

ENERGY STAR All-In-One Device Buying Guide

Buying an all-in-one device (or multifunction printer) that meets ENERGY STAR requirements can result in significant energy and paper savings for businesses. This all-in-one device buying guide will help you determine the type and features that will meet your business needs and enable you to save on energy and paper costs. Key savings mechanisms include:

- **Sleep mode and automatic shut off.** Features that automatically place the machine in a reduced power state after a specified period of inactivity can result in significant energy savings.
- **Automatic double-sided/duplexing.** All-in-ones that can produce images on both sides of the paper without a user needing to manually manipulate the paper make it easier to produce double-sided copies, which cut down on paper use.
- **Various quality settings.** Many all-in-ones have more than one quality setting and using a lower quality or draft mode when printing draft or internal documents can save ink.
- **Digital filing and organizing.** All-in-ones that can digitally file and organize files directly from the machine can cut down on the amount of printing that must be done to maintain files.

These and other features that reduce energy and paper use will be discussed in the buying guide.

Consider the All-in-One Device Types

Laser all-in-one devices: Laser all-in-ones are faster, produce better text quality and better print quality overall, and can handle higher volumes than inkjet all-in-one devices. They typically have a higher up-front cost, but the cost of replacing toner and other consumables is less. Laser inkjet all-in-one printers are larger and heavier than inkjets.

Inkjet all-in-one devices: Inkjet all-in-ones are compact and easy to move and produce excellent high-quality images. However, inkjets are slower and produce a lower quality product when printing low resolution images through the copy, scan, or fax functions. They have a lower up-front cost than laser all-in-ones, but the cost of replacing ink is higher than the cost of laser consumables. Inkjets are best suited for low-volume use.

Consider Your Office Needs

The primary benefits of all-in-one devices are their smaller footprint and the potential to streamline office functions that are used together. Most all-in-ones can print, scan, copy, and fax; though it is becoming more common to not include fax capabilities. All-in-ones vary in how well they handle each of those tasks, so it is important when choosing an all-in-one to decide which components are most important to you and then shop accordingly. In some cases, if you need the best available product and features, you may be better off purchasing stand-alone units.

Printing

All-in-ones are capable printers on standard paper sizes (e.g., letter, legal, envelopes). Some all-in-ones have automatic double-sided printing/duplexing, some allow for manual flipping, and some cannot print on both sides. All-in-ones scan color documents in color, but to print in color, you must purchase a color all-in-one.

Copying

Most all-in-ones have a flatbed scanner that fit letter-size documents or smaller, but some models come with a second scanner head that works with an automatic document feeder (ADF) for larger paper sizes. Flatbed scanners are appropriate for low-volume copying needs, though models with an additional scanner head and ADF could handle higher-volumes.

Scanning

The key functions of an office scanner (scanning to fax, copy, or e-mail) are handled well by most all-in-ones, which have comparable, if not better, resolutions (measured in dots per inch (dpi)) than most scanners. Some all-in-ones have higher resolutions that allow for scanning of photos, maps, and other detailed images.

Fax

Laser all-in-ones with fax capabilities usually offer features such as programmable speed dial, fax transmission during off-hours (which can save time and phone costs), polling (a fax machine asks another fax machine to send it a fax), forwarding (sending incoming faxes to another fax machine automatically), and fax storage capacity (storing faxes until you choose to print them). Color faxing is a new feature, but it works only if the recipient has a compatible color machine.

Some all-in-ones no longer include fax and if you only need to use a fax machine a few times a year, you may be better off purchasing a model without fax and outsourcing those needs.

Evaluate All-in-One Device Features

Sleep mode: A reduced power state that the all-in-one automatically enters after a period of inactivity or at a user-set time of day (after business hours). ENERGY STAR required defaults for entering sleep mode range from 15 to 60 minutes of inactivity. An important consideration when purchasing an all-in-one is the amount of time it takes an all-in-one to achieve an active state from sleep mode.

Automatic shut-off: Similar to a sleep mode, an automatic shut-off option saves energy and decreases wear on an all-in-one. However, an automatic shut-off options powers the machine off completely rather than putting it in a reduced power state. This saves more energy, but the machine will take longer to achieve an active state if the automatic shut-off has been activated and an unexpected document need arises.

Double-sided/duplexing. Some all-in-ones have automatic double-sided/duplexing, some can print/scan/copy on both sides but require the user to turn the paper over in a specific way, and a few cannot print/scan/copy on both sides at all. All-in-ones with automatic double-sided printing/duplexing often cost considerably more than those that require the user to turn over the paper, but double-sided printing significantly cuts down on paper use. ENERGY STAR requirements include automatic duplexing as part of the base product in color all-in-ones with product speeds of 35 images per minute (ipm) or more and monochrome all-in-ones with speeds of 37 ipm or more.

Digital filing and organizing. Some all-in-ones have features that can digitally file and organize files directly from the machine. These features can cut down on physical storage space needs and the need to print paper just to maintain files.

Quality settings. Many all-in-ones have more than one quality setting and using a lower quality or draft mode when printing draft or internal documents can save ink. Additionally, color printers can be set to print in grayscale for draft documents, to save on ink.

Automatic document feeder (ADF): An ADF is a tray that feeds the paper through while scanning or copying. This feature is important for those who scan and copy frequently or handle multi-page documents. Some all-in-ones with ADF trays can also collate multi-page documents when copying or printing.

Connectivity: Some all-in-ones have Wi-Fi-enabled printers that allow you to print from any computer in a wireless network. Other connectivity features available in many all-in-ones are USB ports; memory-card readers; and internet connectivity.

Touchscreen: Many all-in-ones have touchscreens that allow the user to access files, troubleshoot and perform maintenance, or crop and edit photos and images before processing. However, not all machines with touchscreens have added features and in some cases the user-interface for the touchscreen may be too difficult for some users. It is important to test out the touchscreen to see if it helps or hurts the user experience before making a purchase.

References

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