Comparing tech products without the jargon: what to actually look for

Why tech specs can feel like a foreign language

When you start shopping for a new gadget, the product page often throws a wall of numbers and acronyms at you. GHz, IPS, NVMe, Wi-Fi 6, USB-C Gen 2, the list goes on. For someone who just wants a device that works well, this kind of information can be more confusing than helpful. The problem is that manufacturers use technical language because they need to distinguish their products from hundreds of similar ones. But for the average person, the real question is simpler: will this thing do what I need it to do without being a pain to use?

This guide will help you cut through the noise. Instead of memorising specs, you can learn to focus on what each specification actually means for your daily experience. Once you understand the basic ideas behind the numbers, comparing devices becomes a matter of matching features to your own habits rather than trying to become an engineer overnight.

What a spec sheet actually tells you

A spec sheet is a summary of a product's hardware and software capabilities. Every number or term on it describes something that affects how the device performs, how long it lasts, or what you can connect to it. The trick is knowing which numbers matter for the way you use the device and which ones are just marketing noise.

Take battery life, for example. A laptop might claim "up to 12 hours of battery life." That figure is usually measured under very specific conditions: low screen brightness, minimal background apps, and light tasks like typing. If you plan to watch videos, run several programs at once, or increase the brightness, the real-world battery life will be shorter. So when comparing two laptops, look at the battery capacity (measured in watt-hours or Wh) rather than the advertised hours. A higher Wh number generally means more energy stored, which translates to longer use under similar conditions. But even then, the efficiency of the processor and screen matters too. The point is to treat the headline number as a rough guide, not a guarantee.

Breaking down the big three: performance, display, and connectivity

Most consumer electronics can be understood through three main categories: how fast it runs, how good the screen looks, and what you can plug into it or connect wirelessly. Once you get a feel for these three areas, you can evaluate almost any device.

Performance: what the processor and memory do for you

The processor (often called the CPU) is the brain of the device. Its speed is measured in gigahertz (GHz), but a higher GHz doesn't always mean a faster experience. A newer processor with a lower clock speed can outperform an older one with a higher speed because it handles tasks more efficiently. For everyday tasks like browsing the web, checking email, and streaming video, almost any modern processor is enough. For more demanding work like video editing, 3D modelling, or gaming, you'll want something with more cores (think of cores as individual workers inside the chip) and a higher single-core speed.

Memory, or RAM, is what the device uses to keep multiple apps open at once. More RAM means you can switch between programs without slowdowns. For basic use, 8GB is comfortable. For heavy multitasking or creative work, 16GB or more is a safer bet. Storage (SSD or hard drive) affects how fast your files load and how much you can save. An SSD (solid-state drive) is much faster than an old-style hard drive, so the operating system boots quicker and apps open almost instantly. The size you need depends on how many files, photos, and programs you plan to keep. A good rule is to buy slightly more storage than you think you need, because you can't easily upgrade it in many modern laptops.

Display: resolution, panel type, and refresh rate

Screen resolution tells you how sharp the image looks. The most common resolutions are Full HD (1920x1080), Quad HD (2560x1440), and 4K (3840x2160). For a 13- or 14-inch laptop, Full HD is perfectly fine for most people. On a larger monitor or TV, 4K makes a bigger difference because you sit closer and the screen is bigger. Resolution alone doesn't determine picture quality, though. The panel type matters too. IPS (in-plane switching) panels offer better colours and wider viewing angles than older TN panels, which look washed out when you tilt the screen. OLED screens go a step further with deep blacks and vibrant colours, but they cost more and can be prone to burn-in over time.

Refresh rate, measured in hertz (Hz), tells you how many times the screen updates per second. A standard 60Hz display is smooth enough for typical office work and video. Higher refresh rates like 120Hz or 144Hz make motion look much smoother, which is noticeable when scrolling through web pages or playing fast-paced games. If you don't game or do graphic design, 60Hz is usually plenty. The trade-off is that higher refresh rates drain the battery faster, so a 120Hz screen on a laptop may mean shorter unplugged time.

Connectivity: ports and wireless standards

Ports are the physical sockets on the device. The most common ones today are USB-C and USB-A. USB-C is the newer, smaller connector that can transfer data, charge the device, and output video all through one cable. USB-A is the rectangular port you've seen on older devices.

Check what devices you already own. If you have a lot of USB-A accessories, you may want a laptop that still includes at least one USB-A port, or you'll need an adapter.

Wireless connectivity covers Wi-Fi and Bluetooth. Wi-Fi standards are numbered, Wi-Fi 5, Wi-Fi 6, Wi-Fi 6E, and soon Wi-Fi 7. Wi-Fi 6 is the current mainstream standard. It offers better performance in crowded homes with many devices and is backward compatible with older routers. Bluetooth is used for connecting mice, keyboards, headphones, and speakers. Version 5.0 or newer is common and works well for most accessories. If you plan to use a lot of wireless peripherals, you don't need to worry about the version as long as it's not ancient (Bluetooth 4.0 or older).

How to compare two devices side by side

When you have two products in mind, start by listing the three or four things that matter most to you. For a student, that might be battery life, weight, and a comfortable keyboard. For a photographer, it could be screen quality, storage speed, and the availability of an SD card slot. Then compare only those points between the two models. Ignore the rest of the specs, they are distractions.

For example, suppose you are comparing two laptops: one has a faster processor but a smaller battery, and the other has a slower processor but a bigger battery and a better screen. If you mostly use your laptop plugged in and need raw power for video editing, the first one is the better choice. If you are often on the move and value a sharp display for watching movies, the second one wins. There is no universal "best", only what fits your pattern of use.

Watch out for compatibility traps

Compatibility is one of the most overlooked aspects of buying a new device. A new gadget may not work with your existing accessories or software. For example, a 3D printer might require a specific slicer program that only runs on Windows, not on macOS. A wireless mouse may need a USB-A dongle, but your new laptop only has USB-C ports. A smart home device might only work with Amazon Alexa and not with Google Assistant. Before you buy, check the product's compatibility list. If the retailer doesn't include one, a quick look at the manufacturer's support page usually clarifies things.

Another common trap is assuming that all USB-C cables are the same. They are not. Some USB-C cables only support charging, others support data transfer, and others support video output. The same applies to power adapters, a cheap third-party charger may not deliver enough power to charge a laptop quickly, or it could even damage the battery over time. When in doubt, use the cable and charger that come in the box, or buy from a reputable brand that states the specifications clearly.

Building your own shortlist

A good way to narrow down the options is to set a budget and then filter by the features that matter most to you. If you are looking for a tablet for reading and light browsing, focus on screen size, weight, and battery life. If you are buying a pair of wireless earbuds, pay attention to battery life per charge, comfort, and how well they stay in your ears. Reviews from real users can be helpful, but keep in mind that everyone's ears, hands, and preferences are different. A product that works great for one person may not work for you.

One useful approach is to look at curated selections from sources that do the filtering for you. For instance, trendsvia.com offers hand-picked product picks across technology, home, kitchen, and gadgets. Instead of browsing thousands of items, you can start with a shortlist that has already been checked for quality and relevance. That saves time and reduces the chance of picking something that looks good on paper but disappoints in practice.

Making the final decision

Once you have a shortlist of two or three products, it helps to see them in person if possible. Go to a store that displays them and try the keyboard, pick up the device, and look at the screen from different angles. If you can't see them in person, look for detailed video reviews that show the device being used in real-world scenarios. Pay attention to the reviewer's comments about build quality, fan noise, heat, and how the device feels after an hour of use. Those are things you can't read in a spec sheet.

Remember that no product is perfect. Every device has compromises. A thin and light laptop may have limited ports and a smaller battery. A powerful gaming laptop may be heavy and loud. A budget tablet may have a dim screen and slower performance. The goal is to find the combination of trade-offs that you can live with happily. The best device is the one that fits your life, not the one with the highest numbers on paper.

If you still feel unsure, take a break and come back the next day. A fresh look often reveals which device you were leaning toward all along. Choosing technology should not feel like a test. It is a tool to make your daily tasks easier or more enjoyable. When you focus on what really matters to you, the decision becomes clear. And if you want a starting point that cuts through the clutter, a curated catalog like trendsvia.com can give you a reliable list of technology product picks to consider, saving you from hours of scrolling through endless options.