Multifunctional Devices

Multifunctional devices (MFDs) combine operations such as copying, printing, scanning and faxing into one machine. Rather than buying separate equipment for each capability, choosing a multifunctional device that combines some or all of them:

- Saves money - instead of buying several different machines
- Saves energy - powering only one device rather than several - which also reduces global warming gases
- Takes up less space - rather than siting several machines
- Reduces waste - making practices such as scanning and emailing documents easier

CONTRACTS - The CA Department of General Services (DGS) has negotiated a collection of contracts identified as "IT Hardware, Printers and Copiers" that include eight contracts for Multifunctional Devices. See individual contracts on BidSync for ordering instructions.

<table>
<thead>
<tr>
<th>Multi-Function Devices On California State Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monochrome Low Volume</strong></td>
</tr>
<tr>
<td>Printer-Based, Contract #</td>
</tr>
<tr>
<td>Copier-Based, Contract #</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SPECIFICATIONS - All of the MFDs on these contracts meet California's legislative requirements as well as the following specifications:

- ENERGY STAR qualified - increased energy efficiency, reduced greenhouse gas emissions
- Energy saving (sleep mode) within 30 minutes of non-use
- Duplex - equipment delivered pre-set, reduces paper use as well as file storage space
- No restrictions on using recycled/remanufactured toner cartridges
- Compliant with California law and international rules limiting toxic materials, toxic flame retardants, and persistent organic pollutants (POPs)
- Certification of recycled content
- Warranties and established product recall procedures
- Manufacturers meet ISO 14001 environmental management system standards
- Indoor air emissions limits
- Recyclable packaging
- Vendor Take Back Program for spent toner and ink cartridges, although an agency can choose a different program if desired. All the machines can use remanufactured consumables.

BUYING TIPS - The CA MFD contracts include four equipment categories, each with a choice of printer-based or copier-based. Printers and copiers were originally designed on very different technology platforms, but the most useful features of one are now frequently included in the other. Decide which base to buy depending on whether most intended projects are more likely to require copying capabilities or printing capabilities.

CONSIDER:
Printer-based MFDs tend to be purchased to replace single-function printers. They also offer light copier capabilities, but heavier copier needs would probably be better met by a copier-based MFD.

Carefully assess realistic needs - Don't buy “too much machine.” Operations that are rarely needed may be better met with occasional access to another machine rather than built into day-to-day availability.

Estimate the number of likely pages to be produced on the machine each month - what manufacturers call the machine's “duty cycle.” Regard the manufacturer's published duty cycle as inflated outer limits. Check Buyers Lab’s [Optimum Monthly Volume](#) chart for their comparison of reasonable expected volumes.

Evaluate control panels. Are they appropriate for your office’s use and likely staff training level? Copier-based MFDs tend to have larger and more complex control panels because they usually are built to handle more complex operations than printer-based MFDs.

While all the MFDs are capable of including fax capacity, several do not have it automatically installed because of its added cost and complexity. The contract indicates how to add this capability if needed.

**Printer-Based MFDs**
- Provide finer print quality and may be the best choice if most projects are short, such as several pages, without complicated finishing requirements (such as binding).
- Use less energy than copier-based MFDs.
- Cost less initially, are likely to have a smaller footprint, and may not require scheduled maintenance.
- Use cartridge-types of printing inks or toners that can be changed by the machine’s user. Some printer-based devices use a cost-effective "dual component solution" for replacing toner cartridges. These allow replacing the drum and toner at different intervals, delivering longer drum life (and less expensive costs).
- Current contracts K, N and P offer this option.

**Copier-Based MFDs**
- Are likely to be the best choice if projects tend to be long or complicated.
- Often handle a greater range of paper sizes and are likely to be able to offer more complex finishing options for projects (e.g. booklets).
- Because these devices are built to handle more complicated projects, they may need oversight by more highly-trained staff than printer-based devices.
- Generally require a supplemental contract for ongoing maintenance.

**ADDITIONAL INFORMATION**
- Reduce energy use, multiple machine clutter, and redundancies while encouraging more efficient equipment use - Network MFDs so that many users can use the same equipment.
- These MFDs may qualify for U.S. Green Business Council LEED operations credits on the basis of their recycled content materials. Using recycled content paper and remanufactured toner cartridges should also qualify for credits.
- MFDs have more moving parts than single-function printers or copiers, so may need maintenance more often, which can potentially disable the other functions. State contracts require next-business-day (NBD) service.
- Staff training is essential for optimum use of MFDs and to minimize down-time. Because MFDs incorporate three or four different functions into one machine, train users to become familiar with how they are different from previous single-function machines they may have used.
- In particular, MFDs need to be used appropriately for each function or users will be dissatisfied. Use the right type of paper and the right function for each job. Misjudgments will waste toner, paper and other consumables, and may lead users to mistakenly assume that the machine does not perform adequately.

**REFERENCES AND RESOURCES**
- [Buyers Laboratory Buying Tips](#) for MultiFunction Products
- [Buyers Laboratory Tips for Choosing Between Printer-Based and Copier-Based](#) MultiFunction Products
How a Product Earns the ENERGY STAR Label
Toner Cartridge [new RPN information sheet for DGS]