

# Buying a new Desktop Computer

## Desktop Computers

Many people have moved away from desktops in the past decade. However, they still may be useful for many consumers.

Desktops typically offer more performance for the money than laptops and are less expensive to repair. They may allow for a more ergonomically correct work environment, generally come with better speakers, and allow you to view your work on a larger screen.

## Full-Size Desktop

Though they require a little more room under or on top of your desk, full-sized desktops are the least expensive and the easiest to upgrade and repair.

## Choosing a Processor, an OS, and More

Speed matters. Processors [with multiple cores](#) can process more data simultaneously, with four cores now increasingly common.

Clock speed, measured in gigahertz (GHz), along with the number of cores and other factors, determines how quickly a processor can process information. Many processors can up the speed a bit for a brief time to yield maximum performance. Generally, within a processor family, the higher the clock speed, the faster the processor. Clock speeds typically start at around 1 GHz for a mobile processor. Speeds can exceed 5 GHz for a desktop processor.

## Power Consumption

If you're looking for a very basic or budget computer to browse the web, email, and work on Office documents, basically every processor on the market should be sufficient.

If you plan to watch high-resolution videos or play mainstream games, you should consider the Intel Core i5 and AMD's Ryzen line of processors.

## How Much Memory?

The more memory a computer has, the faster it is, up to a point. Memory is measured in gigabytes (GB). On both desktops and laptops 8GB has become common, with 16GB found on higher-end devices. Unless you regularly have multiple large apps open at the same time, 8GB should suffice .

## Operating System

Windows 10 brings a more uniform interface across a variety of devices: computers, tablets, Xbox consoles, and smartphones. In addition, "universal apps" developed for Windows 10 will look and work the same on a variety of devices. And far more games are available for Windows computers than for Macs.

Macs can be more expensive, but they're less prone to most viruses and spyware (in part because there's more Windows PCs out there than Macs, making them a bigger target for hackers), and Apple's support has been tops in our surveys. The company's phone support is free for only 90 days, but you can get [unlimited technical support through the Genius Bar at any Apple Store](#). The latest version of macOS (previously known as OS X) is called Catalina and was released in the fall of 2019. Macs last a long time .

### **Graphics Adapter and Graphics Memory**

Also known as the video card, graphics processing unit (GPU), or graphics card, this hardware is responsible for drawing what you see on your screen. Graphics processing comes in two basic flavors: It can either be integrated into the same chip that's running the rest of the computer or it can run on a discrete piece of equipment.

Most computers have integrated graphics. This has usually been the less expensive and lower-performing option—fine for most tasks but not for serious gaming. If you play mainstream and extreme games with all the visual effects turned on or if you edit video, especially HD and Ultra High Definition (4K), you need discrete graphics. Light video editing and gaming and all other typical computer tasks will do fine with integrated graphics.

Some new CPUs integrate discrete-class graphics, offering excellent graphics abilities without adding a separate chip.

### **All About Drives and the Battery**

**Solid-State Drives:** SSDs are a different type of storage technology, letting your computer access data without the moving parts required by a traditional hard drive. They are also [the single largest performance boost you can give a computer](#) over an identical computer with a hard drive.

SSDs don't have the spinning disk of a conventional hard drive, so they use less power, work more quietly, and should be more resistant to damage—and less likely to fail mechanically. And because there are no moving parts, access to data should be quicker.

Although they once cost several times as much as traditional hard drives and had smaller capacities, prices are coming down and capacities are inching upward. In general, Consumer Reports recommends solid-state drives over hard drives.

### **Hard Drives<sup>[1]</sup><sub>SEP</sub>**

Also known as a hard disk, this type of drive uses a spinning hard disk and uses more power than a solid-state drive. It is also slower overall.

Bigger is better. Hard-drive sizes are measured in gigabytes and terabytes, and commonly range from 250 GB to more than 1000 GB.

Speed is equally important and is measured in rpm (revolutions per minute). A slow hard drive will take longer to start up the OS and programs, and complete tasks (such as installing programs or scanning your hard drive for viruses).

For best performance, get a desktop with at least a 7,200-rpm hard drive or a laptop with a 5,400-rpm hard drive.

## Hybrid Drives

Lower-priced hybrid drives, which combine a hard drive with solid-state memory, represent a good compromise.

## Optical Drives

Blu-ray Disc (BD) drives are the newest standard. They're capable of playing Blu-ray movies and can store 25GB (single layer) or 50GB (dual layer) of data. DVD/RW is okay too.

. Most of today's software is distributed via download, so there's little need for an optical drive.

## Monitors (for Desktops)

Screen sizes (measured diagonally) generally range from 15 to 27 inches, but you can find larger ones. The most common sizes are 19 and 20 inches.

Most are **wide-screen**, which fit wide-screen movies better but give you less screen area per inch. Those who plan to edit photos or videos should note differences in color, viewing angle, contrast, and brightness. Monitors are often less expensive when bundled with a new computer.

## Recommended units

### Apple 27-inch iMac 5K Display (2019, MRQY2LL/A) computer

An all-in-one desktop computer with a 27-inch screen, tested with macOS Mojave 10.14, an Intel Core i5 3GHz processor, 8GB of memory, a 1TB Fusion Drive, an AMD Radeon Pro 570X video adapter with 4GB dedicated video memory, and built-in speakers. \$ 1799.00

### Dell Inspiron 3670-5575BLK computer

A full-size desktop computer screen, tested with Windows 10 Home, an Intel Core i5-9400 2.9GHz processor, 12GB of memory, a 128GB solid-state drive and a 1TB hard-disk drive, an integrated Intel UHD Graphics 630 video adapter, a DVD burner, and no speakers. \$ 800

### Dell 27 Monitor: E2720HS



Dell

- Manufacturer part ToMFO
- Dell part 210-AUNH

**In Stock and Ready to Ship**

A 27" monitor enhances your daily workflow. Featuring a height adjustable stand, Full HD resolution and integrated speakers in a space-saving design. VGA & HDMI input ports

Dell Price \$249.99

Order Code e2720hssap

Your existing printer should connect via USB port to your new computer

Your existing Ethernet cable should plug in and give access to Internet. If desired, you can add a wifi adapter and connect to your router from another location.