

Head2Head Comparison

Make	Sharp Electronics
Model	AL-2040CS
Price	\$549.00
Imaging	Laser
Classification	B&W MFPs From \$500 To \$750
Resolution (dpi)	600x600 Network Scan <input type="checkbox"/>
BW/Color Print Speed (ppm)	20/NA Color Scan <input checked="" type="checkbox"/>
Monthly Duty Cycle (pages)	4,000 Network Print <input checked="" type="checkbox"/>
Max Media Length (inches)	14.0 Duplex Print <input checked="" type="checkbox"/>
Max Media Width	8.50 Duplex DF <input type="checkbox"/>
Walk-Up Fax <input type="checkbox"/> Touch Screen <input type="checkbox"/> USB 2.0 Port <input checked="" type="checkbox"/>	

At \$549, Sharp's AL2040CS Multifunctional Printer will likely attract home users and small offices and workgroups that tend to have limited budgets. Unlike most B&W systems in this class, there is no walk-up fax or network scanning (only direct B&W or color scanning to a single computer workstation). Sharp Electronics primarily markets office-imaging devices that are designed for higher volumes and are distributed through its dealer network.

Head2Head Comparison

Make	OKI Printing Solutions
Model	B4545 Monochrome MFP
Price	\$809.00
Imaging	LED-array
Classification	B&W MFPs From \$500 To \$750
Resolution (dpi)	600 Network Scan <input checked="" type="checkbox"/>
BW/Color Print Speed (ppm)	21/NA Color Scan <input checked="" type="checkbox"/>
Monthly Duty Cycle (pages)	12,500 Network Print <input checked="" type="checkbox"/>
Max Media Length (inches)	14.0 Duplex Print <input checked="" type="checkbox"/>
Max Media Width	8.50 Duplex DF <input checked="" type="checkbox"/>
Walk-Up Fax <input checked="" type="checkbox"/> Touch Screen <input type="checkbox"/> USB 2.0 Port <input checked="" type="checkbox"/>	

The B4545 is a solidly built, compact B&W MFP suitable for home users and small workgroups, and uses LED (light emitting diode) imaging technology, a simpler and more reliable alternative to laser-imaging technology. Like nearly all MFPs in this class, it doesn't provide a touch screen, but OKI has added a QWERTY-style keypad so that entering e-mail addresses for scan-to-e-mail will be much easier than using conventional navigation keys.

Head2Head Comparison

Make	Canon
Model	imageCLASS MF6560CX
Price	\$992.00
Imaging	Laser
Classification	B&W MFPs From \$500 To \$750
Resolution (dpi)	600x600 Network Scan <input type="checkbox"/>
BW/Color Print Speed (ppm)	23/NA Color Scan <input checked="" type="checkbox"/>
Monthly Duty Cycle (pages)	15,000 Network Print <input checked="" type="checkbox"/>
Max Media Length (inches)	14.0 Duplex Print <input checked="" type="checkbox"/>
Max Media Width	8.50 Duplex DF <input checked="" type="checkbox"/>
Walk-Up Fax <input checked="" type="checkbox"/> Touch Screen <input type="checkbox"/> USB 2.0 Port <input type="checkbox"/>	

This no-nonsense B&W MFP is built on Canon's successful imageCLASS platform, and integrates print/copy/scan/fax functions into a fairly compact package. B&W printing is at 23 ppm; note that a network interface (\$163.99) is optional. Canon—which is the world's largest producer of laser-print engines—typically markets its office-imaging equipment through dealers. However, it markets many of its imageCLASS MFPs such as the MF6560CX through retail channels.

Head2Head Comparison

Make	Panasonic
Model	KX-FLB851
Price	\$500.00
Imaging	Laser
Classification	B&W MFPs From \$500 To \$750
Resolution (dpi)	600x600 Network Scan <input type="checkbox"/>
BW/Color Print Speed (ppm)	18/NA Color Scan <input checked="" type="checkbox"/>
Monthly Duty Cycle (pages)	20,000 Network Print <input checked="" type="checkbox"/>
Max Media Length (inches)	14.0 Duplex Print <input checked="" type="checkbox"/>
Max Media Width	8.50 Duplex DF <input checked="" type="checkbox"/>
Walk-Up Fax <input checked="" type="checkbox"/> Touch Screen <input type="checkbox"/> USB 2.0 Port <input checked="" type="checkbox"/>	

This fax-based B&W MFP features both Super Group 3 walk-up fax and LAN fax. Its maximum paper capacity of 780 sheets is more substantial than that of most MFPs in this class. Note too that this MFP employs three consumables: toner cartridge, drum, and a fax-film cartridge. One nice convenience is a three-bin Multi-Action Sorter. When equipped with the optional KX-FA102 LAN board, this sorter can be used to separate print, copy and fax jobs; alternately, each tray can be used as a mailbox.

Head2Head Comparison

Make	Brother International
Model	MFC-8870DW
Price	\$599.00
Imaging	Laser
Classification	B&W MFPs From \$500 To \$750
Resolution (dpi)	600x600 Network Scan <input checked="" type="checkbox"/>
BW/Color Print Speed (ppm)	30/NA Color Scan <input checked="" type="checkbox"/>
Monthly Duty Cycle (pages)	20,000 Network Print <input checked="" type="checkbox"/>
Max Media Length (inches)	16.0 Duplex Print <input checked="" type="checkbox"/>
Max Media Width	8.50 Duplex DF <input checked="" type="checkbox"/>
Walk-Up Fax <input checked="" type="checkbox"/> Touch Screen <input type="checkbox"/> USB 2.0 Port <input type="checkbox"/>	

This compact B&W MFP weighs in at just 36.8 lb. but still packs a punch: rated print speed is up to 30 ppm and monthly duty cycle is up to 20,000 pages. This is Brother's flagship B&W MFP for home users and small- and mid-size businesses and workgroups. It features both Ethernet and wireless network interfaces, and is economically priced at \$599.00. Brother is a veteran SOHO MFP manufacturer and has considerable experience in the marketing development of MFPs and printers for home users and small- and mid-size office users.

Head2Head Comparison

Make	Xerox Corporation
Model	Phaser 3300 MFP
Price	\$599.00
Imaging	Laser
Classification	B&W MFPs From \$500 To \$750
Resolution (dpi)	600x600 Network Scan <input checked="" type="checkbox"/>
BW/Color Print Speed (ppm)	30/NA Color Scan <input checked="" type="checkbox"/>
Monthly Duty Cycle (pages)	25,000 Network Print <input checked="" type="checkbox"/>
Max Media Length (inches)	14.0 Duplex Print <input checked="" type="checkbox"/>
Max Media Width	8.50 Duplex DF <input checked="" type="checkbox"/>
Walk-Up Fax <input checked="" type="checkbox"/> Touch Screen <input type="checkbox"/> USB 2.0 Port <input checked="" type="checkbox"/>	

With a \$599 price point, the Phaser 3330 MFP is one of Xerox's more economical B&W office MFPs. It still packs a punch: rated B&W print speed of up to 30 ppm, 25,000-page duty cycle, standard network connectivity, and 300 MHz CPU. Nor does Xerox skimp on the "value-add," including its CentreWare Internet Services and CentreWare Web software for network-printer management, software for managing scanned files, color fax capability and USB flash drive.

Head2Head Comparison

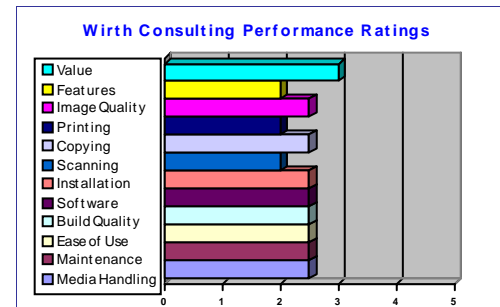
Make	Xerox Corporation
Model	WorkCentre 4118P
Price	\$799.00
Imaging	Laser
Classification	B&W MFPs From \$500 To \$750
Resolution (dpi)	1,200x1,200 Network Scan <input type="checkbox"/>
BW/Color Print Speed (ppm)	18/NA Color Scan <input type="checkbox"/>
Monthly Duty Cycle (pages)	20,000 Network Print <input checked="" type="checkbox"/>
Max Media Length (inches)	14.0 Duplex Print <input checked="" type="checkbox"/>
Max Media Width	8.50 Duplex DF <input checked="" type="checkbox"/>
Walk-Up Fax <input type="checkbox"/> Touch Screen <input type="checkbox"/> USB 2.0 Port <input checked="" type="checkbox"/>	

The WorkCentre 4118P is a straight-forward B&W network printer/digital copier; however, expect better image quality (up to 1,200x1,200 dpi resolution in copy mode (600x600 dpi in copy mode)). Most devices in this class provide 600x600 dpi resolution in both print and copy modes. Also of note is that it can be equipped with true Adobe PostScript Level 3 (not a PostScript emulation). Additionally, it has standard maximum paper capacity (650/1,200 sheets) are as much as those of most devices in this class.

Head2Head Comparison

Make	Xerox Corporation
Model	WorkCentre PE120i
Price	\$599.00
Imaging	Laser
Classification	B&W MFPs From \$500 To \$750
Resolution (dpi)	600x600 Network Scan <input type="checkbox"/>
BW/Color Print Speed (ppm)	22/NA Color Scan <input checked="" type="checkbox"/>
Monthly Duty Cycle (pages)	15,000 Network Print <input checked="" type="checkbox"/>
Max Media Length (inches)	14.0 Duplex Print <input checked="" type="checkbox"/>
Max Media Width	8.50 Duplex DF <input checked="" type="checkbox"/>
Walk-Up Fax <input checked="" type="checkbox"/> Touch Screen <input type="checkbox"/> USB 2.0 Port <input type="checkbox"/>	

Based on Xerox's capable Phaser platform, the WorkCentre PE120i, with its rated B&W print speed of up to 22 ppm, 15,000-page duty cycle, and standard network connectivity, is suitable for use among small workgroups and offices, as well as for home use. Features of note include color fax capability (send documents in color), and Xerox's Control Centre software that conveniently enables users at their computer workstation to configure fax settings, obtain page-count information and upgrade firmware. Expect good ease-of-use.



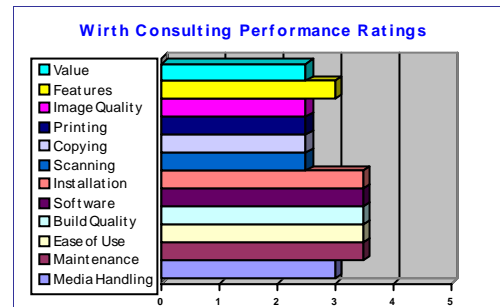
RATINGS SCOREBOARD Total Ratings Score 29.0

Supplies Cost Per Page

Black/Color	\$0.02319
Total Cost of Ownership (Black/Color/ Mixed)	
100 pages/month	\$688.15
500 pages/month	\$1,244.74
1,000 pages/month	\$1,940.48
3,000 pages/month	\$4,723.45
5,000 pages/month	\$7,506.42

Strengths	Limitations
<ul style="list-style-type: none"> •Sharpdesk 2.7 software for managing scanned files and for OCR. •TWAIN driver for pull scanning. •Relatively low B&W Cost Per Page and Total Cost of Ownership. <p>Note: Sharp rates this system at up to 20 ppm in copy mode and at up to 10 ppm in print mode.</p>	<ul style="list-style-type: none"> •Microsoft Windows GDI printing only (no PCL or PostScript print drivers). •Via USB flash drive, scan files to USB flash memory devices for storage, as well as print files stored on USB flash memory devices. •Users make selections via LCD panel and hard keys, but control panel also features a QWERTY-style keypad, which makes it much easier to enter e-mail addresses (numeric keypad also included). •Companion Suite Pro solution for configuring system functions (such as scan-to-e-mail and scan-to-FTP); indicates consumables status. •Capable PrintSoft PaperPort SE 9.0 software for document management.

Best Use
Small-businesses and workgroups, as well as home users, that have B&W network print and copy applications on letter- and legal-size media, with direct-to-PC scanning, and no fax applications.



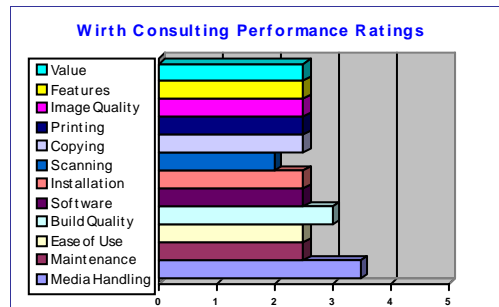
RATINGS SCOREBOARD Total Ratings Score 36.0

Supplies Cost Per Page

Black/Color	\$0.03412
Total Cost of Ownership (Black/Color/ Mixed)	
100 pages/month	\$1,013.70
500 pages/month	\$1,832.50
1,000 pages/month	\$2,856.00
3,000 pages/month	\$6,950.00
5,000 pages/month	\$11,044.00

Strengths	Limitations
<ul style="list-style-type: none"> •TWAIN driver for "pull" scanning (no network scanning). •ScanSoft OmniPage and PaperPort software for document management and OCR. •Accepts up to 90 lb. index stock. •Via USB flash drive, scan files to USB flash memory devices for storage, as well as print files stored on USB flash memory devices. •Users make selections via LCD panel and hard keys, but control panel also features a QWERTY-style keypad, which makes it much easier to enter e-mail addresses (numeric keypad also included). •Companion Suite Pro solution for configuring system functions (such as scan-to-e-mail and scan-to-FTP); indicates consumables status. •Capable PrintSoft PaperPort SE 9.0 software for document management. 	<ul style="list-style-type: none"> •Wirth Consulting has determined that this device does not have any notable limitations and should provide good functionality.

Best Use
Small-businesses and workgroups, as well as home users, that have B&W network print and copy applications on letter- and legal-size media, as well as B&W/color-scanning and walk-up fax applications.



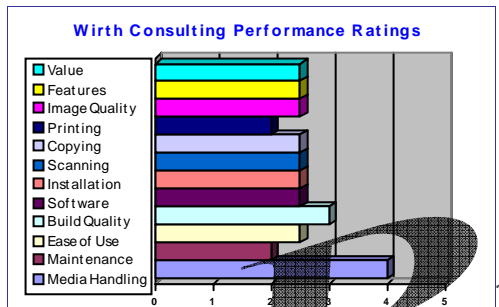
RATINGS SCOREBOARD Total Ratings Score 31.0

Supplies Cost Per Page

Black/Color	\$0.02940
Total Cost of Ownership (Black/Color/ Mixed)	
100 pages/month	\$1,168.49
500 pages/month	\$1,873.94
1,000 pages/month	\$2,755.88
3,000 pages/month	\$6,283.64
5,000 pages/month	\$9,811.40

Strengths	Limitations
<ul style="list-style-type: none"> •TWAIN and WIA drivers for pull scanning (no network scanning). •Super Group 3 walk-up fax with up to 1,000 pages of reception memory. •USB 2.0 high-speed interface. •Comparatively generous maximum paper capacity of 1,100 sheets. 	<ul style="list-style-type: none"> •No PostScript print driver.

Best Use
Home users, and small businesses and workgroups that have B&W network print and copy applications on letter- and legal-size media, as well as B&W/color-scanning and walk-up fax applications.



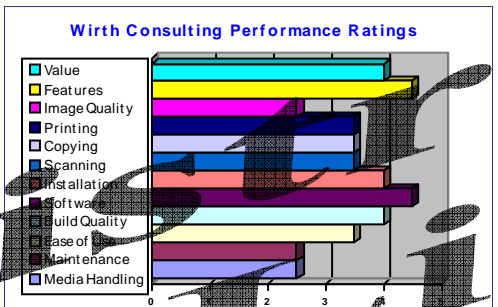
RATINGS SCOREBOARD Total Ratings Score 31.0

Supplies Cost Per Page

Black/Color	\$0.03469
Total Cost of Ownership (Black/Color/ Mixed)	
100 pages/month	\$708.13
500 pages/month	\$1,540.67
1,000 pages/month	\$2,581.34
3,000 pages/month	\$6,744.02
5,000 pages/month	\$10,906.70

Strengths	Limitations
<ul style="list-style-type: none"> •When equipped with the optional KX-FA102 LAN board, the Three-bin Multi-Action sorter can be used to separate priority and fax jobs; alternately, each tray can be assigned to a different user or group, minimizing users that must sort through other users' jobs in order to find their own. •Readiris Pro 5.5 software for OCR. •Panasonic Multi-Function Software for "pull" scanning and device configuration. •Caller ID for fax. 	<ul style="list-style-type: none"> •Fax-film cartridge is a required consumable; the cartridge (\$104.99) is rated to yield 150 pages. •Microsoft Windows GDI host-based printing—no PCL or PostScript print drivers.

Best Use
Small-businesses and workgroups, as well as home users, that have B&W network print, copy and fax applications; multiple users will benefit from the system's mailbox.



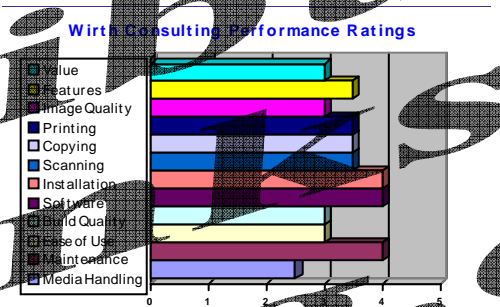
RATINGS SCOREBOARD Total Ratings Score 42.5

Supplies Cost Per Page

Black/Color	\$0.01659
Total Cost of Ownership (Black/Color/ Mixed)	
100 pages/month	\$698.55
500 pages/month	\$1,098.77
1,000 pages/month	\$1,598.55
3,000 pages/month	\$3,585.64
5,000 pages/month	\$5,576.74

Strengths	Limitations
<ul style="list-style-type: none"> •Very low B&W Cost Per Page (CPP) of 1.2 cents and low Total Cost of Ownership. •Standard 802.11 b/g wireless interface. •Standard 32 MB of memory can be expanded to 544 MB. •ScanSoft PaperPort SE software with OCR for Microsoft, Windows and Presto! PageManager for Apple Mac for document management. •Administrators can lock out selected users from using designated functions. 	<ul style="list-style-type: none"> •Wirth Consulting has determined that this device does not have any notable limitations and should provide good functionality.

Best Use
Small- and mid-size businesses and workgroups, as well as home users, that have B&W network print and copy applications on letter- and legal-size media, as well as B&W/color-scanning and walk-up fax applications.



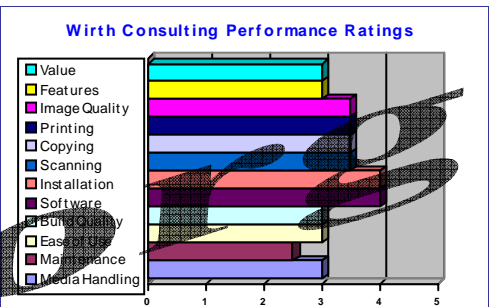
RATINGS SCOREBOARD Total Ratings Score 40.5

Supplies Cost Per Page

Black/Color	\$0.02112
Total Cost of Ownership (Black/Color/ Mixed)	
100 pages/month	\$725.74
500 pages/month	\$1,232.71
1,000 pages/month	\$1,866.43
3,000 pages/month	\$4,401.28
5,000 pages/month	\$6,936.13

Strengths	Limitations
<ul style="list-style-type: none"> •USB flash drive for scanning files to USB flash memory devices for storage, as well as printing files stored on USB flash memory devices. •Compatible with Microsoft Windows, Apple Mac and Linux environments. •Scan files to e-mail address (with LDAP), computer desktops, software applications, and standard OCR application. •Color fax capability. •Forwarding of received faxes to recipients' e-mail addresses, which saves paper, as incoming faxes aren't printed. •Standard 96 MB of memory can be expanded to 320 MB. •Robust 300 MHz CPU. •Scan to PC Desktop software for document management and OCR. •Very capable CentreWare Internet Services and CentreWare for network-printer management; also provides CentreWare for HP OpenView and Rendezvous. 	<ul style="list-style-type: none"> •Wirth Consulting has determined that this device does not have any notable limitations and should provide good functionality.

Best Use
Small- and mid-size businesses and workgroups, as well as home users, that have B&W network print and copy applications on letter- and legal-size media, as well as B&W/color-scanning and walk-up fax applications.



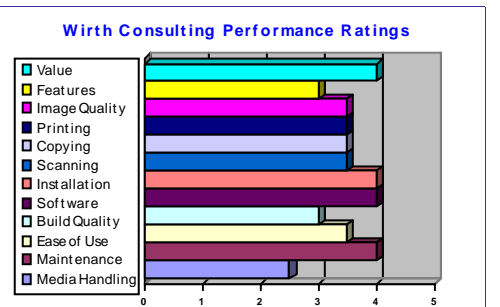
RATINGS SCOREBOARD Total Ratings Score 39.5

Supplies Cost Per Page

Black/Color	\$0.01732
Total Cost of Ownership (Black/Color/ Mixed)	
100 pages/month	\$902.94
500 pages/month	\$1,318.70
1,000 pages/month	\$1,838.40
3,000 pages/month	\$3,917.19
5,000 pages/month	\$5,995.98

Strengths	Limitations
<ul style="list-style-type: none"> •Very low B&W Cost Per Page (CPP) of 1.3 cents and low Total Cost of Ownership. •Comparatively generous maximum paper capacity of 1,200 sheets for less time spent replenishing paper. •Optional true Adobe PostScript Level 3 print driver. •240 MHz CPU. •Compatible with Microsoft Windows, Apple Mac and Linux environments. •Very capable CentreWare Internet Services and CentreWare Web for network-printer management; also includes CentreWare Web, NPDS, HP Openview and ControlCentre 5.0. <p>Note: The Xerox WorkCentre 4118P (\$1,119 plus \$199 for network interface kit) adds scanning, Super Group 3 walk-up fax and automatic document feeder (\$199 network interface kit is optional).</p>	<ul style="list-style-type: none"> •Wirth Consulting has determined that this device does not have any notable limitations and should provide good functionality.

Best Use
Small-businesses and workgroups, as well as home users, that have B&W network print and copy applications on letter- and legal-size media, and require somewhat better image quality in print mode than usually found in this class.



RATINGS SCOREBOARD Total Ratings Score 42.0

Supplies Cost Per Page

Black/Color	\$0.02543
Total Cost of Ownership (Black/Color/ Mixed)	
100 pages/month	\$751.55
500 pages/month	\$1,361.77
1,000 pages/month	\$2,124.54
3,000 pages/month	\$5,175.63
5,000 pages/month	\$8,226.71

Strengths	Limitations
<ul style="list-style-type: none"> •Color fax. •"Pull" scanning with TWAIN driver (no network scanning). •ControlCentre software for remotely configuring fax settings, configuring the device, obtaining meter information and upgrading firmware. •Embedded Web server (printer home page) for monitoring the system from a remote computer desktop. •Standard 32 MB can be expanded to 160 MB. •Very capable CentreWare Internet Services and CentreWare Web for network-printer management. •ScanSoft OmniPage SE 2.0 software and PaperPort SE 9.0 software for OCR and document management. 	<ul style="list-style-type: none"> •Wirth Consulting has determined that this device does not have any notable limitations and should provide good functionality.

Best Use
Small-businesses and workgroups, as well as home users, that have B&W network print and copy applications on letter- and legal-size media, as well as B&W/color-scanning and walk-up fax applications. CentreWare Internet Services makes it suitable for use in managed or enterprise environments.