoring and much more. The status information can trigger alarms and shutdowns, adding to the safety on board. The Cerbo GX now supports the NMEA2000 out protocol, allowing you to monitor your boat"s network of systems from wherever you are.

The Victron Cerbo GX is the communication-centre of your boat"s installation, allowing you to always have perfect control from wherever you are and maximises its performance. Simply connect through our Victron Remote Management (VRM) portal, or access directly, using the optional GX Touch 50 screen, a Multi Functional Display or our VictronConnect app thanks to its added Bluetooth capability.

The Victron Cerbo GX is an easy to use visual system. Instantly monitor the battery state of charge, power consumption, power harvest from PV, generator, and mains, or check tank levels and temperature measurements. Easily control the shore power input current limit, (auto)start/stop generator(s) or even set quiet periods to avoid starting the generator in the middle of the night. Change any setting to optimise the system, follow up on alerts, perform diagnostic checks and resolve challenges remotely. The Cerbo GX turns any power challenge into an effortless experience.

A luxury yacht has a lot of DC equipment on board. Most of these devices are needed to safely operate the ship. The battery should be big enough to support them even when the ship"s engines and generators aren"t running.

Contact us for free full report

Web: https://sumthingtasty.co.za/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346