Best in Class

Entry-Level B/W Network MFPs Under $300

Panasonic KX-MB2030

Panasonic's KX-MB2030 sets a new benchmark in this Head2Head Comparison Report for Entry-Level B/W Network MFPs Under $300. As the system with the lowest list price ($189) in this group, the KX-MB2030 allows users who were previously priced out of this segment to obtain fast laser printing up to 24 ppm, and a robust, fully equipped All-in-One with a standard automatic document feeder, walkup and PC fax, and color network scan/scan to e-mail server functions. A nice advantage is that, unlike some other systems in this segment, software is not intrusive, but performs elegantly and smoothly the first time, as we've found with other Panasonic systems we've evaluated and tested. We also found the large control panel easier to use than other systems in this group and appreciated the space-saving internal media drawer.

It's hard to find any fault with the system, and dollar-for-dollar (and in testing), it clearly bests its closest competitors, and users will be hard-pressed to find a better performer in this group. Consequently, Wirth Consulting awards the KX-MB2030 its *Best In Class* rating and highly recommends it for very small workgroups (up to three users), small offices, home offices, small businesses, and satellite offices.

Terry Wirth, President

Awarded: August 27, 2010

Entry-Level B/W Network MFPs Under $300

Make	Brother		
Model	MFC-7440N		
Price	$249.99		
Imaging	Laser		

Not Worth Consideration

BW/Color Print Speed (ppm)	23	Network Scan ☐	Walk-Up Fax ☑
Max Resolution (dpi)	2400x600	Color Scan ☑	Touch Screen ☐
Max Mo. Duty Cycle (pages)	10,000	Network Print ☑	USB 2.0 Port ☐
Max Media Length (inches)	14.0	Duplex Print ☐	110-lb. Index ☐
Max Media Width	8.50	Duplex DF ☐	Finishing ☐

The MFC-7440N is Brother's lowest-priced monochrome MFP and features standard wired 10/100Base-T Ethernet network interface, while the MFC-7840W features wireless network connectivity, but is priced higher at $299.99. No duplex printing is available, so those that require it will have to step up to the DCP-8080DN ($349.99). The MFC-7440N's non-duplexing automatic document feeder holds 35 originals. The MFC-7440N is one of the few devices in this class that features Internet fax capability and can send scans to e-mail servers.

Wirth Consulting Performance Ratings

Rating	Value		Rating	
Value	2.0		2.5	Installation
Features	3.5		2.5	Software
Image Quality	2.5		2.5	Build Quality
Printing	2.5		2.5	Ease of Use
Copying	2.5		2.5	Maintenance
Scanning	2.5		2.5	Media Handling

Total Score	30.5	Black Cost Per Page	$0.0736	Color Cost Per Page	

Total Cost of Ownership)	Black	Color	Mixed
100 pages/month	$691.31		
500 pages/month	$2,456.58		
1,000 pages/month	$4,663.17		
3,000 pages/month	$13,489.53		
5,000 pages/month	$22,315.89		

Strengths

•Compatible with BRAadmin, a server-based system for the management and monitoring of multiple systems on the network.
•500-page fax memory, Internet fax, and 258 fax-broadcasting locations.
•Color scan to file, e-mail servers, FTP sites, and computer workstations.
•ScanSoft PaperPort SE with OCR software for Microsoft Windows; Presto PageManager for Apple Macintosh. •ControlCenter 3 for receiving and managing scans, device configuration, etc.
•Secure print (enter pass code at control panel to release job for printing).
•19,200 x 19,200 dpi color scanning.

Limitations

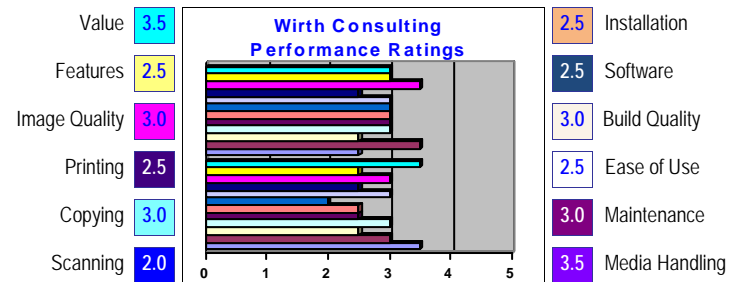•High cost per page of 7.36 cents.
•14.4 Kbps fax modem (not Super Group 3 33.6 Kbps).
•Ships with starter toner cartridge (1,000 pages). High-yield toner cartridge (2,600 pages) is priced at $168.49.

Notes

•Cost per page was calculated using High Yield TN360 toner cartridge.

Best Use

The MFC-7440N is loaded with many useful features that would enhance productivity in any small or home office that does not require duplex printing or scanning. However, its high Cost per Page of 7.36 cents makes its Total Cost of Ownership among the highest in this group at virtually every monthly print volume except at 50 pages per month. Moreover, at a print volume that low, we have evaluated several color ink-jet MFPs with comparable feature sets that have a lower color cost per page than the MFC-7440N's 7.3 black cost per page and would be a better choice.

Entry-Level B/W Network MFPs Under $300

Make	Canon		
Model	imageCLASS MF4370dn		
Price	$299.00		
Imaging	Laser		

Worth Consideration

BW/Color Print Speed (ppm)	23	Network Scan ☐	Walk-Up Fax ☑
Max Resolution (dpi)	1200x600	Color Scan ☑	Touch Screen ☐
Max Mo. Duty Cycle (pages)	7,500	Network Print ☑	USB 2.0 Port ☐
Max Media Length (inches)	14.0	Duplex Print ☑	110-lb. Index ☐
Max Media Width	8.50	Duplex DF ☐	Finishing ☐

The imageCLASS MF4370dn is Canon's least expensive monochrome MFP with networking. Most notably, it's the only device in this class that features automatic duplex printing, and it's a standard feature. The non-duplexing automatic document feeder holds 35-sheets.

Wirth Consulting Performance Ratings

Rating	Value		Rating	
Value	3.5		2.5	Installation
Features	2.5		2.5	Software
Image Quality	3.0		3.0	Build Quality
Printing	2.5		2.5	Ease of Use
Copying	3.0		3.0	Maintenance
Scanning	2.0		3.5	Media Handling

Total Score	33.5	Black Cost Per Page	$0.0375	Color Cost Per Page	

Total Cost of Ownership)	Black	Color	Mixed
100 pages/month	$524.00		
500 pages/month	$1,424.00		
1,000 pages/month	$2,549.00		
3,000 pages/month	$7,049.00		
5,000 pages/month	$11,549.00		

Strengths

•Pull color scans from PC workstation using Color Network ScanGear TWAIN/WIA driver.
•ScanSoft OmniPage (Windows) and Presto! PageManager (Mac OS X) with Document Management, OCR and PDF creation functions (not supported on Windows XP 64-bit version).
•Remote UI allows users to manage address books as well as device and configuration settings via a Web browser.
•All-in-one print cartridge makes maintenance easier.
•256 pages of fax memory; 50 group-dial destinations.
•MF Toolbox 4.9 Scan Function Toolbar.

Limitations

•Cannot send scans from the control panel to a network folder (scan to PC workstation only). No support for pull scanning to PC workstation over the network with Apple Mac OS X (only pull scan to PC workstation via USB direct connection).
•Optional Silex Wireless Server supports Silex Print and Scan functions only and is not compatible with Windows 7 or Mac OS X.
•Ships with starter toner cartridge (1,000 pages).
•Document management software does not support 64-bit Windows XP.

Notes

•Color Network ScanGear provides pull scanning to PC workstation over the network.
•Optional Silex Wireless Print server ($99.99).

Best Use

Canon's imageCLASS MF3470dn is the only device in this group that provides automatic duplex printing and has a moderate CPP and TCO. However, it's hampered by its lack of operating system support and the Color Network ScanGear TWAIN/WIA scan driver does not operate over the network with Mac OSX. There's also no push scanning to network folders or PC workstations (pull scanning only). Consequently, it's only worth consideration for very small workgroups (two to three users), home-offices and small-offices that require duplex printing, use the Windows operating system and do not require push network scanning.

Entry-Level B/W Network MFPs Under $300

Make	**Dell**
Model	**1135n**
Price	$199.00
Imaging	Laser
BW/Color Print Speed (ppm)	23
Max Resolution (dpi)	1200x1200
Max Mo. Duty Cycle (pages)	12,000
Max Media Length (inches)	14.0
Max Media Width	8.50

Network Scan	☑	Walk-Up Fax	☑
Color Scan	☑	Touch Screen	☐
Network Print	☑	USB 2.0 Port	☐
Duplex Print	☐	110-lb. Index	☐
Duplex DF	☐	Finishing	☐

Dell markets a small MFP family for small and home offices and the 23-ppm 1135n is Dell's least expensive monochrome MFP with networking. Sourced from Samsung, the 1135n does not feature duplex printing, so users who require it will have to step up to the 40-ppm 3335DN ($1,299.99). The non-duplexing automatic document feeder holds 40 originals.
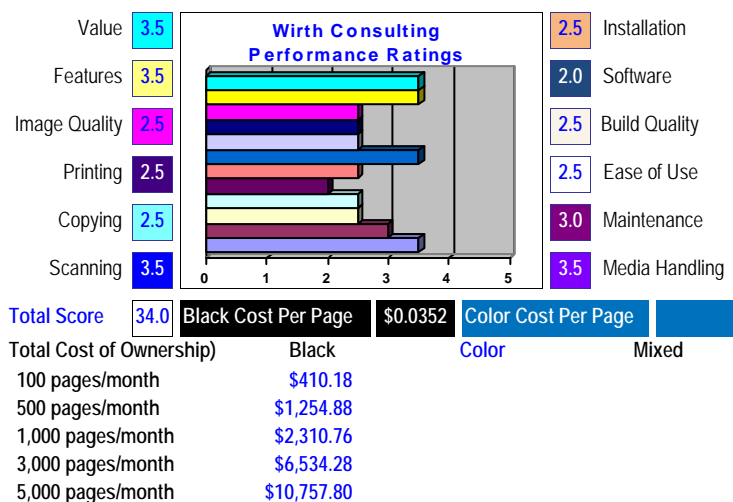
Wirth Consulting Performance Ratings

Rating	Category		Rating	Category
3.5	Value		2.5	Installation
3.5	Features		2.0	Software
2.5	Image Quality		2.5	Build Quality
2.5	Printing		2.5	Ease of Use
2.5	Copying		3.0	Maintenance
3.5	Scanning		3.5	Media Handling

Total Score 34.0 | **Black Cost Per Page** $0.0352 | **Color Cost Per Page**

Total Cost of Ownership)	Black	Color	Mixed
100 pages/month	$410.18		
500 pages/month	$1,254.88		
1,000 pages/month	$2,310.76		
3,000 pages/month	$6,534.28		
5,000 pages/month	$10,757.80		

Strengths
- Color scan to network folders and applications.
- SmarThru for managing, configuring, and monitoring the system on the network.
- Dell Toner Management System automatically notifies users when toner is low.
- Optional management tools include Dell Printer Configuration Web Tool (EWS) and Dell OpenManage Printer Management.

Limitations
- Ships with 1,500-page starter toner cartridge. High-yield toner cartridge (2,500 pages) is priced at $87.99.

Notes
- Cost per page was calculated using high-yield toner cartridge.

Best Use

Dell's 1135n is a sensibly-equipped and well-built device that is well worth consideration for very small workgroups (two to three users), small-businesses, and home-office users who don't require duplex printing or scanning. Relatively low Cost per Page and Total Cost of Ownership are advantages.

Entry-Level B/W Network MFPs Under $300

Make	**Hewlett-Packard**
Model	**LaserJet Pro M1212nf**
Price	$199.99
Imaging	Laser
BW/Color Print Speed (ppm)	19
Max Resolution (dpi)	1200x1200
Max Mo. Duty Cycle (pages)	8,000
Max Media Length (inches)	14.0
Max Media Width	8.50

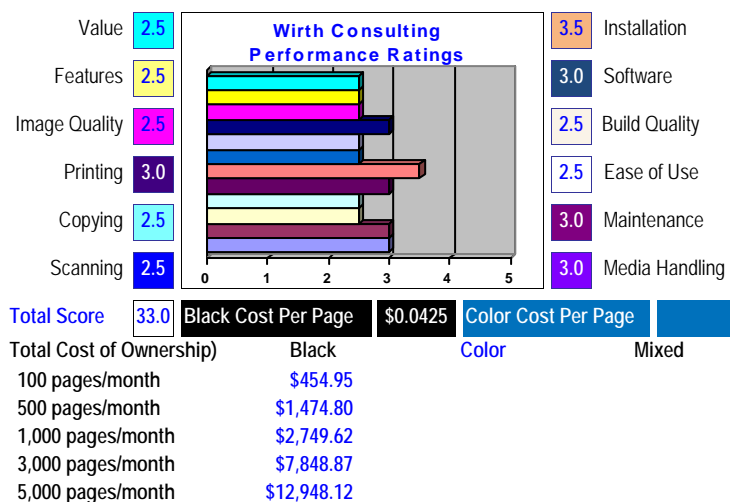|			
Network Scan	☐	Walk-Up Fax	☑
Color Scan	☑	Touch Screen	☐
Network Print	☑	USB 2.0 Port	☐
Duplex Print	☐	110-lb. Index	☐
Duplex DF	☐	Finishing	☐

Introduced in April 2010, the LaserJet Pro M1212nf MFP is HP's lowest-priced monochrome laser MFP with networking. One standout feature is Smart Install for Windows, which streamlines the entire installation process, whether it's via direct USB connection or wired Ethernet network connection, as it eliminates the task of loading software from CD. There is no duplex printing, so users who require it will have to step up to the LaserJet M2727nf MFP that also has a duplexing document feeder ($599.99). The M1212nf's non-duplexing document feeder holds 35 originals.

Wirth Consulting Performance Ratings

Rating	Category		Rating	Category
2.5	Value		3.5	Installation
2.5	Features		3.0	Software
2.5	Image Quality		2.5	Build Quality
3.0	Printing		2.5	Ease of Use
2.5	Copying		3.0	Maintenance
2.5	Scanning		3.0	Media Handling

Total Score 33.0 | **Black Cost Per Page** $0.0425 | **Color Cost Per Page**

Total Cost of Ownership)	Black	Color	Mixed
100 pages/month	$454.95		
500 pages/month	$1,474.80		
1,000 pages/month	$2,749.62		
3,000 pages/month	$7,848.87		
5,000 pages/month	$12,948.12		

Strengths
- TWAIN and WIA scan drivers; Readiris Pro 11 OCR software.
- Remote network monitoring and management.
- Very fast and easy installation with Smart Install for Windows-- install software and connect via USB cable (not included) or Ethernet network interface without downloading software from CD.
- Easy Printer Care for managing and monitoring the system on the network.
- 500 pages of fax memory.
- All-in-one print cartridge makes maintenance easier.
- Management and monitoring capabilities via HP Easy Printer Care (not fully supported by HP Web Jetadmin).

Limitations
- Cannot send scans from the control panel to a network folder (scan to PC workstation only).
- No fax broadcasting.

Notes
- Cost per page was calculated using high-yield toner cartridge.

Best Use

Super easy Smart Install network or local installation and competent performance makes the LaserJet Pro M1212nf worth consideration for very small workgroups (two to three users), small-businesses, satellite offices, and home-office users who don't require duplex printing and scanning, and prefer the HP brand. Otherwise, several other systems in this group have a lower Cost Per Page and Total Cost of Ownership and more advanced capabilities such as a USB convenience port, network scanning/scan to e-mail, and enclosed media drawers (not an open tray) with higher capacities.

Left Column — Lexmark X204n

Wirth Consulting - B2B ©Head2Head Comparison
Entry-Level B/W Network MFPs Under $300

Make	Lexmark
Model	X204n
Price	$299.99
Imaging	Laser
BW/Color Print Speed (ppm)	24
Max Resolution (dpi)	1200x1200
Max Mo. Duty Cycle (pages)	10,000
Max Media Length (inches)	14.0
Max Media Width	8.50

Well Worth Consideration!

Network Scan	☐	Walk-Up Fax	☑
Color Scan	☑	Touch Screen	☐
Network Print	☑	USB 2.0 Port	☐
Duplex Print	☐	110-lb. Index	☐
Duplex DF	☐	Finishing	☐

The X204n is Lexmark's lowest-priced monochrome laser MFP with network connectivity, and can also be equipped with optional 802.11g Wireless Print Server, or external MarkNet Gigabit Ethernet or MarkNet N7000e Fast Ethernet network interfaces. The X204n is notable for the very broad range of operating systems it supports--from Microsoft Windows and Apple Macintosh, to Linux and legacy environments. There's no duplex printing, so users who require it will have to step up to the X264DN ($399.99). The X204n's non-duplexing document feeder holds 30 originals.

Wirth Consulting Performance Ratings

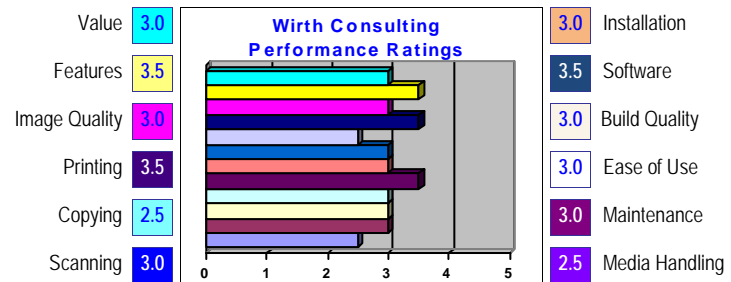|			
Value	3.0	Installation	3.0
Features	3.5	Software	3.5
Image Quality	3.0	Build Quality	3.0
Printing	3.5	Ease of Use	3.0
Copying	2.5	Maintenance	3.0
Scanning	3.0	Media Handling	3.0

Total Score	36.5	Black Cost Per Page	$0.0385	Color Cost Per Page	

Total Cost of Ownership)	Black	Color	Mixed
100 pages/month	$531.08		
500 pages/month	$1,455.46		
1,000 pages/month	$2,610.93		
3,000 pages/month	$7,232.80		
5,000 pages/month	$11,854.67		

Strengths

- PCL 5e, PCL 6, Universal, and PostScript 3 emulation print drivers.
- Lexmark Scan Center software for receiving, storing, and e-mailing scanned documents to a PC workstation.
- Broad operating support, including Microsoft Windows, Apple Macintosh, Linux, UNIX and Citrix MetaFrame.
- Optional 802.11g Wireless Print Server, External MarkNet Gigabit Ethernet ($389.99), External MarkNet N7000e Fast Ethernet ($273.99).
- Compatible with Lexmark's MarkVision Web-based device management and monitoring solution.
- Compatible with Lexmark Document Solutions (3.1, 3.2, and 3.3) that consists of: Document Distributor (one-touch routing to workstations of scans, prints, copies, faxes, e-mails and archiving); Document Producer (server-based forms solution); and Document Portal (server-based electronic forms repository).
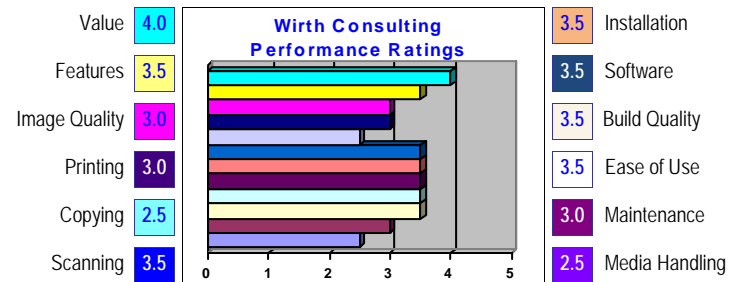
Limitations

- Non-duplexing automatic document feeder holds 30 originals, which is among the lowest in this group.
- Cannot send scans from the control panel to a network folder (scan to PC workstation only)
- Ships with a starter Return Program toner cartridge (1,500 pages). High-yield (2,500 pages) toner cartridge is $89.99.

Notes

- Cost per page was calculated using high-yield toner cartridge.

Best Use

The X204N's enterprise-level feature set and moderate cost per page make it well worth consideration for very small workgroups (two to three users), small businesses, enterprises, satellite offices, and home-office users that do not require network scanning and duplex printing and scanning.

Right Column — Panasonic KX-MB2030

Wirth Consulting - B2B ©Head2Head Comparison
Entry-Level B/W Network MFPs Under $300

Make	Panasonic
Model	KX-MB2030
Price	$189.00
Imaging	Laser
BW/Color Print Speed (ppm)	24
Max Resolution (dpi)	600x600
Max Mo. Duty Cycle (pages)	10,000
Max Media Length (inches)	14.0
Max Media Width	8.50

Wirth Consulting Best in Class Highest Overall Performance

Network Scan	☑	Walk-Up Fax	☑
Color Scan	☑	Touch Screen	☐
Network Print	☑	USB 2.0 Port	☐
Duplex Print	☐	110-lb. Index	☐
Duplex DF	☐	Finishing	☐

At $189.00, Panasonic's KX-MB2030 is currently the lowest-priced laser-based MFP on the market with standard network connectivity, and Panasonic's lowest-priced monochrome MFP. Also of note is that network scanning (in color) is also provided, so that, for instance, from the control panel, users can scan documents directly to network folders. The KX-MB2030 is also one of the few devices in this group that can send scans to an e-mail server. There's no duplex printing, so users who require it will have to step up to the KX-MB3020 ($499.99). The non-duplexing document feeder holds 20 originals.

Wirth Consulting Performance Ratings

Value	4.0	Installation	3.5
Features	3.5	Software	3.5
Image Quality	3.0	Build Quality	3.5
Printing	3.0	Ease of Use	3.5
Copying	2.5	Maintenance	3.0
Scanning	3.5	Media Handling	2.5

Total Score	39.0	Black Cost Per Page	$0.0408	Color Cost Per Page	

Total Cost of Ownership)	Black	Color	Mixed
100 pages/month	$433.80		
500 pages/month	$1,413.00		
1,000 pages/month	$2,637.00		
3,000 pages/month	$7,533.00		
5,000 pages/month	$12,429.00		

Strengths

- Color network scan to e-mail, server, FTP, SMB, and PC workstation. Readiris Pro 7 OCR software.
- Multi-Function Station software for PC fax, receiving and managing scans, fax setup, device configuration, etc.
- Preview incoming faxes at the computer workstation instead of printing them; faxes may then be printed, deleted, or saved as files.
- Device Monitor Utility may also be used to monitor third-party networked devices.
- Easy Print Utility for merging files created using different source applications (such as Microsoft Word and Excel, an image file, etc.); the file may be printed and/or saved as an Adobe PDF.

Limitations

- Ships with a starter toner cartridge (500 pages). High-yield toner cartridge (2,000 pages) is priced at $54.95.
- Limited to 30 fax broadcast groups and 110-page fax memory.
- The non-duplexing automatic document feeder holds only 20 originals, the lowest capacity in this group.

Notes

- Cost per page was calculated using high-yield toner cartridge.

Best Use

The KX-MB2030's solid performance and feature-set, and low acquisition cost, make it a great bargain and a Best In Class selection for very small workgroups (two to three users), small-businesses, satellite offices, and home-office users. While its slightly above-average Cost per Page makes it most suitable for relatively lower print volumes, its strong build quality, large, easy-to-use control panel, network scanning, scan to e-mail, enclosed and space-saving paper drawer (not a cassette or an open tray) and unobtrusive and easy-to-use software set it apart from others in this group.