THE DOCUMENT COMPANY
XEROX®

Phaser 8400
Evaluator
Guide

ABOUT THIS GUIDE

This guide will introduce you to the Xerox Phaser 8400 color printer, and aid you in your printer evaluation process.

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This guide was printed entirely on a Xerox Phaser 8400 color printer.

Introducing the Xerox Phaser 8400 Color Printer

PRODUCT OVERVIEW

The Phaser 8400 color printer is designed to bring color capabilities to the office. Used in reports, intraoffice documents, and especially in sales tools and marketing communications, color draws attention, makes information come alive and impresses clients and customers. Simply put, color helps businesses compete more effectively. The Phaser 8400 color printer makes this capability affordable.

Value and Affordability

With an attractive base price of just $999*, the Phaser 8400 color printer puts affordable color and monochrome printing capabilities within reach of small offices or workgroups. Whether you're increasing the impact of spreadsheets and memos, producing customized brochures or making persuasive flyers or sales kit materials, the Phaser 8400 printer delivers impressive, professional-looking output; without outsourcing to expensive copy shops or commercial printing presses.

The Phaser 8400 printer leverages the award-winning Xerox solid ink color performance with the low cost-per-page that has always been the hallmark of solid ink technology.

Professional Image Quality

The Phaser 8400 printer consistently produces vivid, colorful prints on virtually any media. New 2400 FinePoint™ image enhancement technology excels at delivering photo quality images.

Performance

The solid ink technology of the Phaser 8400 printer delivers the perfect combination of speed and image quality, making it the overall performance winner in its class. An easy to use ink system, simple driver installation, and the most comprehensive list of productivity features make the Phaser 8400 printer extremely simple to use.

* Base Estimated Retail Price (ERP)

Configurations

PHASER 8400B

The Phaser 8400B color printer comes packed with standard performance and productivity features:

• Print speed:
24 ppm in **Fast Color Mode**
18 ppm in **Standard Mode**
12 ppm in **Enhanced Mode**
7 ppm in **High Resolution/Photo Mode**

• Phaser 8400 Solid Ink - Xerox Printers and Supplies are **Made for Each Other**®

• New 2400 FinePoint™ image enhancement technology

• True Adobe® PostScript® 3™ and PCL® 5c support, with auto-sense and auto-switching

• 500 MHz PowerPC processor

• 128 MB memory (expandable to 512 MB)

• USB 2.0 and bi-directional parallel connectivity

• Six-line, graphical LCD front panel with built-in context-sensitive help

• 100-sheet multipurpose Tray 1 for paper, transparencies, and other media; 525-sheet Tray 2

• Print drivers for Windows 98, Windows NT, Windows 2000/XP, UNIX, Linux, Macintosh, and model files for SUN, SGI, HP, IBM, and DEC workstations

• 137 resident PostScript fonts and 81 PCL fonts

• Broad media range from everyday office paper to cardstock, labels, envelopes and even business cards

• Improved Usage Profiling

• Current job page counting

• TekColor™ Automatic Color Corrections

• Intelligent Ready

• 1 year depot warranty (upgrade to on-site available) and Xerox Total Satisfaction Guarantee

PHASER 8400N

The Phaser 8400N color printer adds networking capabilities to serve larger workgroups. It has all the standard features of the Phaser 8400B printer, **plus:**

• 10BaseT/100BaseTX Ethernet connectivity

• Walk-Up™ Driver Installation

• Automatic IP address installation

• CentreWare® IS Embedded Web Server for Web-based printer management

• Job Accounting

• Usage Analysis Tools

• PrintingScout

• Email alerts

• Remote Printing via email

• PhaserSMART™ Web-based technical support

PHASER 8400DP

The Phaser 8400DP color printer is built to support higher levels of productivity. It has all the features of the Phaser 8400N printer, **plus:**

• An additional 128MB of RAM for a total of 256MB; expandable to 512MB

• Automatic two-sided printing capability (duplexing)

• Job Pipelining with compression

PHASER 8400DX

The Phaser 8400DX color printer is the advanced model of the 8400 line. It has all the features of the Phaser 8400DP printer, **plus:**

• Additional 525-sheet High-Capacity Paper Tray (up to two may be added for a 1675 sheet total)

• Internal hard drive (20GB minimum), preloaded with productivity enhancements including: drivers, manuals, help videos and font storage (the hard drive is sharable with other Phaser 8400 printers on the network)

• Secure Print

• Proof Print

• Saved Print

• Hard Disk collation

• CWIS Context Sensitive Help

Evaluating Workgroup Color Printers

While the benefits of color are easy to see, evaluating the printers that create the color output can be more challenging. Based on years of research and experience with the real-world needs of color printer users, Xerox has identified some key issues for you to consider as you undertake your own color printer evaluations.

Workgroup color printers are typically shared by up to 25 people on a regular basis, but even larger groups may use a color printer at least occasionally. It is surprisingly common for these groups to use multiple computer platforms, such as the various versions of Microsoft Windows, MacOS or UNIX. By far the most popular network used is Ethernet with TCP/IP protocols.

Communicating concepts and ideas outside one's own company or department has become the top use of color printing. Increasing use has also been seen in everyday printing such as project management, letters, spreadsheets, memos and training materials. Other color printing applications include marketing and sales materials, reports, proposals, user guides and graphic art proofs. As workgroup color printers become more cost-effective, expect to see more color used on traditionally black-and-white documents to improve understanding and retention. Regardless of the applications, three things are foremost in the minds of color printer users:

Color Performance
They **expect** clear, sharp images on plain paper. They expect a color range that matches their imagination. They expect accurate color matching between their applications and their printed documents. And they don't want to wait for their prints. Once they click 'print', they consider their work done and they don't want to wait around for the printer to do its work.

Value
They **expect** color to add value to their work without adding excessively to the cost, either initially or over time.

Simplicity
They **expect** printing to be easy. They don't want network hassles, software hassles or supplies hassles. They just want it to work perfectly, time after time, day in and day out, every time.

The challenge, then, is to match user expectations as closely as possible with the color printers available on the market.

This section of the Evaluator Guide will look at each of these areas, suggest ways you can evaluate a printer's performance against that requirement, and explain how the Phaser 8400 printer exceeds the expectations of color printer users on all counts.

COLOR QUALITY

Simply put, color print quality means accurately reproducing the image you see on your screen onto the media you choose to print on — and being able to do that consistently, page after page. It's more than just numbers — such as dots-per-inch resolution (dpi). Here are some things to consider when evaluating color print "quality":

Does it print text, graphics and photos well? Print out text in various typefaces, sizes and formats. Then explore the results you get with photos. Finally, look at color graphic printouts, paying special attention to color blends and gradients, adjacent primary colors, and large areas of solid color.

Is the printing consistent? Check that image quality and color remain consistent page after page, particularly after 100 or 200 prints of the same image.

Does it handle all kinds of media? Many color printers are surprisingly sensitive to the type of paper or other media used. In addition to plain paper, test papers with different colors or textures, such as are used for company letterhead, to see if the colors change or the quality is degraded.

How well do print colors match your expectations? Look at the depth and breadth of color matching capability - especially for design and publishing applications where the ability to use standard color profiles and match press output may be important.

Does it produce good results with the kind of documents you print most? Try printing business reports and proposals, spreadsheets with highlight color, graphic design proofs, paper-based presentation handouts and black-and-white documents.

Does it print the file types you are likely to print? Can the printer handle the versions of PostScript that the software might produce? Some popular graphic applications, such as Adobe Photoshop or Illustrator, depend on true PostScript compatibility for the best color quality and most accurate proofing capability.

SPEED

A workgroup color printer must be able to deliver, both quickly and reliably, with a wide variety of documents. And, to qualify for the "workgroup" category, a color printer must keep up with the performance demands of a shared network environment.

Is the printer fast? Since color printing, rather than black-and-white printing, is the primary use of most color printers, it makes sense to pay special attention to the color print speed. Start with the rated engine speed, but also investigate the total color "throughput." Compare default print quality and speed across a variety of jobs. Compare Best Modes — consider user applications and what trade-offs between speed and print quality are best.

Calculate print job throughput. Print job throughput is the time it takes from clicking the Print button on your computer screen to the final delivery of the color document in the output tray. About 80% of all office print jobs are only one to five pages long. This means the first-page-out time of a printer can be just as important as the rated engine speed, which only measures multi-copy performance. Measure actual speed on various types of print jobs to understand the effects of engine speed and processor speed. How a printer handles a given job has much to do with the quality of the firmware as well as the processor.

Test multi-page, multi-copy output. Testing multiple copies of several multiple page documents is just the kind of test that will really show how well the printer handles the stress of a multi-user environment. And be sure to include two-sided printing.

How fast is the printer in your environment? To accurately measure overall performance in a real workgroup environment, send documents of different length and complexity to the printer over a standard Ethernet network. This combines the network transmission time, first-page-out time, and multi-copy engine speed to paint a clear picture of actual overall color performance.

**HOW THE PHASER 8400 PRINTER EXCEEDS
THE COLOR PERFORMANCE REQUIREMENT:**

Color Quality and Control

The solid ink printing process is optimized for quality color printing. Solid ink excels at smooth color blends and gradients. And with the new 2400 FinePoint™ image enhancement technology in the Phaser 8400 printer, you can achieve the finest results with photographs and other high-resolution graphics.

Color is consistent, page after page. This means that the blue in a corporate logo will look the same on a report printed in the morning as it will on an email printed out in the evening. And, on longer run print jobs, copy #100 will look just as good as copy #1.

The Phaser 8400 color printer provides superior color control and image quality over a far wider range of media than color laser printers. One unique attribute of solid ink printing is its ability to print on almost any kind of paper. This ability opens many possibilities for users, from using economy grades of paper to rough-textured art papers to transparency films. Color laser and liquid ink-jet printers, on the other hand, are much more sensitive to the variations in the media they print on.

Solid ink boasts the widest color range of any color printing technology, and is less susceptible to changes in temperature, humidity or even ink levels in the printer. So, it has the capacity to accurately portray the colors of your software programs, your hardware devices (such as scanners, monitors), and to present these colors across a wide variety of media, anytime.

Prints at the Speed you Need.

Users don't want to be limited to a single print speed or print mode. Some jobs call for speed, while others require the absolute best image quality possible. The Phaser 8400 color printer design offers 4 printing modes to suit practically any color printing application: **Fast Color mode, Standard mode, Enhanced mode and High Resolution/Photo mode.**

Engineered for Speed

By combining a powerful 500 MHz processor, a robust controller architecture optimized for color printing and a single-pass color print engine tuned for speed, the Phaser 8400 color printer achieves an important advantage over other color printers: fast first-page-out time. For most documents, the Phaser 8400 color printer has a first-page-out time of about 6 seconds. (By comparison, on the first print, many laser printers must synchronize their imaging components and paper path elements, adding overhead to the total print time. They must also warm up their fusers, sometimes for 30 seconds or more, before printing can begin.)

Not only is the Phaser 8400 printer faster than most competitors in each comparable print mode, it also excels at the most common print jobs, those one to five pages in length. This is due in part to its very short paper paths for both single-sided and two-sided (duplex) printing, (see page 12). The printer begins printing without any special synchronization or lengthy pre-job warm-up periods.

The overall quality and productivity offered in a color printer must be balanced against the total cost of owning and operating it over time.

Find the true purchase price. The purchase price should include everything needed for a workgroup to begin printing in color right away and to effectively share the printer over a network. If extra hardware is needed, then these costs must be added to the original purchase price to arrive at the true purchase price. Also consider whether the configuration you choose has the feature set you need. Can the printer be easily upgraded as your needs change?

Count the cost of operation. The total cost per page can be every bit as important as the purchase price. It is especially important to consider all the consumables the printer may require over its lifetime and to calculate the contribution each of these items make to the average cost per page. Likewise, count the cost of black-only printing. And don't forget the "hidden" costs — especially how often the printer needs attention from users and whether any special skills are required to change consumables or troubleshoot problems.

Estimate the cost of keeping the printer printing. Start with durability: Also expect that the more complex the mechanism, the more likely it will need maintenance and repair. Few problems can ruin an office's productivity faster than a printer that won't print. To estimate long-term reliability, start with the length of the warranty. Then, look at the duty cycle — does it indicate that the printer can handle heavy color print volume? Consider the number and complexity of moving parts; fewer parts generally mean higher reliability. Finally, consider the manufacturer's color printing expertise — the depth and breadth of experience with color printing technologies — as another good indicator of long-term color printer performance.

THE XEROX ADVANTAGE

HOW THE PHASER 8400 PRINTER EXCEEDS THE VALUE REQUIREMENT:

Low purchase price. The feature-packed Phaser 8400 printer sets a new standard for cost of acquisition for a networked color printer. High performance color printing is now available for much less than you would expect. And it's offered in 4 configurations that allow you to upgrade as your business grows.

Low cost of operation. The Phaser 8400 printer's solid-ink technology means fewer consumables than comparably priced color lasers, as well as the easiest operation of any printer in its class. Far fewer total user interventions are required. By contrast, color laser printers have up to 12 consumables that can often be both hard to install and messy. The cost of these consumables, the time spent handling them, and the time the printer is unavailable for printing all add up to increase the total cost of ownership of a color laser printer. The more time you spend tending to the needs of the printer, the more it costs to own the printer.

High durability and reliability. Due to its simple yet robust design, the Phaser 8400 color printer is capable of producing over 85,000 color prints per month. Not only does the solid ink printer design allow the printer to be up and running longer with minimal user intervention, the printer can print more, and print faster while it is running.

The Phaser 8400 printer has over 17 years of experience, research and engineering behind it to ensure that it is the most useful, productive and problem-free color printer available. If problems do arise, the Phaser 8400 offers PhaserSMART™ remote diagnostic tool, an automated, internet-based support system for problem diagnosis and solution.

And of course, Xerox stands behind the Phaser 8400 printer with a one-year depot warranty, and extensive online and telephone support — in addition to the Xerox Total Satisfaction Guarantee.

EVALUATE SIMPLICITY

The best way to determine a printer's simplicity is to use it in a real environment over an extended period of time. But even barring that opportunity, you can uncover a printer's true start-up and day-to-day productivity potential by investigating the following questions:

Setup and installation.
How complicated is printer setup? What assembly or configuration is required? How easy is it to learn to use and manage? Do the driver and front panel use graphic icons to simplify the user experience?

Ease-of-use and ergonomics.
How much desktop space does it require with all trays installed? From how many different sides does it require access? Can it be set up almost anywhere that is convenient for the people using it? How many consumables are there and how difficult is it to replace them? Can the toner or ink be topped off at any time or does the printer decide when to quit printing and demand attention?

Management, Maintenance and Network Control.
Can the printer be easily managed from a remote location? Does it offer tools that would be of help to a system administrator? Does it offer easy control both over the network and from its front panel? How easy is the driver interface to use?

THE XEROX ADVANTAGE

HOW THE PHASER 8400 PRINTER EXCEEDS THE SIMPLICITY REQUIREMENT:

EASY SETUP AND INSTALLATION

The Phaser 8400 color printer includes a number of software-based features to boost user productivity and make the printer easier to install, use and manage. First, unpack and set up the printer following the simple Setup Poster:

1. Load the "Rainbow Pack" of solid ink sticks supplied with the printer.

2. Load the paper tray.

3. Connect a network or printer cable.

4. Turn on the printer. Allow it to warm up; if completely cold this takes about 12 minutes as the printer melts the ink in the printhead.

5. Install the driver software onto your host computers, using the Printer Installer and Utilities CD-ROM included with the printer, or directly from the optional internal hard drive. The CD Installation Experience is also available for download from the Xerox website.

Installing Driver Software

The Phaser 8400 color printer Driver Installation is designed to provide an easy, automated installation process on all computer platforms.

- Automatic discovery of the printer on your network
- Automatic port creation
- Automatic printer model and feature detection
- Automatic driver installation
- Automatic IP address assignment

Step-by-Step Installation (for Windows systems)

The **Install Printer Driver** link launches the Setup program.
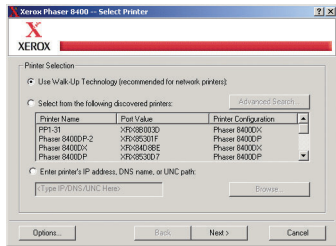
Other links take users to Manuals and Videos, Technical Support, Register Printer, Color Connection, PowerPoint Design Wizard, and Printer Management Tools.

The installer searches for a printer. It looks on physical ports on the computer – parallel and USB – as well as on a network (if present) for TCP/IP printers. If a printer is found on the network (already has an IP address), it highlights the printer and gives you the option to install this printer or a different one. A new feature – **Subnet Mapping** – means that if a Phaser 8400 has been previously installed on another subnet, it will show up here as well.

If multiple printers are found and you don't know which IP address to choose, the installer directs you to go to the printer and choose "Select for Installation" from the front panel menu. The installation completes automatically and prints a confirmation page.

For larger installations, the IT department can simply send an email to end-users with a link to the Driver Installation Package, available from any of the following sources:

- Product CD
- CentreWare IS Embedded Web Server
- Xerox Web Site

All Phaser 8400 Printers Come With INTELLIGENT READY

DON'T TURN OFF THE PRINTER.

The printer features Intelligent Ready software that tracks when and how the printer is used. Tracking these patterns over a rolling 3-week period, the printer automatically places itself in a standby power-saving mode during periods of non-use. The printer will automatically return to its Ready mode, just prior to an expected use period, avoiding any warm-up time and minimizing power usage in periods of non-use.

HOW THE PHASER 8400 PRINTER EXCEEDS THE SIMPLICITY REQUIREMENT (continued):

EASY TO USE
Small & Light
At just 16.3 x 14.5 x 21 in., and only about 59 lbs., the Phaser 8400 color printer occupies only a modest space for such a full-featured printer. Many color laser printers require twice the work space as the Phaser 8400 and weigh considerably more.

Friendly Front Panel
The large high-contrast front panel display is simple and intuitive, and it's backlit for comfortable viewing. A list of help topics is available at the main menu. What's more, pressing the i button pops up a contextual help message to explain whatever menu function or message is being displayed.

Easy Access
Loading ink is as simple as loading a stapler. Simply open the top cover, drop the shape-coded and numbered ink sticks into the matching slot, and close the cover. Ink sticks can be added at any time without waiting for the ink to run out, so you're always ready to print.

The maintenance kit is also easily accessed from a side panel; just slide it in or out. The Standard Maintenance Kit consists of a maintenance roller and a counter. It lasts up to 10,000 prints, while the Extended Maintenance Kit supports up to 30,000 prints. Replacement takes less than a minute.

Easily Upgradeable
The Phaser 8400 color printer's modular design allows for easy upgrades. The printer's main board can be accessed by loosening two thumb screws, so you can add memory or a hard disk. The configuration card is accessed from the side of the printer, allowing easy feature upgrades.

Phaser 8400 Solid Ink
The improved formulation of Phaser solid ink provides easy loading reliability, better color accuracy, more durable prints at a low cost-per-page.

HOW THE PHASER 8400 PRINTER EXCEEDS
THE SIMPLICITY REQUIREMENT (continued):
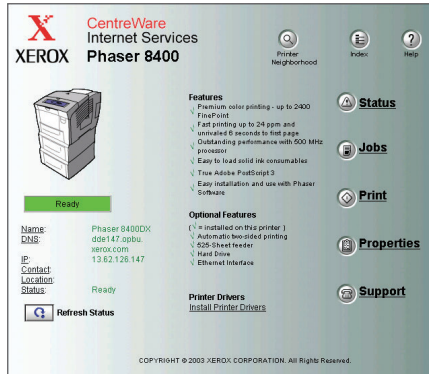
EASY TO MANAGE
CentreWare® IS Embedded Web Server

The printer's built-in CentreWare IS Embedded Web server is like a web site inside the printer, letting users remotely check the printer's status, job accounting, troubleshooting and more, by simply using a web browser such as Microsoft Internet Explorer, Netscape Navigator, or Safari. Users only need the printer's IP address to connect to the printer.

Printer Neighborhood

A simple-to-use, printer-based administrative tool for managing multiple printers on an IP network. It's geared for the small- to medium-sized company that does not need an enterprise class, server-based management tool.

Status

Displays information on input and output trays, capacities, page count and consumables information. Links to a Xerox supplies ordering site.

Jobs

Job Accounting provides links to browse, download or clear Job Accounting Records. **Usage Profile** reports provide information on many aspects of printer usage gathered during the life of the printer, such as ink or toner used, number of pages printed, and paper types used. From this page you can view or print a report, and also send it to an email address you specify, or to users who are specified in the Usage Profile Properties page. **Cancel Job** clears the current print job.
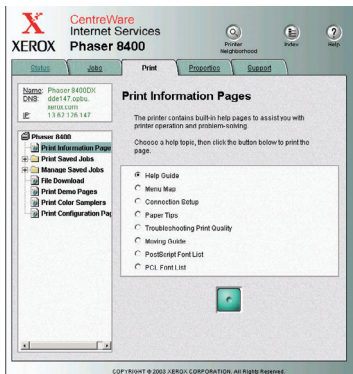
Print

Print Demo Pages prints the demo pages that exhibit the printer's various capabilities.

Print Help Pages prints the internal help pages on topics selected, including: Front Panel Menu Map, Supplies, Connection Setup, Paper Tips, Print Quality Tips and Moving Guide.

Print Color Samplers (for both CMYK and RGB) helps users set or match specific colors, by showing what colors you get for different color values.

Print Configuration Page provides general information on the printer, network connectivity and interfaces.

Properties

Provides a wealth of information on general printer settings, protocols, emulations, tool preferences and security. Primarily used by Network Administrators to configure printers.

Troubleshooting

Provides access to the printer's network logs and diagnostic tools.

Support

Provides links to printer drivers and other software, user manuals and videos, support links and a user customizable link.

CentreWare Web Printer Management

CentreWare Web is the newest printer management tool in the CentreWare family. CentreWare Web is designed to provide enterprise management solutions for all devices connected to your network - not just Xerox. Install, troubleshoot, configure and produce asset reports for all your devices. Simply install CentreWare Web on MS Windows 2000 or NT 4 servers and gain access from anywhere on your network through any standard web browser.

Other Optional Printer Management Tools

You can find these, and other additional management tools, by visiting www.xerox.com/office/pmtools

CentreWare Web Printer Management – provides enterprise management solutions for all devices connected to your network - not just Xerox. Install, troubleshoot, configure and produce asset reports for all your devices.

CentreWare, DP – gives Novell NetWare administrators a single solution for installing connecting and configuring Xerox network printers.

CentreWare, MMC – (Microsoft Management Console) allows seamless installation, configuration and status monitoring of Xerox network printers in the Windows 2000 environment.

CentreWare, for UNIX – provides enhanced printing and management capabilities for UNIX and Linux environments.

NDPS Gateway – allows you to use Novell Distributed Print Services (NDPS)/Novell Enterprise Print Services (NEPS) with Xerox printers.

Inside a Solid Ink Printer

Looking inside the Phaser 8400 color printer reveals a surprisingly simple printing mechanism for such a powerful printer. In simplest terms, to make a print, a printhead applies ink droplets, comprising a printed image, onto a rapidly rotating, heated drum. The image is transferred directly off the drum onto a sheet of paper. The final print is completely dry since the ink solidifies as soon as it transfers to the paper.
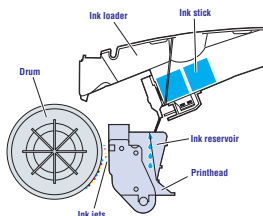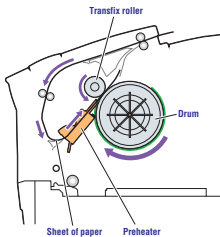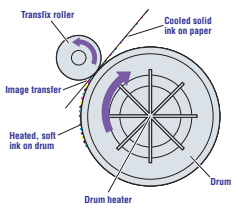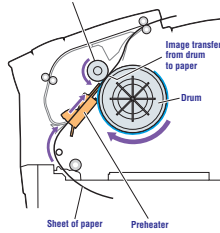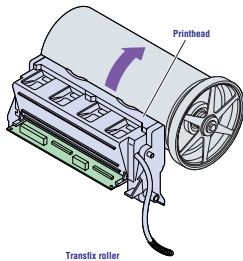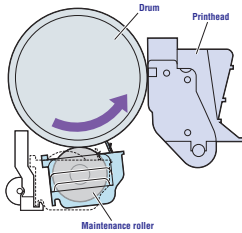
	ADVANTAGES
Preparing to print. As the printing process begins, the long-life maintenance roller quickly applies a microscopic layer of silicone oil to the heated drum for reliable ink release.	• A simple, robust, reliable printing mechanism. • Maintenance roller lasts up to 30,000 prints (in Extended Maintenance Kit) • No complex consumables.
Single pass imaging. Next, the full-width printhead applies all colors at the same time on the rotating drum.	• High-speed image transfer. • Simultaneous application of all colors eliminates misregistration of separate cyan, magenta, yellow, and black image layers.
Image transfer. A sheet of paper is rapidly fed between the drum and a transfix roller, transferring the ink to the paper.	• High-speed image transfer. • A short, simple paper path for speed and high reliability. • Transfer printing process yields great print quality on a wide variety of papers. • No fuser required.
Ink bonding. As the ink on the drum transfers to the paper, it penetrates the paper's fibers, but without the spreading of liquid ink-jets or the toner scattering of laser. The ink cools and solidifies immediately, forming a strong, permanent bond to the paper. Total time for the print process: as little as 4 seconds.	• Colorfast printing with no smearing or drying time. • More consistent color quality on a wider range of media than liquid ink-jet or color laser.
Two-sided printing. For automatic two-sided printing, the sheet of paper is not fully ejected into the exit tray but is fed back into the printer through the duplex paper path. The second image on the drum transferred to the other side of the sheet of paper.	• A simple, short, built-in duplex paper path means faster two-sided printing and fewer paper jams. • No additional paper tray required.
Reloading. The ink loader draws ink from solid ink sticks instead of a self-contained toner cartridge. Ink can be replaced or added at any time without taking the printer offline.	• Easy, on-the-fly ink stick reloading for continuous operation. • Ink loader can be "topped off" before long, high-coverage print jobs to avoid interruptions. • More environmentally friendly; less waste packaging, less waste ink by-products.

Configurations, Specifications, Upgrade/Options and Supplies

COMPETITIVE COMPARISONS

	PHASER 8400	HP LASERJET 4600	HP LASERJET 3500/3700**	OKIDATA C5100n/5300n
Price*	$999 (8400B)	$1999	$999 / $1,599	$839 / $1,153
COLOR PERFORMANCE Speed	24 ppm in Fast Mode (color and black & white) 18 ppm Standard Mode 12 ppm Enhanced Mode 7 ppm Photo Mode (2400 FinePoint™)	17 ppm color and black & white	12 / 17 ppm	12 ppm color 20 ppm black & white
First Page Out	6 seconds	18 seconds	22 / 20 seconds	18 seconds
Technology	Single-pass Color Solid Ink	Single-pass Color Laser	Single-pass Color Laser	Single-pass Color LED
Processor	500 MHz PowerPC	400 MHz	333 / 350 MHz Mips RISC	200MHz/400 MHz
Language Support	Adobe® PostScript® 3, PCL5c emulation	PCL5c, PCL6, PostScript 3 emulation	PCL6, PCL5c, PostScript 3 emulation, native PDF	PCL5c, PostScript 3 emulations
Memory	Base: 128 MB Max: 512 MB	Base: 96 MB Max: 416 MB	64 MB / Max: 448 MB	Base: 32 MB / 64 MB Max: 288 MB / 320 MB
Hard Disk	20 GB standard on DX	Standard on hdn	N/A	N/A / Optional
Duty Cycle (max.)	85,000/month	85,000/month	45,000 / 55,000/month	50,000/month
COLOR QUALITY Resolution (dpi)	2400 FinePoint™, 600 dpi	600 x 600 dpi, Image RET 2400	600 x 600 dpi, Image RET 2400	1200 x 600 dpi
Color Controls	Automatic, TekColor™, ColorSync®, ICC and PANTONE® Color Matching System	Automatic, manual	Automatic, manual	Automatic
PAPER HANDLING Duplex	Optional (standard on DP and DX models)	Optional (standard on dn, dtn, hdn)	Optional (standard on dn, dtn)	Optional
Paper Input (# trays/total)	2/625	2/600	2/350	2/400
Optional Paper Tray Capacity (# trays/total)	2/1050	1/500	1/500	1/530
Total Paper Capacity	1675 sheets	1,100 sheets	850 sheets	930 sheets
Media Types	Paper, transparencies, labels, envelopes, cardstock, business cards	Paper, envelopes, transparencies, labels, cardstock	Paper, envelopes, transparencies, labels, cardstock	Paper, transparencies, labels, envelopes, card stock, business cards
Media Weights	16 lb. bond to 80 lb. cover (60 to 220 gsm)	16 lb. – 47 lb. bond (60 – 163 gsm)	16 lb. – 58 lb. (60 – 216 gsm)	20 lb. – 47 lb. bond
NETWORK FEATURES Network Interfaces	8400B: USB 2.0, Parallel 8400N, DP, DX: USB 2.0, Parallel, 10/100BaseTX Ethernet	Base: parallel, Fast Infrared n, dn, dtn, hdn: add 10/100 Ethernet Optional: Ethernet (10Base-T, 10Base2), 802.11b wireless Ethernet Token Ring, Local Talk, Serial and USB, Fast Infrared	Base: USB 2.0, parallel. n, dn, dtn: add 10/100 Ethernet (ext. for 3500n). Optional: Ethernet (10Base-T, 10Base2), 802.11b wireless Ethernet Token Ring, Local Talk, Serial and USB, Fast Infrared	10/100 Base-T Ethernet, USB 2.0 / 10/100 Base-T: Ethernet, parallel, USB 2.0
Embedded Web Server	CentreWare® Internet Services	HP Embedded Web Server (limited)	HP Embedded Web Server (limited)	OkiLAN Embedded Web Server
Status Help	Job Accounting, status notification, complete usage analysis tool, PrintingScout, PhaserSMART	Limited to general consumable status	Limited to general consumable status	Limited to consumable status and job size

* Estimated Retail Price

**This product has not been released in the United States, data based on preliminary data

CONFIGURATION SUMMARY

FEATURE	PHASER 8400B	PHASER 8400N	PHASER 8400DP	PHASER 8400DX
Print Speeds*				
Fast Mode		24 ppm		
Standard Mode		18 ppm		
Enhanced Mode		12 ppm		
Photo Mode with 2400 FinePoint™		7 ppm		
First Page Out Time		6 seconds		
Processor		500 MHz PowerPC RISC, Adobe PostScript 3 - 137 fonts, PCL5c - 81 fonts		
Memory (std./max)	128 MB/512 MB		256 MB/512 MB	
Internal Hard Disk		Optional		20 GB standard
Maximum Resolution		2400 FinePoint™, 600 dpi		
Networking				
USB 2.0		Standard		
Bi-directional Parallel		Standard		
10/100BaseTX Ethernet	Optional		Standard	
Automatic Duplex (two-sided printing)		Optional		Standard
Paper Trays				
Tray 1 (100-sheet capacity)		Standard		
Tray 2 (525-sheet capacity)		Standard		
High capacity Feeder (525-sheet capacity)		Optional		Standard
Paper Output Tray Capacity		250 sheets		
Media Types	**Tray 1:** (Multipurpose Tray) papers up to 80 lb. Cover (60 – 220 gsm), coated or Phaser High Resolution Photo Paper, labels, envelopes, business cards, Phaser Professional Solid Ink Transparencies, Phaser Weatherproof Paper, Phaser Postcards, Phaser Trifold Brochures. Media sizes: A/Letter, Legal, Executive, Statement, US Folio, A4, A5, A6, B5 JIS, B5 ISO, 3 x 5 in. Index Cards and Custom sizes; Envelopes: #10 Commercial, DL, C5, #5½, #6¾, Monarch, Booklet, Lee (A7), Choukei 3 Gou and Choukei 4 Gou and custom sizes. **Tray 2: 525-sheet tray** (standard) papers up to 32 lb. Bond (60 – 122 gsm), coated or Phaser High Resolution Photo Paper, labels, envelopes, Phaser Professional Solid Ink Transparencies, Phaser Weatherproof Paper, Phaser Postcards, Phaser Trifold Brochures. Media sizes: A/Letter, Legal, Executive, Statement, US Folio, A4, B5 JIS, B5 ISO; Envelopes: #10 Commercial, DL, and C5. **Tray 3: 525-sheet Feeder** (standard on DX) Same media weights and sizes as Tray 2. **Tray 4: 525-sheet Feeder** (optional) Same media weights and sizes as Tray 2.			
Media Sizes	Letter: 8.5 x 11 in. (215.9 x 279.4 mm) Executive: 7.25 x 10.5 in (184 x 267 mm) Legal: 8.5 x 14 in. (215.9 x 355.6 mm) A4: 8.27 x 11.7 in. (210 x 297 mm) A5: 5.83 x 8.27 in (148 x 210 mm) A6: (105 x 148 mm) Envelopes: (#10, #5.5, #6.75, Monarch, C5, DL, Lee (A7), Choukei 3 Gou, Choukei 4 Gou)			
Printable Image Area	LEFT/RIGHT Margins 0.2 in. (5mm) for all sizes. TOP/BOTTOM Margins: 0.2 in. (5mm) for Letter and A4, 0.275 in (7mm)			
Color Control	TekColor™ Dynamic Color Correction profiles: Automatic: Adjusts color of photos, graphics and text automatically for best results sRGB Display: Matches your computer's monitor Vivid Color: For business presentations, charts and graphs SWOP®, Commercial and Euroscale: for press simulations			
Color Standards	PANTONE®-approved solid color simulation, Adobe PostScript device-independent color, CIE international color standards, support for ICC and Apple ColorSync color management systems			
Pipeline Printing – overlaps image rendering several pages ahead of printing. Performance is memory-dependent.	Optional – (requires upgrade to DP feature set)		Standard	
Printer Drivers	Windows 95/98/Me, Windows NT 4.x, Windows 2000/XP/Server 2003, MacOS 9.x/X, version 10.1 or higher, Novell NetWare 4.x/5.x/6.x, UNIX (Linux 5.2+, Sun OS 4.x, Sun Solaris 2.4+, DEC, HP/UX 11.x, IBM AIX 4.2+, SGI, SCO), Xerox Walk-Up Printing Driver			
Duty Cycle	Up to 85,000 pages per month			
Conservation	Printer features Intelligent Ready warm-up mode, which tracks printer usage and automatically places itself in standby mode during non-use periods and returns to Ready mode just prior to use periods. Energy Star.			
Size/Weight	16.3 in. x 14.5 in. x 21 in. 59 lbs. (26.8 kg)		20 in. x 14.5 in. x 21 in. 78 lbs. (35.4 kg)	
Service/Support	1-year warranty. In-depth technical support via the World Wide Web. Telephone technical support. Innovative service offerings include extended service agreements and custom training for internal help desks.			

Print speeds have been rounded to the nearest whole number.

MEDIA AND SUPPLIES

DESCRIPTION	DETAILS	PART NUMBER
XEROX PHASER PRINTING MEDIA		
Phaser Premium Color Printing Paper	A/Letter (8.5 x 11 in.)	016-1368-00
500 sheets, 24 lb./90 gsm bond	A4 (210 x 297 mm)	016-1369-00
Phaser Premium Cover Paper	A/Letter (8.5 x 11 in.)	016-1823-00
100 sheets, 60 lb./163 gsm cover	A4 (210 x 297 mm)	016-1824-00
Phaser Professional Solid Ink	A/Letter (8.5 x 11 in.)	016-1808-00
High Resolution Photo Paper	A4 (210 x 297 mm)	016-1809-00
Phaser Premium Die-cut Business Cards	A/Letter (8.5 x 11 in.)	103R01041
25 sheets, 70 lb./190 gsm, 10 cards/sheet	A4 (210 x 297 mm)	103R01042
Phaser Professional Solid Ink Transparencies	A/Letter (8.5 x 11 in.)	103R01039
50 sheets	A4 (210 x 297 mm)	103R01040
Phaser Color Printing Labels	A/Letter 30 labels/sheet	016-1812-00
100 Sheets	A4, 8 labels/sheet	016-1815-00
Phaser Premium Postcards	Letter, 4/sheet, 100 sheets	103R01016
	A4, 4/sheet, 100 Sheets	103R01017
Phaser Weatherproof Paper	Letter, 150 Sheets	103R01020
	A4, 150 Sheets	103R01021
Phaser Trifold Brochures	Letter, 150 Sheets	103R01018
	A4, 150 Sheets	103R01019
CONSUMABLES		
Genuine XEROX® Solid Ink 8400	3 Sticks Black	108R00604
	3 Sticks Cyan	108R00605
	3 Sticks Magenta	108R00606
	3 Sticks Yellow	108R00607
	6 Sticks Black	108R00608
OPTIONS AND UPGRADES		
Internal Hard Drive (20GB)		097S03172
Internal Hard Drive (20GB, w/Japanese fonts)		097S03173
128 MB Memory		ZMD128/A
256 MB Memory		ZMD256/A
Paper Tray	525-sheet capacity	097S03195
High Capacity Feeder	525-sheet capacity	097S03174
B to BD Upgrade		097S03175
B to N Upgrade		097S03176
N to DP Upgrade		097S03177
N to Advanced Features		097S03178
DP to Advanced Features		097S03179
ROUTINE MAINTENANCE ITEMS		
Standard Maintenance Kit	(10K prints)	108R00602
Extended Maintenance Kit	(30K prints)	108R00603

TOTAL SATISFACTION SERVICES™

DESCRIPTION	U.S. PART NUMBER	CANADIAN PART NUMBER
Extended On-Site Service		
(available during first 90 days of product ownership;		
converts 1-year depot warranty to 1-year on-site service)	8400S1	8400S1C
2 years additional (for a total of 3 years)	8400S3	8400S3C
Annual On-Site Service		
(available after first 90 days of product ownership)	8400SA	8400SAC
Installation		
(training and driver installation for max of two computers)	A4INST	A4INSTC
Help Desk Service		
Core Training	HDCORE	HDCORE
Product Training for Phaser 8400/8200/860/850/840	HD8400	HD8400
Annual Support Subscription	HDYEAR	HDYEAR

SPECIFICATIONS

PHYSICAL DIMENSIONS

MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
8400B	14.5 in. (36.8 cm)	16.3 in. (41.4 cm)	21 in. (53.3 cm)	59 lb. (26.8 kg)
8400N	14.5 in. (36.8 cm)	16.3 in. (41.4 cm)	21 in. (53.3 cm)	59 lb. (26.8 kg)
8400DP	14.5 in. (36.8 cm)	16.3 in. (41.4 cm)	21 in. (53.3 cm)	59 lb. (26.8 kg)
8400DX	20 in. (50.8 cm)	16.3 in. (41.4 cm)	21 in. (53.3 cm)	78 lb. (35.4 kg)

POWER CONSUMPTION

FUNCTION	POWER USED
Idle	180 watts
Continuous printing	230 watts
Warm-up	1000 watts
Energy Star mode (optional)	30 watts maximum

PRINT QUALITY MODES

PRINT QUALITY MODE	DESCRIPTION	MAXIMUM SPEED*
Fast Color	Fastest full-color output Great for general office correspondence	24 ppm
Standard	Light presentation mode for such documents as Microsoft® PowerPoint® handouts	18 ppm
Enhanced	Optimal balance of print quality and speed	12 ppm
High Resolution/Photo	2400 FinePoint™ Professional presentation quality Near-photographic detail	7 ppm

*   Approximate number of pages per minute. Image complexity can affect print time.

TEKCOLOR COLOR CORRECTIONS

CORRECTION	DESCRIPTION
Automatic	Automatically applies the best color correction mode to each element on the page.
Office Color	Uses a color correction designed for office applications. You then select the specific color correction to use from the drop-down list: • sRGB Display: closely approximates the colors on a standard display screen. • sRGB Vivid: produces the brightest possible colors and makes blues appear less purple • None: no color correction made to colors Used with the PANTONE® Color Chart for PANTONE® Color matching and ICC Profiles.
Press Match	Uses a color correction designed for press operations, professional graphic artists and photographers. You then select the specific color correction to use from the drop-down list: • SWOP® Press: specification for Web Offset Publications. Used to match U.S. press standards. • Euroscale: emulates the Euroscale 4-color process press mode • Commercial: emulates a 4-color process commercial press
Black & White	Grayscale printing.
Use Printer Front Panel Setting	Uses the color correction set on the printer. The color correction can be set in the printer using the front panel or using CentreWare® (if available).

ABOUT MEDIA USED WITH THE PRINTER

MULTIPURPOSE TRAY 1:	
Tray Size	Multipurpose, 100-sheet capacity
Paper	Bond or equivalent, 18 lb. bond - 80 lb. cover (60 - 220 gsm) Phaser Professional Solid Ink High Resolution Photo Paper Phaser Premium Postcards Phaser Weatherproof Paper Phaser Trifold Brochures
Transparencies	Phaser Professional Solid Ink Transparencies
Labels	50-sheet capacity Phaser Color Printing Labels are recommended for best quality
Envelopes	#10 Commercial, DL, C5, #5$\frac{1}{2}$, #6$\frac{3}{4}$, Monarch, Booklet, Lee (A7), Choukei 3 Gou and Choukei 4 Gou
TRAY 2:	
Tray Size	Multipurpose, 525-sheet capacity
Paper	Bond or equivalent, up to 32 lb. bond (60 - 122 gsm) Phaser Professional Solid Ink High Resolution Photo Paper Phaser Premium Postcards Phaser Weatherproof Paper Phaser Trifold Brochures
Transparencies	Phaser Professional Solid Ink Transparencies
Envelopes	#10 Commercial, DL, and C5
TRAY 3 - 4 (OPTIONAL HIGH-CAPACITY FEEDER TRAY):	
Tray Size	Multipurpose, 525-sheet capacity
Paper	Bond or equivalent, up to 32 lb. bond (60 - 122 gsm) Phaser Professional Solid Ink High Resolution Photo Paper Phaser Premium Postcards Phaser Weatherproof Paper Phaser Trifold Brochures

PRINT AREA OF SUPPORTED PAPER SIZES

PAPER*	SHEET SIZE	PRINT AREA	TOP/BOTTOM MARGINS	LEFT/RIGHT MARGINS
Letter	8.5 x 11 in. (215.9 x 279.4 mm)	8.1 x 10.6 in. (215.9 x 279.4 mm)	.2 in. (5 mm)	.2 in. (5 mm)
Executive	7.25 x 10.5 in. (184 x 267 mm)	6.85 x 9.95 in. (174 x 253 mm)	.2 in. (5 mm)	.275 in. (7 mm)
Legal	8.5 x 14 in. (210 x 297 mm)	7.87 x 11.3 in. (200 x 287 mm)	.2 in. (5 mm)	.275 in. (7 mm)
A4	8.27 x 11.7 in. (210 x 297 mm)	7.87 x 11.3 in. (200 x 287 mm)	.2 in. (5 mm)	.2 in. (5 mm)
A5	8.83 x 8.27 in. (148 x 210 mm)	5.43 x 7.72 in. (138 x 196 mm)	.2 in. (5 mm)	.275 in. (7 mm)

PRINT AREA OF SUPPORTED ENVELOPE SIZES

PAPER	SHEET SIZE	PRINT AREA	TOP/BOTTOM MARGINS	LEFT/RIGHT MARGINS
#10 (U.S.)	4.13 x 9.5 in.	3.73 x 8.95 in.	.2 in. (5 mm)	.2 in. (5 mm)
#6.75 (U.S.)	3.65 x 6.5 in.	3.25 x 5.95 in.	.2 in. (5 mm)	.2 in. (5 mm)
Monarch (U.S.)	3.875 x 7.5 in.	3.475 x 6.95 in.	.2 in. (5 mm)	.2 in. (5 mm)
C5	162 x 229 mm	152 x 197 mm	.2 in. (5 mm)	.2 in. (5 mm)
DL	110 x 220 mm	100 x 206 mm	.2 in. (5 mm)	.2 in. (5 mm)
Choukei 3 Gou	120 x 235 mm	110 x 221 mm	.2 in. (5 mm)	.2 in. (5 mm)
Choukei 4 Gou	90 x 205 mm	80 x 191 mm	.2 in. (5 mm)	.2 in. (5 mm)

INFORMATION SOURCES

You can press the **Information** key at any time to get additional information about the message displayed on the front panel.

Use the **Printable Pages** menu to print internal pages that give information about the printer configuration, supplies information, paper tips, etc.

The Printer's Installer & Utilities CD-ROM contains:
- Printer Drivers
- Installer
- ATM
- Links to Documentation & Videos, Quick Start Tutorial, Tech Support, Alternate Drivers and Printer Management Tools

The User Documentation CD-ROM contains:
- Setup – Basic installation of printer and options in written and video form
- Reference Guide – User documentation and instructional videos for Printer Features, Printing, Networking and Troubleshooting
- Explore – Information and links to FAQs, Features Overview, Tools & Utilities, Supplies

On the Web visit www.xerox.com/office for:
- Product, supplies and service information
- Downloading printer drivers
- Finding your local reseller
- On-line documentation

Visit www.xerox.com/office/infoSMART for:
The same troubleshooting knowledge base used by Xerox Customer Support staff to provide the latest technical information on:
- Application issues
- Networking issues
- Printer errors
- Print-quality issues
- Troubleshooting

Visit www.colorconnection.xerox.com for:
- Color resource for tools and information to help you get the most from your color printer
- Interactive tutorials and helpful tips for using your printer and favorite software applications
- Easy access to on-line technical support
- Customized features to meet your individual needs

Questions? Comments? Problems?

If you have any questions or issues with your evaluation printer, please contact your Xerox sales representative or the Xerox Office Printing Help Desk at: 1-877-362-6567 (U.S. AND CANADA). Or visit us on the web at www.xerox.com/office

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