

The 12-Point Boat Tech Buyer's Checklist

A pre-purchase checklist to avoid the most common, most expensive mistakes people make when buying connected boat technology — from cellular monitors to Starlink to Home Assistant setups. Work through these twelve questions before spending a dollar and you'll save hundreds.

Why this checklist exists. Every week, someone on a boating forum posts some version of the same story: they bought a piece of smart-boat gear, it doesn't quite work the way they expected, and now they're stuck with a \$300 paperweight and a subscription they can't cancel without losing historical data.

Most of those mistakes were avoidable — not because the buyer was careless, but because **nobody asked them the right questions before they clicked 'Buy Now.'** This checklist is the twelve questions we wish every boater asked themselves before a connected-boat purchase.

Work through it in order. If you can't answer a question confidently, that's the research you need to do before buying — not after.

01

What specific problem am I solving?

"Better boat monitoring" is not a specific problem. "I want to know within 10 minutes if my bilge pump runs more than twice in an hour" is a specific problem. The narrower you define the problem, the less you'll overbuy.

› Is the problem safety (bilge, fire, intrusion), convenience (lights, AC), or visibility (location, battery, tanks)?

Each category needs different hardware. Safety = always-on cellular. Convenience = Wi-Fi + app. Visibility = NMEA-integrated sensors.

› How would I know if I'd solved the problem?

If you can't describe what success looks like, you're not ready to buy.

02

What's my total 3-year cost, not just the sticker price?

Hardware price is a trap. The number that matters is hardware plus three years of service. A \$300 Siren 3 with \$225/year service is \$975 over three years. A \$130 Armlt BilgeMax with \$70/year service is \$340. Same category, 3x the cost difference once you count the subscription.

› What's the monthly or annual service cost after the first year?

Year-one promotional pricing is often 30-50% off the standard rate. Budget the standard rate.

› What happens to stored data if I cancel?

Some platforms (Siren, Yacht Sentinel) retain historical data. Others wipe it. Know before you buy.

03

Does this product require a cellular subscription I don't need?

Cellular-first products assume your boat is away from Wi-Fi. That's true for liveaboards and offshore cruisers, less true for dock-kept boats near residential marinas. A cellular product on a Wi-Fi dock is paying for a capability you're not using.

› **Is the boat on a dock with Wi-Fi, or away from infrastructure?**

Dock-kept boats with marina Wi-Fi may be better served by Wi-Fi-only products (Shelly, many Home Assistant-compatible devices) without monthly fees.

› **Does cellular coverage exist where I actually keep the boat?**

Verizon and T-Mobile maps are marketing; check real-world coverage on maps like CellMapper.net before committing.

04

What's the installation complexity — honestly?

Vendors always say "plug and play." Some are. Many aren't. A product that requires NMEA 2000 tap, 12V wiring, and a Raspberry Pi isn't plug-and-play — even if the box says so.

› **Am I wiring this myself or hiring an installer?**

Installer fees can double the cost of many products. Budget \$500-\$1,500 for pro installation of complex systems.

› **Do I have the existing infrastructure (NMEA 2000, 12V, Wi-Fi) this needs?**

NMEA 2000 backbone adds \$300-\$500 if you don't have one. 12V accessory circuits may need a new fuse block.

05

What happens when the vendor disappears?

Marine tech has a graveyard of dead companies. Boatrax, Gost, Nautic Alert — all sold products that became bricks when companies went dark. Products with open-source compatibility (NMEA 2000, Signal K, Home Assistant) survive vendor failure. Proprietary cloud-only products don't.

› If the company vanished tomorrow, would the hardware still work?

Local-control products (Shelly, Home Assistant, NMEA-integrated) keep working. Cloud-dependent products brick.

› Is my data exportable?

Ask before you buy. Most vendors will tell you. Silence is a red flag.

06

Does this integrate with my existing electronics?

If you already have NMEA 2000 for engine data, chartplotter for navigation, or Home Assistant for home automation, products that plug into those systems compound in value. Products that require separate apps fragment your attention across five dashboards.

› Does it speak NMEA 2000, Signal K, MQTT, or a standard API?

These are all signs of an open product. "Works with our app" without mentioning standards is a closed-ecosystem signal.

› Can I see this data in the same place I look at everything else?

A new app per sensor is a hidden cost. Integration matters.

07

What's the power budget on my boat?

Always-on devices consume power 24/7. A device pulling 5W continuously is 120 Wh per day — roughly 10 Ah at 12V. For a boat kept on a mooring with solar, this matters. For a dock-kept boat with shore power, it doesn't.

› How much idle and active power does this product actually draw?

Vendor specs often only list active draw. Real continuous monitoring adds up — add it to your daily consumption math.

› Is my battery and charging system sized for it?

Adding 10 Ah/day to a marginal system forces recharging that wasn't needed before.

08

Have I read the last 30 Amazon reviews — including the 1-stars?

Five-star reviews tell you what vendors want you to see. One-star reviews tell you what actually breaks. The most useful review data isn't the average — it's the pattern in the complaints.

› Are the 1-star complaints about one specific failure mode?

If 8 of 10 one-star reviews mention the same thing (battery dies, app crashes, cellular connection drops), that's the real issue.

› Are the positive reviews recent or from years ago?

A product that was great in 2022 and terrible in 2026 often indicates firmware decay or the company going downhill.

What's the warranty actually cover — and for how long?

A 1-year warranty on a \$500 marine product that typically fails at 18 months is functionally a rental. Warranty terms vary enormously. Some vendors ship replacements proactively. Others require you to prove the failure was covered.

› **What's the warranty length and does it cover water damage?**

Water damage exclusions are common. A marine product that doesn't warrant against water ingress is a product whose vendor doesn't trust it.

› **Is RMA straightforward or adversarial?**

Look at user complaints about warranty service specifically. The process is often worse than the length.

What am I actually going to do with alerts?

People buy monitoring systems, get overwhelmed by notifications in week one, and silence them by week three. A system that cries wolf is a system you'll ignore when it matters. The buying question is whether you'll respond to alerts.

› **What's my plan for responding when an alert fires at 3 AM?**

If you don't have a plan (nearby friend, marina staff number, insurance protocol), the alert is just anxiety.

› **Can I tune alerts to skip non-emergencies?**

Products that only send "all or nothing" notifications get silenced fast. Look for per-event severity controls.

11

Is this better than what I already have?

Many boat monitoring purchases replace a working \$20 float switch and a bilge alarm horn with a \$300 cellular product that does roughly the same thing plus push notifications. The upgrade is real — but it's worth asking whether the \$280 delta is justified for your situation.

› What's wrong with what I have now?

Dissatisfaction with a specific failure mode is a better buying signal than general curiosity about a new product category.

› Am I replacing something, or adding another layer?

Layered redundancy is legitimate. But be honest about whether you're buying a new tool or a new hobby.

12

Can I try before I fully commit?

The best-designed marine tech purchase lets you test it in a low-stakes window before scaling up. Some vendors offer 30-day money-back trials. Others don't. Cellular plans can be paused cheaply; installations usually can't be undone.

› Is there a return window or a trial period?

A 30-day trial eliminates most buying risk. No trial is a vote of no-confidence from the vendor.

› Can I buy the minimum configuration first, then expand?

Multi-sensor systems are best tested with a single sensor. If one sensor plus the hub works well in practice, add more. If it doesn't, you've lost \$100 instead of \$500.

What to do next.

You now have a framework. Use it on the next connected-boat product you're considering. If you get stuck on any question — especially the integration ones (question 6) or the total-cost math (question 2) — our buyer's guides work through the specifics for the major product categories.

The guides that pair best with this checklist:

- **Best cellular boat monitoring system** — decision framework across Siren, Armlt, Yacht Sentinel
- **Best bilge monitor for sailboats under 35ft** — the safety-first starter category
- **Best boat monitoring without a subscription** — for readers who prioritize avoiding recurring fees
- **Best Starlink for boats 2026** — Mini vs Standard vs Flat High Performance
- **Home Assistant for boats, end to end** — the self-hosted build guide

All guides live at smartboats.org/guides. Free, no signup, no pop-ups.

About SmartBoats.org

SmartBoats.org is an independent directory and buyer's guide site for connected-boat technology. We're funded by affiliate commissions when readers buy through our links — never by pay-for-placement. If a vendor won't let us review them honestly, they don't get listed. Simple as that.

Questions or feedback? hello@smartboats.org