

# Lexmark OfficeEdge Pro5500

21 ppm Monochrome • 14 ppm Color





## **Key Buyer Benefits**

- Prints faster than most similarly-priced color laser MFPs with speeds up to 21 ppm in black and 14 ppm in color
- Fewer supply replenishments with high-yield cartridges. Cartridges yield up to 2,500 pages black and 1,600 pages color
- Enhance efficiency and productivity with easy-to-download applications, including Scan to Network, Scan to Email and Scan to PDF
- Scan documents in less than 3 seconds per side with the 50-sheet single pass, duplex automatic document feeder (ADF)
- The USB port allows for convenient walk-up printing of many popular file formats, including PDF and JPEG, without the use of a PC
- Easily load different types of paper with the optional 550-sheet tray that boosts plain paper input capacity to 850 sheets, and envelope capacity to 75 envelopes
- Print documents on a variety of specialty papers, including card stock, labels and envelopes; accommodates paper sizes up to 8.5 x 14 inches
- Lexmark SmartSolutions are software applications designed to help businesses save time and money.
   These easy-to-download customizable solutions help streamline everyday tasks and common workflows.
   Select the SmartSolutions that best fit your business needs
- OfficeEdge's high resolution (up to 4800x3600 dpi) is perfect for printing sharp small text and colorful images

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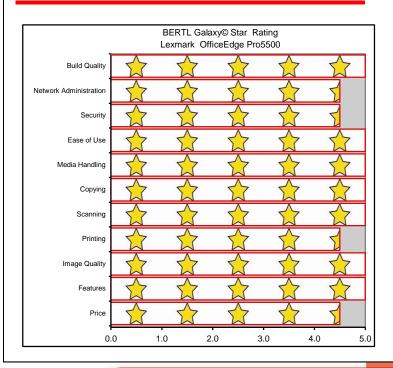
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#### **About BERTL**

**About BERTL** 

### **BERTL'S GALAXY© STAR RATING**







## **Executive Summary**

January 2012
Lexmark OfficeEdge Pro5500
www.BERTL.com

#### **EXECUTIVE SUMMARY**

When customers focus on growing their business, they can't afford to wait for expensive color output. They need to print and go with extraordinary quality and an economical cost per page. That's why businesses should take a closer look at the Lexmark OfficeEdge Pro5500 Color inkjet MFP. Featuring Vizix Pro ink technology users get vivid colors, dark black text, and higher resistance to water and smearing, as well as optimized speeds and affordability. Plus, the entire system is designed with an eye on the environment, with minimal power requirements using the Eco Mode solution, and is ENERGY STAR® compliant. As a result, this extremely cost-effective color inkjet MFP provides a stunning combination of bold business color and high productivity that is ideal for small businesses and workgroups. BERTL observed the following when testing the Lexmark OfficeEdge Pro5500 Color MFP:

- Users can change the quality mode to Draft mode for faster speeds.
- Tested simplex monochrome speed was as fast as 21.0 ppm, matching Lexmark's rated print speed of 21 ppm.
- Tested simplex color speed was as fast as 11.2 ppm closely matching Lexmark's rated print speed of 14 ppm.
- Tested duplex network-printer productivity was productive up to 5.2 ppm in monochrome and 4.5 ppm in color.
- Tested monochrome copier productivity was up to 21 cpm in simplex draft mode, matching Lexmark's rated copy speed of up to 21 cpm.
- Tested color copier productivity was up to 18 cpm in simplex draft mode, surpassing Lexmark's rated copy speed of up to 14 cpm.
- Lexmark's ID Card Copy solution allows users to automatically scan both sides of a card, enlarge and print ID cards, licenses, and insurance cards directly onto a single sheet.
- Image quality produced from the Lexmark OfficeEdge Pro5500 was outstanding with vivid colors and realistic photos.
- Ease of maintenance, replacing ink, clearing misfeeds, and paper loading is effortless.
- User-friendly installation software gets the Lexmark OfficeEdge Pro5500 out of the box and running smoothly on your network in minutes.
- The 4.3" color touch screen gives walk-up operators the ability to easily program jobs in seconds.
- Using SmartSolutions, customers can create and customize common tasks such as Scan to Email, Scan to Box, view RSS feeds, retrieving the latest news, view their favorite photo sharing sites and monitor the weather directly from their printer.
- Users can gain freedom and flexibility with Lexmark's built-in 802.11b/g/n wireless technology, Ethernet, and USB connectivity.
- Lexmark's Printer Home software offers a range of maintenance tools and advanced scan settings and provides users with the ability to convert a document to text using OCR.
- Scan to PC supports PDF, Searchable PDF, TIFF, JPEG and other formats.
- Users can scan to and print directly from USB flash drives and memory cards for instant document portability.
- Also contributing to the Lexmark's overall productivity is Lexmark's Embedded Web Server, which provides detailed
  device and consumable status, and offers network administrators the ability to configure and manage both the network
  and device settings.
- Compatible with MarkVision Enterprise, a full fleet device management solution, including remotely reading page counts, handling device alerts, deploy SmartSolutions, reordering supplies, and other key benefits
- Versatile media handling and flexibility, with the ability to print on photo paper and on stock as heavy as 110 lb (413 g/m²) and sheets up to 8.5" x 14".
- Standard automatic two-sided printing up to Legal reduces paper usage.
- Advanced energy and supply-saving features, which includes built-in two-sided printing and Eco-Mode, which saves
  energy. The device also ships with Lexmark Return Program Toner Cartridges which can be returned to Lexmark free of
  charge for remanufacturing or recycling.
- Duty cycle of up to 30,000 pages per month and a maximum paper capacity of 850 sheets.
- Lexmark's protection guarantee features a one year warranty and lifetime priority phone and online support.

Considering Lexmark OfficeEdge Pro5500's exceptional overall performance in testing, superb ease of use, outstanding innovative technology and exceptional office-color image quality, BERTL awards Lexmark OfficeEdge Pro5500 Color MFP its Five Star *Exceptional* rating and highly recommends the device for small businesses and enterprises that require a fully functional color inkjet MFP.



#### INTRODUCTION

In January 2012, Lexmark International, Inc. launched the new Lexmark OfficeEdge Series of business inkjet MFPs. This new series consists of four new devices: the OfficeEdge Pro5500, Pro5500t, Pro4000, and Pro4000c. The series is targeted towards small businesses and small workgroups within the enterprise who need affordable color printing and multifunction capabilities.

BERTL recently tested the Lexmark OfficeEdge Pro5500 Color MFP, which has a rated print speed of 21 ppm in monochrome and 14 ppm in color. The maximum monthly print volume is 30,000 pages with high XL ink yields of 2,500 pages using black and 1,600 pages using CMY. The OfficeEdge Pro5500 has flexible media capabilities with a maximum paper capacity of 850 pages, the ability to print on stock as heavy as 110 lb Bond (413 g/m²) and sizes up to 8.5" x 14".

Through its Rapid Scan technology which features a 3-channel scan bar and a LED lamp with zero warm-up time, and single-pass duplex ADF, the Pro5500 allows for the fast scan time of up to 28 ipm, or as fast as 2.2 seconds per image (letter, 300 dpi). In addition to its Rapid Scan technology, the Lexmark OfficeEdge Pro5500 also features the company's Vizix Pro print technology, which uses an off-carrier ink system to enable faster speeds, smudge-free output, and produces high quality prints at an economical replacement cost for customers.

The new Lexmark OfficeEdge Pro5500 is designed to be easy on the environment and offers the following features:

- Single-pass duplex ADF (Automatic Document Feeder)
- 4.3 inch color touch screen with SmartSolutions
- Automatic duplex printing
- Color print resolution up to 4800 x 3600 dpi
- Lexmark's Vizix Pro ink cartridges produce vivid colors, dark black text, and have a higher resistance to water and smearing
- Media types supported include Card Stock, Envelopes, Labels, Plain Paper, Transparencies, Hagaki Card, Iron-on Transfers, Photo Paper, and Heavy Weight Matte Paper
- Standard connectivity includes USB 2.0, Ethernet and Wireless-N
- Media Slots include: USB, and SD/MS/xD/MMC
- Ability to print a one-sided copy of a two-sided ID card with the ID Card Copy solution
- Ability to download one-touch workflows for scanning documents to multiple destinations such as Scan to Email, Scan to Fax, Scan to PC, Scan to Network, Scan to Box, and Scan to USB

- Easy to use Scan Profiles, through Lexmark Printer Home software or Embedded Web Server
- Standard Super G3 fax unit
- ENERGY STAR® compliant
- Ability to centralize the management of networkenabled output devices (lasers or business inkjets) via Lexmark's Markvision Enterprise so that IT departments no longer have to manage devices individually
- Advanced security features include the following: IPv6, SSL, SNMP, Flash wiping, Password protection and the ability to disable specific ports
- Mac compatible and AirPrint certified

This device is available in four models and sold via Lexmark's large account sales force and through Lexmark authorized providers. Pricing for each model in the series is as follows:

•	Lexmark OfficeEdge Pro5500t	US \$499.00
•	Lexmark OfficeEdge Pro5500	US \$399.00
•	Lexmark OfficeEdge Pro4000	US \$249.00
•	Lexmark OfficeEdge Pro4000c	US \$249.00

In the following test report, BERTL takes an in-depth look at the Lexmark OfficeEdge Pro5500, testing and evaluating its productivity, image quality, workflow, and ease-of-use.

Lexmark OfficeEdge Pro5500 Features Summary		
List Price	US \$399.00	
Imaging Technology	Color Thermal Inkjet	
Standard Functions	Print, Copy, Scan, Fax	
Maximum Monthly Duty Cycle	30,000 pages	
Mono Print Speed	21 ppm	
Color Print Speed	14 ppm	
Automatic Duplex	Yes	
Network Scanning	Yes	
Color Scanning	Yes	
Dimensions (H X W X D)	11.8 x 19.7 x 16.8 in.	
Weight	35.4 lbs	



#### PRINT PRODUCTIVITY

Evaluating print productivity is not as simple as timing copy jobs. The printing process involves several steps and can be affected by a variety of factors along the way.

The document must first be spooled by the print driver into a PCL or PostScript file. The PCL or PostScript file is then sent to the printer where it is raster image processed (RIPped) into image data by the device processor. The image data is then sent to the marking engine and output as printed pages.

It is possible to time and compare these factors through the use of careful preparation, conditioning and testing. Following are charts that show printing performance when tested under controlled conditions.

#### **NETWORK PRINTING**

- + The Lexmark OfficeEdge Pro5500's Rated Output Speed is 21 ppm in monochrome and 14 ppm in color using the default Auto Mode. Users can choose Draft Mode which offers faster speeds of 40 ppm in monochrome and 36 ppm in color.
- + The Lexmark OfficeEdge Pro5500's Time to First Page is as fast as 7 seconds in monochrome and 9 seconds in color.
- + The Lexmark OfficeEdge Pro5500 comes with a universal driver that supports generic PostScript/PCL emulations that is optimized for maximum printing productivity.
- + The print driver offers bi-directional communication with its user-selectable interface for all of the Windows-based operating systems.
- + The Lexmark OfficeEdge Pro5500 delivers high print resolutions of up to 4800 x 3600 dpi in color for enhanced image quality.
- + The driver supports the following operating systems: Windows XP, Windows XP Professional x64, Windows Vista, Mac OS X (10.4.4-10.6.x Intel), Vista x64, Mac OS X (10.3.9 Power PC), Linux, Windows 7, and Mac OS X (10.4.4-10.7.x PowerPC).
- + Users can connect to the Lexmark OfficeEdge Pro5500 via USB, Ethernet, and Wireless-N.
- + The Lexmark OfficeEdge Pro5500 is compatible with the following digital media memory cards: Sony Memory Stick, Memory Stick PRO, Secure Digital (SD) Card, MultiMedia Card (MMC), xD Card, Sony Memory Stick Duo (with adapter), Mini Secure Digital (Mini SD) Card (with adapter), Sony Memory Stick PRO Duo (with adapter), SanDisk TransFlash Memory Module (with adapter), RS-MMC (with

adapter), xD Card Type M, Type H, Multimedia Card (MMC) Mobile (with adapter), Micro Secure Digital (Micro SD) Card (with adapter), and Secure Digital High Capacity (SDHC) Card (with adapter).

+ Offers fast productivity with 256 MB of memory.

#### **TESTING RESULTS**

All testing was done in default mode.

Network-Bandwidth/Print File Sizes				
File Name / Native File	Universal Driver			
1-page Digital Photo PDF	4.48 MB	12.9 MB		
4-page Passport Form PDF	0.08 MB	580 KB		
16-page Magazine in PDF	1.78 MB	15.0 MB		
22-page Excel Worksheet	0.12 MB	2.94 MB		
32-page Text-Based PowerPoint	0.23 MB	4.40 MB		
32-page Text-Based PowerPoint (duplex)	0.23 MB	4.40 MB		
32-page Graphic Intensive PowerPoint	4.20 MB	37.8 MB		
38-page Word Document	0.91 MB	14.0 MB		
50-page Text-Based PDF	0.17 MB	1.95 MB		
50-page Text-Based PDF (duplex)	0.17 MB	1.95 MB		

Monochrome Print Productivity			
# of Originals Mode Universal Driver			
50	Simplex	21.0 ppm	
50	Duplex	5.2 ppm	

Monochrome print productivity is evaluated based on a text-based letter sized 50 page PDF file.

Color Print Productivity				
# of Originals Mode Universal Driver				
32	Simplex	11.2 ppm		
32 Duplex 4.5 ppm				

Color print productivity is evaluated based on a graphic-based letter sized 32 page PPT file



Job List	First Page Out Time (seconds)	Total Job Time (seconds)		
000 =:01	` `	Universal Driver		
1-page Digital Photo Print Original	13.13	13.13		
4-page Passport Form PDF	15.64	38.35		
16-page Magazine PDF	15.80	136.36		
22-page Excel Worksheet	19.96	100.49		
32-page Text-Based PowerPoint	13.45	192.77		
32-page Text-Based PowerPoint (duplex)	53.67	496.67		
32-page Graphic Intensive PowerPoint	16.36	298.46		
38-page Form Word Document	13.05	172.62		
50-page Text-Based PDF	11.49	151.58		
50-page Text-Based PDF (duplex)	41.39	590.39		

Test files printed on Letter paper size (8.5" x 11").

Legal Print	Universal Driver		
Performance	Simplex	Duplex	
First Page Time (secs)	24.93	50.83	
Total Print Time (secs)	351.27	706.27	
Running PPM	7.2	3.5	

Test files printed on Legal paper size (8.5" x 14"). Test is based on printing a 100 page document in simplex and duplex modes.



**Above:** The Lexmark OfficeEdge Pro5500 as tested by BERTL.

#### WHAT BERTL LIKED

- Tested simplex monochrome speed was as fast as 21.0 ppm, matching Lexmark's rated print speed of 21 ppm.
- Tested simplex color speed was as fast as 11.2 ppm, closely matching Lexmark's rated print speed of 14 ppm.
- Tested duplex network-printer productivity was productive up to 5.2 ppm in monochrome and 4.5 ppm in color.
- Tested Time to First Page was 13.05 seconds in monochrome and 13.13 seconds in color.
- Legal Print productivity in simplex mode was as fast as
   7.2 ppm and 3.5 ppm in duplex mode.
- The Pro5500 completed BERTL's job stream test in 17 minutes and 22 seconds, running at 14 ppm, which translates to an efficiency rate of 67%.

#### WHAT BERTL WOULD LIKE TO SEE

• BERTL was satisfied with the Lexmark OfficeEdge Pro5500's print performance.



#### **COPY PRODUCTIVITY**

Advertised speeds are always quoted using the simplest route in-and-out of a device. Of course, users often apply finishing options, incorporate different media sizes and types into the document, print in duplex, and add other elements that can affect speed. In the chart below, BERTL tests how different modes—mixed-size original mode and duplex mode—affect document-feeder productivity.

To assess copier productivity, BERTL ran copy jobs in order to determine document-feeder scanning speed, the affect of the first set out on overall engine speed, and whether specific job attributes affect engine throughput capability. Each job was set up by feeding media from the shortest media route to the shortest available output destination. A separate test examines how adding finishing/output destinations affects productivity.

#### **COPY FEATURES**

- + The Lexmark OfficeEdge Pro5500's rated copy speed is up to 21 cpm in monochrome and 14 cpm in color.
- + The Lexmark OfficeEdge Pro5500 time to first copy is as fast as 9 seconds in monochrome and 12 seconds in color.
- + Users can submit jobs that require simplex or duplex copying. The Lexmark OfficeEdge Pro5500 supports copy jobs that require 1:1, 1:2, 2:2 and 2:1 side printing.
- + Lexmark's ID Card Copy solution automatically allows users to scan both sides of a card, enlarge and print ID cards, licenses, and insurance cards directly onto a single sheet.
- + Users can make copies that range from 1 to 999 in quantity and copy paper sizes from 3" x 5" up to 8.5" x 14".
- + The Lexmark OfficeEdge Pro5500 comes with the following image modes: Automatic, Best, Normal, and Draft.
- + Users can use the variable zoom to scale from 25% to 400% in 1% increments.
- + Basic Copy Features included with the Lexmark OfficeEdge Pro5500 incorporate the following: Scale, Darkness, Duplex, Color Mode, Pages per Side, Background Removal, Overlay, and Separator Sheets.

#### **TESTING RESULTS**

All testing was done in default Automatic mode.

Automatic Document Feeder Time to First Copy		
Time in Seconds		
Number of Originals Monochrome Mode		
1 Simplex Original	10.75	
1 Duplex Original	40.07	
Color Mode		
1 Simplex Original	14.28	
1 Duplex Original 62.94		

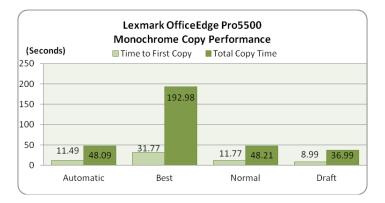
Platen Glass Time to First Copy		
Time in Seconds		
Number of Originals Monochrome Mode		
1 Simplex Original 10.80		
	Color Mode	
1 Simplex Original	13.06	

Copy Job Time			
# of originals	Monochrome Mode	Time In Seconds	СРМ
10	1 sided to 1 sided	47.56	12.6
10	1 sided to 2 sided	135.72	4.4
10	2 sided to 1 sided	141.30	4.2
10	2 sided to 2 sided	401.58	1.5
	Color Mode		
10	1 sided to 1 sided	99.82	6.0
10	1 sided to 2 sided	195.12	3.1
10	2 sided to 1 sided	288.99	2.1
10	2 sided to 2 sided	406.46	1.2

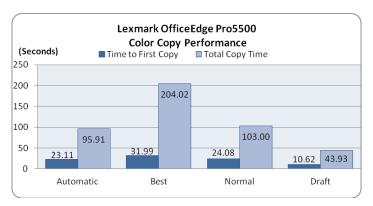


#### **COPY PERFROMANCE RESULTS**

BERTL performed a simple speed test using all the different quality settings: Automatic, Best, Normal, and Draft. The charts below show the time to first copy, total copy time, and copies per minute (cpm) results. These results were calculated from using a single text-based file placed on the platen glass and copied 10 times.



**Results:** Automatic = 16 cpm; Best = 4 cpm; Normal = 16 cpm; Draft = 21 cpm



**Results:** Automatic = 8 cpm; Best = 3 cpm; Normal = 8 cpm; Draft = 18 cpm



**Above and below:** The Lexmark OfficeEdge Pro5500 platen glass and single pass, duplex automatic document feeder (DADF).



#### **DOCUMENT FEEDER PRODUCTIVITY**

BERTL also takes the user into account and looks at how document feeder productivity affects the amount of time a user has to wait at the device before they can walk away with their originals.

Document Feed Speed			
# of originals	Monochrome Mode	Time In Seconds	ОРМ*
11	Simplex Originals	49.28	12.2
6	Duplex Originals	37.28	8.0
	Color Mode		
11	Simplex Originals	85.44	7.0
6	Duplex Originals	131.40	4.6



#### WHAT BERTL LIKED

- Tested copy monochrome Time to First Copy was 10.80 seconds off the platen glass and 10.75 seconds using the automatic document feeder.
- Tested copy color Time to First Copy was 13.06 seconds off the platen glass and 14.28 seconds using the automatic document feeder.
- Tested monochrome copier productivity was up to 21 cpm in simplex draft mode, matching Lexmark's rated copy speed of up to 21 cpm.
- Tested color copier productivity was up to 18 cpm in simplex draft mode, exceeding Lexmark's rated copy speed of up to 14 cpm.
- Fast document-feeder speeds of up to 12.2 opm in simplex mode.
- The ID Card Copy solution allows users to copy ID cards onto one sheet of paper.
- The Lexmark OfficeEdge Pro5500 features an exceptionally easy-to-use, 4.3 inch color touch screen. BERTL analysts found it to be one of the easiest touch screens to use among the numerous touch screens BERTL has evaluated. There are no complex and confusing sub-menus or cryptic instructions. Instead, even novice users will be able to navigate the touch screen for copy jobs in just a matter of seconds.

#### WHAT BERTL WOULD LIKE TO SEE

 BERTL was satisfied with the Lexmark OfficeEdge Pro5500's copying capabilities.



#### **NETWORK SCANNING FEATURES**

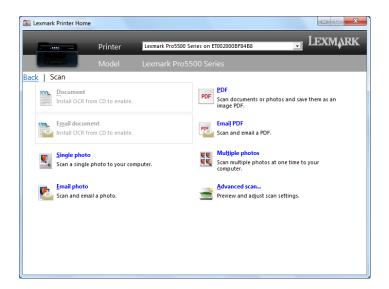
The Lexmark OfficeEdge Pro5500 comes standard with a color network scanner. Users can scan documents to PCs, Network, Email, Fax, Online Storage, USB memory devices, and Memory Cards. Lexmark has established a new level of scanning by using its Rapid Scan technology which features a 3-channel scan bar and a LED lamp with zero warm-up time and Single Pass duplex ADF, which allows for a fast scan time of up to 28 ipm, or as fast as 2.2 sec per image (letter, 300 dpi).

Lexmark also offers time saving apps designed to help small and medium business users save time and money. These apps are conveniently accessible right from the control panel. Some of these apps include the following:

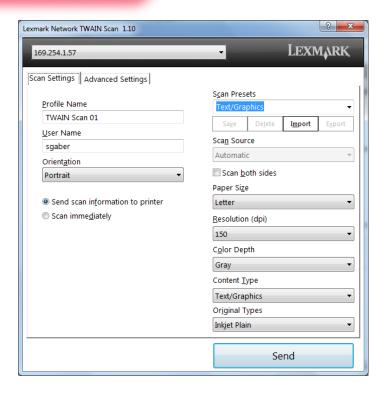
**Scan to Box:** Easily digitize and upload important business information to your Box.net account.

**Scan to File:** Quickly scan and save documents in a designated location on your computer.

**Scan to E-Mail:** With one-touch scan a document and email it to a pre-set list of contacts.



**Above:** Lexmark's Printer Home software enables users to preview scanned files, process them with OCR software, and also choose from many more advanced scanning settings.

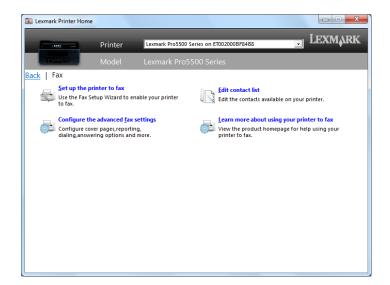


**Above:** The Lexmark's OfficeEdge Pro5500's TWAIN driver offers users the most common scanning settings which include resolutions, color modes, and paper sizes, among others.

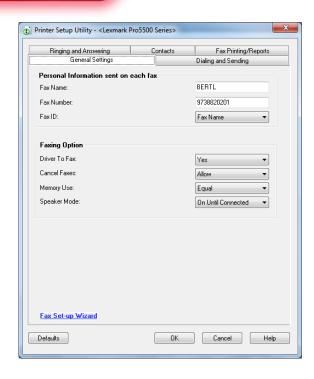
#### **FAX FEATURES**

The Lexmark OfficeEdge Pro5500 comes standard with a full-featured business class fax with memory backup. Users can configure the fax settings through the printer control panel or via the Lexmark Printer Home Page software that comes standard with the device.

FAX SPECIFICATION		
F T	Stand-Alone Mono & Color Fax; PC	
Fax Type	interface for fax sending	
Fax Resolution	400 x 400 dpi (Ultra-fine)	
Fax Speed	As fast as 3 seconds per page	
Advanced Fax Features	Out-of-paper Reception & Delayed Fax Transmission (Flash Memory stores up to 900 pages); Activity, Confirmation, and Error Reports; Auto Answer & Redial; Junk Fax Blocking; Auto Fax Reduction (Fit-to-page); 99 Speed Dials; Fax Forwarding; Distinctive Ring Detection; Fax Broadcasting	
Fax Technical Specifications	Super G3 (V.34, 33.6 kbps) / Class 2.1 / ITU-T.30U	



**Above and next column:** Lexmark's Printer Home Page allows users to send faxes directly from their PC as well as set up address books, enable fax forwarding and many more common fax settings.



#### WHAT BERTL LIKED

- Versatile features include Scan to PC, Scan to Network, Scan to Email, Scan to Fax, Scan to Memory devices (USB & SD Cards), and TWAIN Scan.
- Fast scanning due to Lexmark's Rapid Scan Technology.
- The Super G3 Fax feature expands the unit into a powerful workgroup fax.

#### WHAT BERTL WOULD LIKE TO SEE

• BERTL was satisfied with the Lexmark OfficeEdge Pro5500's scanning and faxing capabilities.

#### **IMAGE QUALITY**

BERTL evaluates the output of several "test targets" in order to determine image quality. Following are descriptions of key elements of image quality. Note the numbered examples on each of the test targets shown in the right column.

#### Office Color Image Quality

- 1. Density of Solid Areas Better contrast; more vivid overall images
- 2. Line Work Better production of lines and text
- 3. Halftones Better production of photographic and screened images
- 4. Negative/Positive Better production of fine detail

#### **Photographic Color Image Quality**

- 5. Flesh tones Better production of portraits
- 6. **Banding -** Better solid and dithered fill
- 7. Low Contrast Better production of dark images
- 8. Saturation Better production of bright colors
- 9. Caste Better color fidelity
- 10. Fine Detail Better reproduction of fine details

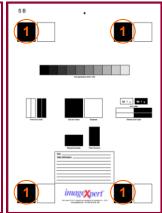
Density of Solid Areas*			
	Copy Density	Print Density	
Black	1.68	1.71	
Cyan	1.23	1.57	
Yellow	1.19	1.17	
Magenta	1.48	1.50	

<sup>\*</sup>Density is on a scale of 0 to 2.5, with 2.5 being the best possible.

Copy & Print Resolution*				
	Copy Resolution		Print Re	solution
	Vertical	Horizontal	Vertical	Horizontal
Black	2.0	2.0	2.0	2.0
Cyan	2.0	2.0	2.0	2.0
Yellow	2.0	2.0	2.0	2.0
Magenta	2.0	2.0	2.0	2.0

\*Line Pairs per Millimeter. For copy and print resolution, lower is better (range, 1.0-5.0).





BERTL uses ImageXpert printer test targets for the evaluation of printed image quality. BERTL technicians measure image density and evaluate the device's ability to produce a full range of halftones and various sizes of negative/positive text, dots and lines in each primary printing color (CYMK).









BERTL uses synthetic (photographic) test images obtained from ISO International Standard 12640--Graphic Technology—Prepress digital data exchange—CYMK Standard Color Image Data (CYMK/SCID) in order to evaluate the ability to print photographic images.

#### **IMAGE QUALITY**

Print Halftones				
	Min. Gradation* Max. Gradation*			
Black	10	100		
Cyan	10	100		
Yellow	10	100		
Magenta	10	100		
Copy Halftones				
Min. Gradation* Max. Gradation**				
Black	10	100		
Cyan	10	100		
Yellow	10	100		
Magenta	10	100		

\*Minimum gradation is on a scale of 10 – 100 percent in 10 percent increments. The best possible minimum gradation is 10 percent.

\*\*Maximum gradation is on a scale of 10 – 100 percent in 10 percent increments. The best possible maximum gradation is 100 percent.

Negative/Positive Lines*				
Line Width (points)	Negative		Po	sitive
	Vertical	Horizontal	Vertical	Horizontal
1	√	√	√	<b>V</b>
2	√	√	√	<b>V</b>
3	√	√	√	<b>V</b>
4	√	V	√	V
5	√	√	√	√
6	√ √	√	√	√

\*A "\" mark indicates the device was able to print the line width correctly. Chart cells containing an "x" indicate that the printer was not able to print the line width correctly. Overall, the fewer "x's," the better the image quality. If no cells are marked with an "x," then the device was able to print all line widths correctly.

Negative/Positive Dots*		
Line Width (points)	% of Dots Printed	
1 pixel cyan	100	
1 pixel magenta	100	
1 pixel yellow	100	
1 pixel Black	100	
1 pixel Black Neg	100	
2x2 pixel Black	100	
2x2 pixel Black Neg	100	
Checkerboard apparent?	No	

\*On a scale of 0 - 100%. The higher the percentage, the better.

Color Photo Quality*		
Fleshtones	5.0	
Banding	5.0	
Low Contrast	4.5	
Saturation	5.0	
Caste	4.5	
Fine Detail	5.0	

<sup>\*</sup>Based on a scale of 1 to 5, with 5 being the best.



#### VIZIX PRO PRINT TECHNOLOGY

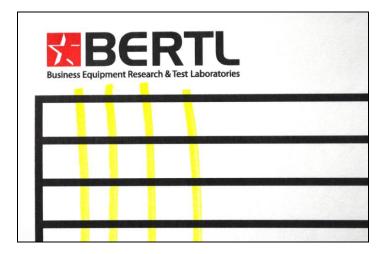


The Lexmark OfficeEdge Pro5500 features Lexmark's Vizix Pro print

technology. The new Vizix Pro pigment-based ink formula has a much higher resistance to water and smearing.



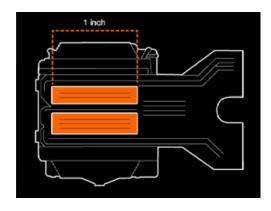
Above: The BERTL test pattern was printed with the Lexmark OfficeEdge Pro5500 on photo paper. Three drops of water were placed in the circled sections above. The drops were then pulled downward through the printed lines. There was very little smearing of the ink.



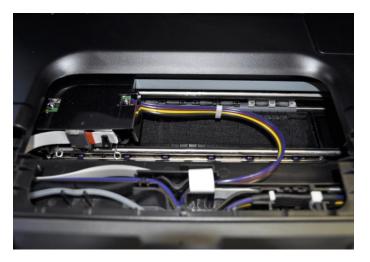
Above: The BERTL test pattern was printed with the Lexmark OfficeEdge Pro5500 on photo paper. Using a common highlighter, lines were drawn through the printed lines. No smearing was achieved in the process.



Above: Vizix Pro Standard Yield Ink Cartridges.

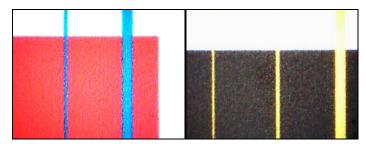


**Above:** One of the key reasons for increased print speeds is the Lexmark OfficeEdge Pro5500's printheads. They are one inch long, resulting in wide ink coverage on each pass.

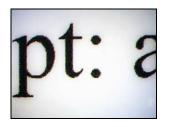


Above: The Lexmark OfficeEdge Pro5500 features an offcarrier ink system allowing for a higher yield and faster print speeds.



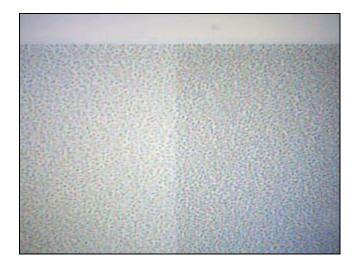


**Above:** The BERTL test pattern was magnified 40x to test for ink bleed. The lines were crisp with very minimal bleeding.





**Above:** Text printed clearly in both positive and negative print.



**Above:** Clear steps were noticed between gradation percentages even with the lightest shades.

#### WHAT BERTL LIKED

- Patented Vizix Pro ink cartridges are engineered for intense ink droplet precision creating vivid, razor sharp images.
- Output displayed excellent print density in both copier and printer modes.
- Both color and monochrome output produced by the Lexmark OfficeEdge Pro5500 was phenomenal. Text was bold, crisp and cleanly formed and photographic files displayed realistic flesh tones with a smooth and beautiful glossy finish.
- Excellent resolution in both copy and printer modes.
- Outstanding halftone reproduction in printer and copier modes, as the device was able to correctly reproduce most of the halftone shades.
- Output displayed great line reproduction and average dot control when printing BERTL's image-quality evaluation chart.

#### WHAT BERTL WOULD LIKE TO SEE

 BERTL was extremely satisfied with the Lexmark OfficeEdge Pro5500's image quality.



#### PROGRAMMING THE CONTROL PANEL

A control panel's ease of use or lack thereof can often have a significant impact on user productivity. The harder it is to select frequently used options, such as duplexing or document finishing, the more time the user has to spend programming the device and the less productive they are. The Lexmark OfficeEdge Pro5500 control panel consists of a 4.3 inch color touch screen LCD that gives users instant access to the system functions, such as Copy, Scan, Fax and Smart Solutions. The touch screen provides graphical icons for basic printer functions, and also offers a wide range of Web-connected applications that can be saved to, or downloaded from the Web directly to, the device. Users **SmartSolutions** the Lexmark available (http://smartsolutions.lexmark.com) to see applications. Also contributing to the productivity of this device is the ability to scan to or print from a USB flash drive instantly giving users a more portable way of accessing their documents. Users can also print photos and documents from SD cards.

Selections Required for Frequently Used Copy Functions	
Best Mode	4
Reduce to 78%	4
1:2	4
2:2	4
Scan to USB	2
Print from USB	1



**Above:** The main screen displays several buttons for each of the available functions. These functions are Copy, Scan, Fax, and Smart Solutions.



Above and below: The LCD touch screen's copy main menu displays the most common copying choices, such as Color, Quality, Scale, and Darkness. The bold blue highlighted buttons on the LCD screen display currently selected settings. Users can use the navigation arrows on the right to scroll down the screen or page down with a tap. User can also scroll the menu with a swipe.





**Above:** Users can choose from four different quality modes: Automatic, Best, Normal, and Draft. Each setting reflects the speed and quality of the copy.



## **Ease of Use**

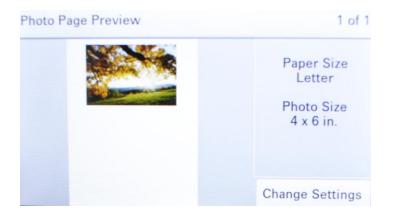
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**Above:** Users can scan directly to their computer, memory devices such as a USB flash drives and memory cards, Email and Network Folders.



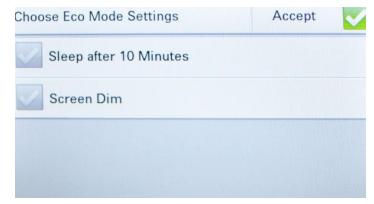
**Above and below**: Users can preview scanned documents and photos on the control panel as well as edit them.





**Above and below:** The Lexmark OfficeEdge Pro5500 comes standard with a preloaded SmartSolutions ID Card Copy, which allows users to Copy both sides of an ID card onto a single page. Users can download and add more SmartSolutions simply by visiting Lexmark's website http://smartsolutions.lexmark.com.





**Above:** The Eco-Mode feature sets the screen brightness to low and sets the printer to enter Power Saver mode after the printer is left idle for 10 minutes.





**Above:** The Ink Menu screen displays the current ink levels on the device.



**Above:** The Setup screen allows users to modify the device settings such as: Paper, Print Mode, Address Book, Network, and Fax Setup.



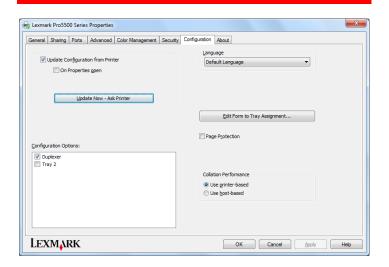
**Above:** The built-in memory interface located on the right side of the device lets users scan to a USB flash drive or memory card for instant portability

#### **PRINT DRIVERS**

As with control panels and touch screens, print driver design can vary enormously from manufacturer to manufacturer. The Lexmark OfficeEdge Pro5500 comes standard with a universal print driver that supports generic PostScript/PCL emulations in a diverse range of printers.

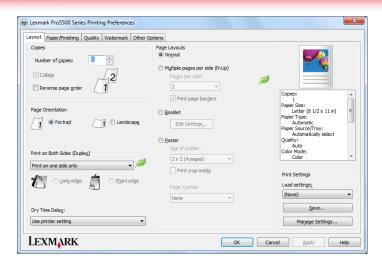
Print Driver Checklist	
Do print drivers have identical user interfaces?	No
Are print driver interfaces identical to other vendor models?	Yes
Bi-directional communication within print drivers?	Yes
Auto device configuration from within print driver?	Yes
Does print driver installation require rebooting of the workstation?	No
Are print driver deployment processes included?	Yes
Are print driver deployment guidelines and procedures included?	Yes

#### **PRINT DRIVER**

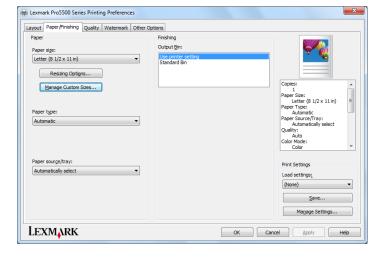


**Above:** In order to specify system defaults and installed options, administrators select the Devices and Printers folder from the Microsoft Windows' Start menu, and then select the Lexmark OfficeEdge Pro5500's print driver. Administrators can manually indicate which options are installed, or, by selecting the Update Now – Ask Printer option in the upper right, installed options will be automatically indicated in the print driver.





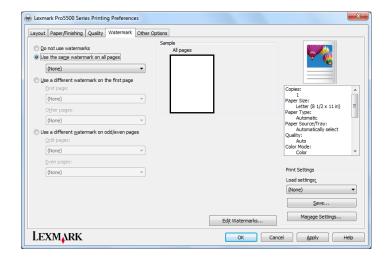
Above: The first tab of the Lexmark OfficeEdge Pro5500 print driver, Layout, enables users to specify Number of Copies, Duplex, Page Layouts, Booklet, Poster, and set Dry Times. Users can also create custom preset settings using the Manage Settings option located on the bottom right, allowing users to avoid having to make multiple print settings every time they want to print a job, thereby reducing the chances of mistakes and misprints.



**Above:** The Paper/Finishing tab provides users with options for changing Paper sizes, Paper Types, Paper Source, and Output options.

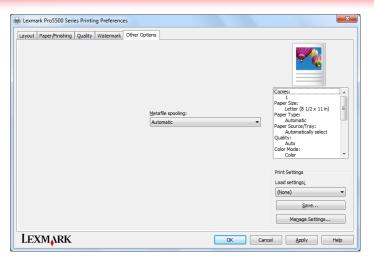


**Above:** The Quality tab provides users with options to change the Print Quality Settings (Auto, Draft, Normal, or Best). These settings change the print speeds and the image quality. Here users can also change the Output Color, Color Preference, and select "Print Color Text as Black".



**Above:** On the Watermark tab, users can apply watermarks to printed pages, create their own watermarks, and specify which pages the watermarks will appear on.





**Above:** The Other Options tab controls the remaining printer driver options such as Metafile Spooling which gives the user the ability to specify the format in which to store printing information on their disk while a print job is waiting to be printed.

#### **ROUTINE MAINTENANCE**

The Lexmark OfficeEdge Pro5500 displays animated, stepby-step instructions for routine tasks, such as replacing ink. BERTL found these animated screens very helpful when performing these routine maintenance tasks.



Maintenance Checklist	
Load ink while running?	No
Requires rear access for access to maintenance and misfeed items?	Yes
Requires side access for access to maintenance items?	No
All-in-one imaging units?	No
User-disposable waste item(s)?	Yes

#### **REPLACING INK**



**Above:** In order to change the Lexmark OfficeEdge Pro5500 ink cartridges, the user must first open the front panel by pulling this door down.



**Above and below:** Once the door is down, the user can then replace the ink cartridge by pushing the release button and pulling the unit out for replacement.





#### **MISFEED ACCESS**



**Above:** The document feeder's misfeed area is accessed by lifting up the DADF cover.



**Above and below:** Misfeeds can be cleared in the rear duplex area by removing the back cover and clearing any misfeeds.



#### **CLIENT UTILITIES AND DEVICE MANAGEMENT**

In order to take the best and most efficient advantage of a device and its capabilities, as well as ensure maximum uptime, clients need an efficient way to access and monitor the device. Lexmark offers many features and options, including its time-saving apps SmartSolutions, Programmable Shortcuts, and an Embedded Web Server, All of these save money and increase productivity for all users. Below are examples of the more than 90 available SmartSolutions apps.



**Scan to Box:** Users can easily digitize and upload important business information to their Box.net account.

Box Business and Box Enterprise put an end to the FTP productivity drain while enhancing your professional image. Easily upload content, organize it into folders, share links to files and manage file/folder permissions.

- Keep Content Organized Box makes it easy to upload and organize all your files – documents, spreadsheets, presentations, images, audio and video files, you name it – in just a few clicks.
- Share Files Quickly and Easily With Box, you share content with your team – and external partners and vendors – just by sending a link.
- Manage Content Access With Box, you define who can access and edit specific files and folders. You also get the reassurance of passwordprotecting shared links.



**Scan to File:** Users can quickly scan and save documents in a designated location on their computers.



**Scan to E-Mail:** With one-touch scan a document and e-mail it to a pre-set list of contacts.



**Eco-Copy:** Turn on environmentally friendly copy settings such as 2-sided and N-Up.



**Print a File:** On-demand file printing for documents that are printed regularly.





The Lexmark Mobile Printing App, which is designed for Android and Apple iOS smartphones and tablets, allows users to print from virtually anywhere directly to the Lexmark OfficeEdge Pro5500 or any other

Lexmark printer introduced since 2005. To get started, the user simply downloads the Lexmark Mobile Printing App from the Android App Store or the iTunes Store and they are ready to print. Using their mobile device to locate the device, they simply send their documents to the device and pick up the pages. Users can also download Apple's AirPrint to easily print wirelessly from their iPad, iPhone or iPod touch.

#### **LEXMARK MARKVISION ENTERPRISE**

Lexmark's award-winning Markvision® Enterprise (MVE) is free browser-based software that gives complete visibility into an entire fleet of network printers and multifunction devices regardless of manufacturer. The advanced, yet easy-to-use, toolset provides everything needed to efficiently discover, configure, monitor and manage devices throughout their lifecycle. To coordinate the multiple tasks involved with managing devices, the software is divided into four service areas: Asset Manager, Policies, Service Desk, and Event Manager. This roles-based design benefits administrators and users alike. Administrators can grant access based on individual user's responsibilities, and users are presented with only the features and functions they need to accomplish their jobs.

#### **Asset Manager**

Markvision Asset Manager discovers the devices, collects information from them, and allows a user to organize devices into groups so they can perform searches, efficiently schedule tasks and keep track of assets throughout their lifecycle.

With Asset Manager, users can:

- Auto-discover devices or import a list of their devices.
- Create discovery profiles and run them on a scheduled basis to keep their list of assets up to date.
- Audit devices to gather information, such as installed features, options, page counts and other statistics.
- Search and group devices based on attributes and then bookmark the results so users can access them any time.
- Track assets throughout their lifecycle and automatically monitor for changes. The lifecycle states are New, Managed, Managed-Changed, Managed-Missing, Managed-Found, Retired and Unmanaged.
- Generate inventory reports in PDF or CSV format to better understand the makeup of the user's fleet and share information with decision makers.

Once a user has discovered and organized their devices, Markvision Policies makes it easy to configure them, update their settings and ensure the devices remain properly configured over time — all from a central location through your Web browser.

With Policies, users can:

- Create reliable, flexible policies that define how you want particular models to be configured.
- Automatically check devices for conformance against their policy.
- Enforce policies, either manually or automatically, to keep devices configured exactly the way they have defined.
- Update firmware and automatically ensure devices are kept at the correct firmware level.

#### Service Desk

Markvision Service Desk lets a user interact with their devices in real time, giving them the tools they need to troubleshoot and correct issues as quickly as possible.

With Service Desk, users can:

- · View the status of a device.
- View policy information to quickly identify if the device is in conformance with its policies and enforce them if the settings have been changed.
- Remotely interact with the device, either through the device's embedded Web page or through the remote operator panel. Access to the remote operator panel is supported on all newer Lexmark models and allows you to change settings as if you were physically at the device.

#### **Event Manager**

Whereas Service Desk allows a user to intervene when a problem occurs, Markvision Event Manager helps a user intercept issues by proactively monitoring your devices, alerting you of events, and launching automatic actions when those events occur.

With Event Manager, a user can:

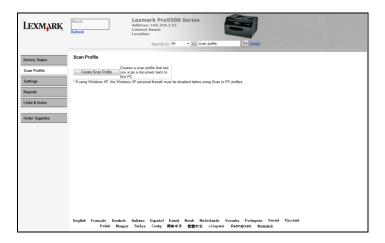
- Listen for events in your fleet, such as low consumables or error conditions.
- Automate your response to an event once the alert is received using either an e-mail notification or, if a custom action is required, an executable command line. Markvision Enterprise is a Web-enabled client server device management application designed for IT professionals. The server discovers and communicates with devices on the network, and provides the information to the client. The client displays the information through an intuitive, roles based interface so users can easily manage and report on their devices.

#### **Policies**

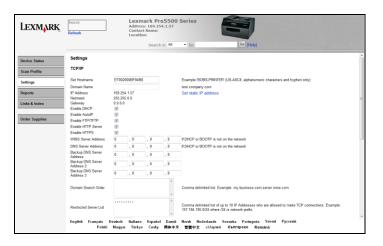




**Above:** The Lexmark OfficeEdge Pro5500 provides a Web-based printer home page which enables users to quickly check the status of the device and consumables.



**Above:** The Scan Profile screen enables users to create a scan profile that lets them scan a document back to their PC.



**Above:** Authorized users can view and configure network settings from the printer home page.



**Above:** Administrators can manage address books by adding and deleting addresses as needed.



**Above:** Administrators can configure the system so that specified users are automatically sent an e-mail message indicating that a specified status condition has occurred, such as the ink is low.

## **Ease of Use**

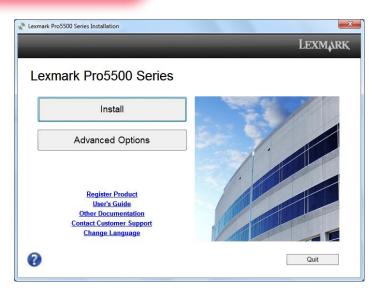
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**Above:** Users can conveniently print reports detailing device settings as well as reports detailing fax call and job logs.



**Above:** The Links & Index view provides convenient shortcuts to various configuration settings, as well as to Lexmark's Web site for firmware upgrades and Lexmark technical support. Users can also order supplies via the Lexmark website by selecting the Order Supplies screen.



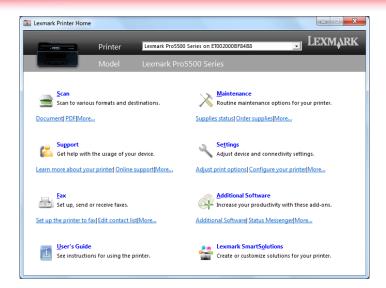
**Above:** Lexmark provides a very easy-to-use utility for automated installation of the OfficeEdge Pro5500. Overall, BERTL found it easy to install the device.



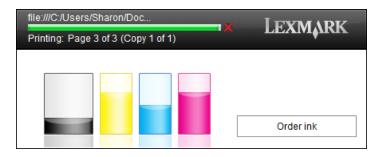
**Above:** The Lexmark OfficeEdge Pro5500 installation wizard offers users the option of connecting their new device using a wireless connection, USB cable, or an Ethernet connection.

## **Ease of Use**

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**Above:** Lexmark Printer Home utility offers users a complete guide to all of the device's features and functions with troubleshooting and maintenance information. Users can also perform maintenance on the device such as; clean cartridges, align cartridges, and check ink levels.



**Above**: Also provided is a status utility that provides "popup" alerts that indicate the current status of jobs and ink levels.

#### WHAT BERTL LIKED

- The print driver is easy to navigate, and provides an exceptionally easy-to-use user interface.
- Performing common tasks such as clearing misfeeds and changing ink was simple to accomplish.
- Using the front USB and SD Card ports to store scanning documents and print from was very easy and effortless.
- The Scan to E-mail solution on the control panel provides the user with all the fields and options needed to quickly send an E-mail with a scanned attachment.
- Control panel consists of a 4.3 inch color touch screen and an Eco-mode function which dims the backlight and enables power saving.
- Connect directly to the web and create customized solutions via Lexmark's SmartSolutions.
- User-friendly installation software gets the Lexmark OfficeEdge Pro5500 out of the box and running smoothly on your network in minutes.
- Built-in wireless, Ethernet, and USB connectivity.
- Lexmark's Printer Home software offers a range of maintenance tools such as clean and align ink cartridges and advanced scan with the ability to convert virtually any document to text using OCR.
- Lexmark's Embedded Web Server is a very easy to use web-based solution that provides device, consumables, and job status. It also enables administrators to easily monitor and configure the system, as well as manage fleets of devices from any workstation on the network.
- Lexmark's status messenger makes monitoring jobs more sufficient.
- This device is supported by Lexmark Markvision Enterprise (MVE) which provides a vast range of capabilities for monitoring and administrating networkconnected printers across the enterprise. With it, network administrators can quickly and efficiently discover, organize, group, configure and upgrade groups of network devices. Administrators can also quickly assess the status and configuration of network devices.
- MVE's client-server component is responsible for discovering and communicating with devices on the network and providing information about those devices to connected clients. The client is responsible for displaying information about the devices to a user and providing them with an interface to manage those devices.
- The Lexmark Mobile Printing App allows mobile workers to print directly from their mobile devices and retrieve documents from their OfficeEdge Pro5500.

#### WHAT BERTL WOULD LIKE TO SEE

 BERTL found that the Lexmark Pro5500 was very easy to use and maintain on a daily basis.



## **User Accessibility**

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#### **USER ACCESSIBILITY**

In the United States, Section 508 legislation prohibits government agencies from purchasing devices that are not accessible to those with physical impairments. For this reason, and the corporate world's increased focus on providing a better work environment for all, many MFP manufacturers increasingly are providing more user-friendly features for physically- and visually-impaired users.

Common design features include tilting control panels, giving wheelchair-bound users a better view of the screen, and larger display options for those with impaired vision. Voice navigation and Braille also are becoming increasingly popular. Easy access to the paper path for misfeed removal and front access to toner supplies also make a device more user-friendly.

The Lexmark OfficeEdge Pro5500 has exceptional accessibility features that are designed for convenient accessibility for everyone in the workplace. These systems incorporate user-friendly features such as simple control panel and easy to load paper feeders, all which are in compliance with Section 508 requirements.

#### **USER ACCESSIBILITY PAPER JAM REMOVAL**

Paper jam removal is a simple process for those in a wheelchair. There are no hidden jam points and all access areas are at a comfortable height and angle for access from the front and back of the device. Adding paper and replacing ink is also a simple process from a wheelchair as well. Ink doors open easily during the ink replacement process and the ink cartridges are designed to be lighter and easy to replace, so most users can do accomplish this with one hand. The Lexmark OfficeEdge Pro5500 also offers a distinctive, professional look while weighing only 35.4 lbs., making it easy for almost anyone to maneuver.

#### WHAT BERTL LIKED

- The Lexmark OfficeEdge Pro5500 has exceptional accessibility features that are designed for convenient accessibility for everyone in the workplace. These systems incorporate user friendly features that make them easier to operate and align with Section 508 requirements.
- BERTL liked that users can easily replace the OfficeEdge Pro5500's consumables.
- The paper feeder is easy to adjust and fill. Users can easily access misfeed areas on the device.
- The touch screen provides audible feedback to the end user.

#### WHAT BERTL WOULD LIKE TO SEE

 BERTL was very satisfied with the Lexmark OfficeEdge Pro5500's accessibility features.



#### **MEDIA INPUT**

The Lexmark OfficeEdge Pro5500 comes standard with one 300-sheet paper tray that can support paper sizes from 3 x 5 inches up to 8.5 x 14 inches and paper weights up to 110 lb (413  $g/m^2$ ) Users can add an optional 550-sheet paper tray for a maximum paper capacity of 850 sheets.

Media Handling Checklist		
Automatic Document Feeder	50-sheet Single Pass Duplexing Automatic Document Feeder DADF	
Two-Sided Printing	Yes	
Custom Sizes	3 x 5 in. to 8.5 x 14 in.	
Supported Paper Weights	18 to 110 lb (67 to 413 g/m <sup>2</sup> )	
Supported Paper Types	Card Stock, Envelopes, Labels, Plain Paper, Transparencies, Hagaki Card, Iron-On Transfers, Photo Paper, Heavy Weight Matte Paper	



**Above:** The Lexmark OfficeEdge Pro5500 shown here comes standard with one 300-sheet paper tray.

#### **LOADING MEDIA**

Media Loading Checklist	
Drop-in loading of a full ream of paper?	No
Spring-loaded ramps in paper trays?	
Geared media size side guides?	
Captured rear media guide?	
Automatic paper size detection?	

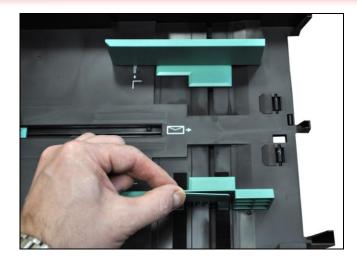


Above: The standard 300-sheet paper tray.



**Above and next page:** In order to adjust the 300-sheet paper tray to accommodate different paper sizes, the user squeezes and slides these green guides into place.





#### WHAT BERTL WOULD LIKE TO SEE

• BERTL was satisfied with the Lexmark OfficeEdge Pro5500's media-handling capabilities.



**Above:** The Lexmark OfficeEdge Pro5500 has a high output capacity of up to 150 sheets.

#### WHAT BERTL LIKED

- The 300-sheet paper tray is easily adjusted to accommodate different paper sizes.
- Full sensing output bin can hold up to 150 sheets for longer print runs.
- Versatile media handling and flexibility, with the ability to print on stock as heavy as 110 lb (413 g/m²) and sheets up to 8.5" x 14".
- Prints and copies on up to 8.5" x 14" paper.
- Accepts a wide range of media types including Card Stock, Envelopes, Labels, Plain Paper, Transparencies, Hagaki Card, Iron-On Transfers, Photo Paper, Heavy, and Weight Matte Paper.



## **Cost of Ownership**

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#### **OVERVIEW**

Purchasing an inkjet printer is often a difficult decision for users to make when they have a limited capital expenditure budget. Many users often fail to look beyond the initial purchase price. A typical approach most users take is to focus on the list price of the equipment without considering the total cost of ownership, which include costs such as consumables and energy usage.

#### **COST OF OWNERSHIP**

The cost of owning an inkjet printer goes beyond the purchase price of the equipment. Users need to take into consideration the cost of ink and other consumables associated with owning the device. Additional costs to consider include energy usage, financing costs and service calls outside of the contract. The total cost of ownership (TCO) of an inkjet printer is comprised of a calculation of the device's purchase price, device specific consumables, paper, maintenance costs, financing costs, and human factors such as training time and device management.

#### **CONSUMABLES**

The number of components that require periodic replacement can vary considerably depending on the type of product, model, style, manufacturer, and feature set. The ink cartridges are typical components that require periodic replacement. When making a purchasing decision, users should consider the life expectancy of the components along with the ink yield of the cartridges. Users should also consider adopting and enforcing mandatory print driver settings such as duplex printing, 2-up printing and printing in monochrome as these have the potential to realize large cost savings. By implementing these policies, users can reduce their electrical usage costs as well as conserve on paper and inks costs. All inkjet printers will require ink replacement, and the life of components as well as the ink yield varies by model and manufacturer.

#### **COST OF USAGE BASED ON CONSUMABLES**

The tables that follow provide a cost per page breakdown based on the street price of the device and manufacturer rated ink yields.

#### **Cost Per Page for Color Devices**

This table demonstrates the cost per page based on the claimed page yields and street price provided by the manufacturer. Ink yields are based on published figures by the manufacturer. Page yield estimates were determined by the manufacturer using the ISO/IEC 19798 standard. The actually page yields may vary based on image, area coverage and print mode. Users have the option of buying standard or high capacity XL ink cartridges.

STANDARD PRINTER COST PER PAGE / CONSUMABLES			CONSUMABLES COST		TOTAL COST PER PAGE	
TYPE	NAME/ID	PAGE YIELDS₁	TOTAL	COST PER PAGE	MONO (K)	COLOR (CMY)
Standard Black Ink	Lexmark OfficeEdge Pro5500 Standard 200 Black Ink Cartridge	625	\$25.99	\$0.0416		
Standard Cyan Ink	Lexmark OfficeEdge Pro5500 Standard 200 Cyan Ink Cartridge	500	\$21.99	\$0.0440		\$0.0440 / \$0.0212 (High Capacity)
Standard Magenta Ink	Lexmark OfficeEdge Pro5500 Standard 200 Magenta Ink Cartridge	500	\$21.99	\$0.0440		
Standard Yellow Ink	Lexmark OfficeEdge Pro5500 Standard 200 Yellow Ink Cartridge	500	\$21.99	\$0.0440	\$0.0416 / \$0.0148	
High Capacity Black Ink	Lexmark OfficeEdge Pro5500 High Capacity 200XL Black Ink Cartridge	2,500	\$36.99	\$0.0148	(High Capacity)	
High Capacity Cyan Ink	Lexmark OfficeEdge Pro5500 High Capacity 200XL Cyan Ink Cartridge	1,600	\$33.99	\$0.0212	,	
High Capacity Magenta Ink	Lexmark OfficeEdge Pro5500 High Capacity 200XL Magenta Ink Cartridge	1,600	\$33.99	\$0.0212		
High Capacity Yellow Ink	Lexmark OfficeEdge Pro5500 High Capacity 200XL Yellow Ink Cartridge	1,600	\$33.99	\$0.0212		

<sup>1</sup> Toner yields are based on published figures by the manufacturer. Page yield estimates were determined by the manufacturer using the ISO/IEC 19798 standard.



#### Cost of Ownership Over A 5-Year Period

The table below shows what the running costs over a 5-year period would be for this device using the XL high capacity ink cartridges based on the usage estimates shown in the table below. Figures are based on the cost of the device, estimated monthly usage, and an estimated cost per page. Costs do not include financing charges, service agreements or the cost of paper. Prices are based on manufacturer published figures as of January 2012, and are subject to change based on market conditions.

TOTAL COST OF OWNERSHIP BASED ON USAGE LEVELS									
DEVICE PRICE	USAGE ESTIMATES	PAGES PRINTED PER MONTH	COST PER PAGE		RUNNING COSTS PER MONTH		TOTAL COST PER MONTH	5-YEAR RUNNING	TOTAL 5- YEAR
			MONO (K)	COLOR (CMY)	MONO (K)	COLOR (CMY)	(Color + Mono = CMYK)*	COSTS	COSTS
\$399.00	Light Usage	500	\$0.0148	\$0.0212	\$3.70	\$5.30	\$9.00	\$540.00	\$939.00
	Normal Usage	1000	\$0.0148	\$0.0212	\$7.40	\$10.60	\$18.00	\$1,080.00	\$1,479.00
	Heavy Usage	2500	\$0.0148	\$0.0212	\$18.50	\$26.50	\$45.00	\$2,700.00	\$3,099.00

Total cost per month assumes an even split between monochrome and color pages printed per month. Actual costs may vary depending on actual page coverage.

#### **ELECTRICAL USAGE AND COST**

Power usage is another hidden cost associated with owning and running a printer. Once plugged into an outlet and the power is turned on, these printers can sit drawing electricity whether the device is in use or sitting idle waiting for the next job. Most inkjet printers today are ENERGY STAR® certified. ENERGY STAR® is a federal standard applied to office equipment for the purpose of rating the energy efficiency of the equipment. ENERGY STAR® certified inkjet printers save energy by powering down and going to "sleep" when not in use, resulting in a reduction of energy use and in electric bills. Similar programs have been adopted around the globe by other countries. The Lexmark OfficeEdge Pro5500 Color MFP has been ENERGY STAR® certified and also ships with a Sleep Mode that is defaulted to 30 minutes (Sleep Mode can be adjusted between Now - 240 minutes). Certified ENERGY STAR® printers must be in compliance with U.S ENERGY STAR® Program mandates which dictate the maximum sleep mode power usage based on the type of device, and a minimum time to sleep mode. Electrical costs are based on the cost per Kilowatt hour (kWh) of US \$0.0988. The Kilowatt usage for each mode is based on the manufacturer rated electrical usage for this device. Calculations were made using the default power settings and available power modes and assume that the device is left plugged in and not turned off over the weekend. The calculations in the below chart are based on printing 12 jobs over the course of a 10 hour business day, each job consisting of 12 pages. The daily number of jobs printed is based on the ENERGY STAR® Imaging Equipment Operational Mode Test Procedure. Figures provided and show the cost of using the device on a daily, weekly, monthly, and yearly basis. User's actual energy usage will vary depending on changes made to the timeout settings and the number of jobs and pages printed on a daily basis.

TOTAL COST OF ENERGY BASED ON POWER CONSUMPTION LEVELS								
USAGE <sup>1</sup>	POWER USAGE (kwh/wk) <sup>4,5,6</sup>	ELECTRICITY COSTS						
USAGE		KILOWATT PER HOUR (kWh) <sup>2, 3</sup>	WEEKLY	MONTHLY (Based on 4.348 Weeks)	YEARLY			
Sleep Mode	5.3	\$0.0988	\$0.52	\$2.28	\$27.32			
Off Mode	0.55	\$0.0988	\$0.05	\$0.24	\$2.84			
Ready Mode	12	\$0.0988	\$1.19	\$5.16	\$61.86			
Copying Mode	36	\$0.0988	\$3.56	\$15.47	\$185.58			
Scanning Mode	19	\$0.0988	\$1.88	.88 \$8.16				
Printing Mode	37	\$0.0988	\$3.66	\$15.89	\$190.74			

<sup>&</sup>lt;sup>1</sup> Power Usage is based on the manufacturer rated electrical usage. See Manufacturer Rated Usage table for specifics.

<sup>&</sup>lt;sup>6</sup> Based on ENERGY STAR Imaging Equipment Specifications for Typical Electricity Consumption (TEC)Standard.



<sup>&</sup>lt;sup>2</sup> Source: U.S. Energy Information Administration, "Form EIA-826 Database Monthly Electric Sales and Revenue Data," ed. Charlene Harris-Russell, Release Date April 15, 2011 <a href="http://www.eia.doe.gov/cneaf/electricity/page/eia826.html">http://www.eia.doe.gov/cneaf/electricity/page/eia826.html</a>.

<sup>&</sup>lt;sup>3</sup> Electricity costs are based on the 12 month average retail price in the U.S across all sectors through December 2010.

<sup>&</sup>lt;sup>4</sup> Daily Energy usage is based on ENERGY STAR Imaging Equipment Operational Mode Test Procedure, April 21, 2006

<sup>&</sup>lt;sup>5</sup> Weekly power usage independently determined by Energy Star, http://www.energystar.gov/ia/products/prod\_lists/image\_equip\_prod\_list.xls

## **Cost of Ownership**

January 2012
Lexmark OfficeEdge Pro5500
www.BERTL.com

#### WHAT BERTL LIKED

- Based on ISO/IEC 19798 standards total cost per page using the standard ink cartridges in monochrome is \$0.0416 and \$0.0440 in color.
- Based on ISO/IEC 19798 standards total cost per page using the high capacity XL ink cartridges in monochrome is \$0.0148 and \$0.0212 in color.
- Low monthly consumable costs are as low as \$3.70 in monochrome and \$5.30 in color with light use printing using high capacity XL ink cartridges.
- The Lexmark OfficeEdge Pro5500 is ENERGY STAR® certified.
- Based on the rated energy consumption in sleep mode, the electrical costs for this device is as low as \$27.32 a year.

#### WHAT BERTL WOULD LIKE TO SEE

• BERTL was very satisfied with the Lexmark OfficeEdge Pro5500 ink and electrical usage costs.



#### About BERTL

The success of an organization depends on its ability to manage its information and assets. An effective workflow process requires the complex integration of information, devices, software and people.

IT managers, office managers, and other knowledge-management professionals need to know what digital imaging devices would best serve their specialized workflow processes.

BERTL's services are designed around this real-world framework, delivering business consumers the independent analysis and insight needed to make critical decisions about digital imaging's role in their organization.

## Independent Analysis and Insight

BERTL's reports, comparative data, and strategic guides look at digital imaging through the eyes of the business user. The research examines not only the technical features, but also vertical market applications, and business benefits. The impact on worker productivity is a primary concern.

BERTL is 100% independent. Business users worldwide trust BERTL for objective, unbiased analysis of digital imaging systems.

#### **BERTL Services**

## **Reports and Star Ratings**

BERTL analysts provide detailed reports on the technical and practical benefits of thousands of color and monochrome workgroup, office, graphic arts, and production devices.

## **Product Specifications**

DataCheck provides the most current competitive data on printers, copiers, MFPs, fax devices, wide format printers, scanners, and more.

## **News, Interviews, and Analysis**

The *iTchat* online magazine provides insight into the dynamics and trends of the digital imaging marketplace through interviews, feature articles, and software reviews.

#### **BERTL** Awards

BERTL analysts recognize the leading devices and software solutions in the semiannual BERTL's Best awards. BERTL also honors the performance of manufacturers in the annual Readers' Choice selections.

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