2015 Desktop Buying Guide

If you need power more than portability, a desktop computer will be your best option. Learn more about navigating our large selection, including traditional tower systems and all-in-one designs.

PURCHASING POWER
a better way to buy.

At a glance

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Getting started

Before you shop, consider the different types of desktops available and your primary need for getting one. Take a moment to consider all the work, entertainment and social networking activities you would use a computer for, and then find a desktop computer that will best fit your lifestyle. Do you need one that is suitable for everyday computing or to serve as a TV or multimedia center? Do you prefer to tackle your projects on a larger screen or enjoy gaming?

Once you have determined your needs and design preference, you'll need to choose your components – operating system, CPU (processor), memory, type of storage, capacity and graphics technology. Then select a monitor and other peripherals (such as an optical drive, keyboard, and mouse) to complete your system.

Choose your operating system

Before purchasing a desktop computer, you will first need to decide which operating system you want for your new computer. The operating system, or OS, is the underlying software that the entire machine runs on. This should not be confused with any applications that you use (like your web browser, photo editing tool or favorite game), which all run on top of the OS itself.

Windows 10

Windows

Windows® 10 is the latest operating system developed by Microsoft. The interface is an evolution of Windows® 8, which has a tablet-like look and feel. Desktop computers with a Windows 8 operating system may be upgraded to Windows 10 with a free downloadable upgrade. It offers faster start-up times, faster transitions between apps and more efficient use of power while maintaining all of the files and programs you used on previous versions of Windows.

Mac OS X

Installed exclusively on Apple® Mac desktop computers, OS X is an easy-to-use interface. The most recent version, Yosemite, is quite similar to the iOS platform for Apple's iPhones and iPads. It enables your Mac and iOS devices to seamlessly work together. iCloud will sync much of your data between your Apple devices, including apps like iMessage, allowing you to respond to chat messages on both your Apple devices and your MacBook.

Chrome OS

Developed by Google and featured exclusively in the Chromebox line of desktop computers, Chrome OS runs custom apps and cloud-based programs rather than traditional software. It provides a fast, simple, and more secure computing experience for people who spend most of their time on the web. Chrome OS automatically downloads and installs security and software updates. Built-in Google web apps such as Google Docs, Google Music, and Gmail are included. It's great for surfing the Web, checking email and social networks, and sharing photos with family and friends, rather than more demanding tasks such as video editing and intensive gaming.

Types of desktops

When determining which of the two main types of desktop systems is right for you, consider the following factors: the space you have available for the system, the ease of configuration and upgrades, whether or not you want touch-screen technology and the overall cost (including the cost of the monitor, if needed).

Tower

Tower desktops contain all components of the computer (hard drives, CPU, graphics card, etc.) in a single unit that is separate from the monitor. The bigger the tower, the more room there is for extra components and add-ons. Towers are usually sold separately from the monitors, keyboards and mice, which allows you to completely customize your system.

All-In-Ones

With a streamlined set-up, all-in-one computers include almost everything (monitor, drives, CPU, webcam, etc.) in one unit within the monitor. Screen sizes are often quite large, starting at 19 inches and up, but the all-in-ones are designed to take up less space overall, compared to towers with separate monitors.

Desktop Systems

A complete desktop computer system includes the monitor and tower for day-to-day tasks, internet access and gaming. Screen sizes range from 19 to 27 inches, so a dedicated desk is preferred for this system. Suitable for creating multimedia graphics, photo editing, video production, multi-track audio recording and home office.

Choose the right system for you

Before deciding on a style of desktop, you should evaluate your needs and how you plan on using the system. Consider the following:

Ease of configuration and upgrades

Tower desktops can be configured and upgraded in a vast number of ways. You can add more memory or swap out the hard drive for greater capacity if your needs change. With more room to work with, a tower desktop lets you add specialized components such as an advanced 3D video card for gaming. As new technologies emerge, it's easier to integrate them into a tower without having to buy a new machine. All-in-one computers offer limited access to components – usually only RAM and hard drive.

Space and set up

All-in-ones take up less space, so you don't need extra room on or under your desk for storage. All-in-ones typically come with a single cord set up to keep your desktop space clutter-free.

Touch Screen technology

Many new all-in-one systems feature touch screens to make navigating on your computer easier and more intuitive. With a simple tap, touch or swipe of your fingertip you can navigate your computer's features. Scroll through long documents and web pages, zoom in and out on images, and get things done quickly by using your fingers to interact with the screen.

Desktops for Everyday Computing

For everyday basic tasks such as checking email, surfing the Web, creating simple office documents or casual gaming, desktop computers don't need to be extremely powerful or expensive.

Recommended Type	Tower or All-In-One
Processor	Intel Core i3 offers a balance of power and affordability
Hard Drive	Minimum 500GB for storing music, pictures, video and documents
Ports	At least one USB 3.0 port, an HDMI or DVI for an HD monitor, and VGA for older displays

Desktops for Students

A computer is necessary for every student's educational and entertainment world. Mid- to high-performance systems can easily double as a TV/media center. Get the best model your budget will accommodate to help ensure that it lasts at least four years.

Recommended Type	All-In-One
Processor	3.0GHz or faster mid-range chips
Memory	Minimum of 6GB or 8GB of RAM
Hard Drive	Minimum of 500GB; 1TB or 2TB is better
Ports	At least one USB 3.0 port, a memory card slot, an Ethernet port, and an HDMI-in for connecting game consoles, cable boxes, DVRs and other components

Desktops for Gaming

The most important features for gamers are power and speed. Serious gamers will need discrete graphics plus speedy storage and internet connections to accommodate high-end games and multi-player action.

Recommended Type	Tower
Processor	Intel Core i5 or i7; AMD A8, A10 or FX Series; Quad Core for lightning-fast processing
Graphics Card	Discrete NVIDIA Graphics Card; At least 2GB of video RAM
RAM	Minimum of 6GB of RAM (on top of the VRAM)
Hard Drive	1TB or more with a minimum 7,200 RPM access speed
Sound	Stereo surround system, 5.1-channel or better
Port	Three or more USB 3.0 ports, a memory card slot, Ethernet, audio out, Bluetooth and at least one HDMI, DVI or DisplayPort for HD monitors

Desktops for TV or Media Center Use

If space is at a premium, or you simply want to streamline your technology, combining your computer and TV into one device makes sense and it's easier than ever.

Recommended Type	Tower or All-In-One
Processor	Quad Core for lightning-fast processing
Graphics Card	Discrete graphics from AMD or NVIDIA Card with at least 1GB of video RAM
RAM	Minimum 4GB of RAM; the more the better
Hard Drive	1TB or more
Sound	Stereo surround system, 5.1-channel or better
Optical Drive	Blu-ray is recommended
Port	Three USB 3.0 ports (minimum), a memory card slot, Ethernet, audio out, Bluetooth and at least one HDMI, DVI or DisplayPort for HD monitors

Storage, processor & memory

Your computer relies on several components for storage capacity and processing speed. It's important to know the different components and how each affects your computer's performance.

Internal Storage

Most of your files and data will be stored on your computer's hard drive. As you expand your collection of text documents, photos, videos and music files, it is quite easy to consume the available storage.

The rule of thumb for memory is to buy with future needs in mind. Try to get enough gigabytes (GB) of storage, or even terabytes (TB), to house all of your current files and extra capacity for several years. A 500GB hard drive will be sufficient for many users, but you can also purchase an external drive or upgrade your internal drive if needed.

Traditional Hard Disk Drives

These drives offer larger storage capacities. Most desktop systems come with a 7200 rpm drive to transfer data more quickly.

Solid State Drives

Also known as SSDs or flash storage, Solid State drives are becoming more common. SSDs are faster, lighter and cooler than traditional hard drives, but they are more expensive per GB so they typically provide less storage space.

Hybrid Drives

Mixing the standard hard drive with solid state memory to offer SSD-like performance and larger storage capacity, the hybrid drive automatically caches data in the solid state drive for you, offering faster speeds for the files you use most.

Processors

Your desktop computer's processor is like its brain. Working in combination with system memory, the processor's power determines the complexity of software you can run, how many programs you can have open at the same time and how fast they will run. Generally speaking, faster is always better. The more cores you have and the higher the speed (measured in gigahertz or GHz), the better your machine will perform. The more cores your processor has, the more computations it can do at once. Speed refers to how quickly the cores can work.

Memory

The random access memory (RAM) of your computer is important because it helps your processor tackle multiple tasks at once. It determines the level of performance you will experience when running multiple programs at the same time. Large programs, like video editors and games, usually demand more RAM. Easier tasks, such as checking email or watching a DVD, don't require as much RAM; however, extra power enhances the speed of every task.

Standard desktop computers come with 4GB of RAM pre-installed. When using your computer for creating graphics or gaming, you will want 8GB or more of RAM. If you think you may need more memory later, choose a desktop computer that allows you to install additional RAM.

Connectivity & Ports

Connectivity is key for all desktop computers. Bluetooth technology is used for pairing wireless devices. Internet connectivity is delivered with 802.11n WiFi, with the standard 802.11ac being used more in newer models.

USB and other ports work with a broad range of accessories such as an optical mouse, memory stick, smartphone and other peripherals. Here are the most common types of ports featured on computers:

- **USB 3.0:** Transfers data quickly when used with USB 3.0 devices
- **USB 2.0:** Connects external drives, gaming controllers, MP3 players, smartphones, and other devices
- **Thunderbolt:** Featured on Apple computers, it offers fast data transfers and supports monitor connections
- **HDMI:** Connects a projector or displays HD media on your flat-screen TV
- **Media Card Slot:** Transfer photos from your digital camera or camcorder to your computer