



West Virginia Purchasing Division

2019 Washington Street, East
Charleston, WV 25305
Telephone: 304-558-2306
General Fax: 304-558-6026
Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header

List View

General Information

Contact

Default Values

Discount

Document Information

Procurement Folder: 79638

SO Doc Code: CRFQ

Procurement Type: Central Purchase Order

SO Dept: 0932

Vendor ID: VS0000002697 

SO Doc ID: DRS1500000006

Legal Name: BUSINESS PRODUCTS OF AMERICA LLC


Published Date: 4/1/15

Alias/DBA:

Close Date: 4/16/15

Total Bid: \$32,370.00

Close Time: 13:30

Response Date: 04/16/2015 

Status: Closed

Response Time: 11:54

Solicitation Description: REQUEST FOR QUOTE TO PROVIDE 415 ALL IN ONE PRINTERS

Total of Header Attachments: 0

Total of All Attachments: 0



Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**State Of West Virginia
 Solicitation Response**

Proc Folder : 79638

Solicitation Description : REQUEST FOR QUOTE TO PROVIDE 415 ALL IN ONE PRINTERS

Proc Type : Central Purchase Order

Date issued	Solicitation Closes	Solicitation No	Version
	2015-04-16 13:30:00	SR 0932 ESR04161500000003312	1

VENDOR

VS0000002697

BUSINESS PRODUCTS OF AMERICA LLC

FOR INFORMATION CONTACT THE BUYER

Evelyn Melton
 (304) 558-7023
 evelyn.p.melton@wv.gov

Signature X **FEIN #** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	PRINTERS, HP OFFICE JET PRO 8610, OR EQUAL	415.00000	EA	\$78.00	

Comm Code	Manufacturer	Specification	Model #
43212100			

Extended Description :	PRINTERS - HP OFFICE JET PRO 8610 OR EQUAL ADDENDUM NO. 2 IS ISSUED:
-------------------------------	---

RICOH
imagine. change.

Ricoh Aficio SG 3100SNw/ SG 3110SFNw

Multifunction GELJET™ Printer

✓ Copier ✓ Printer ✓ Facsimile ✓ Scanner



SG 3100SNw

29 ppm
monochrome
and full-color

SG 3110SFNw

29 ppm
monochrome
and full-color

Everything looks better in color

Brilliant, high-quality color doesn't have to come at a high price. Choose the RICOH® Aficio® SG 3100SNw/ SG 3110SFNw GELJET multifunction printer and perform more tasks with incredible ease and value. This system combines the exceptional color, speed, duplexing and versatile media handling of a laser printer with the convenience and affordability of inkjet technology. Its fast-drying, waterproof viscous inks allow users to reduce full-color printing and copying costs without compromising quality. In addition, this multifunction printer offers standard wireless connectivity in a compact design for central placement to all users in home offices, workgroups, retail outlets, educational settings and large organizations.

Enhanced features, productive results

This versatile system prints up to 29 full-color or black-and-white pages per minute. Use the ID Card Copy feature to copy small, two-sided documents — including insurance cards, drivers' licenses, and more — onto one side of a sheet of paper. Print to the SG 3100SNw and SG 3110SFNw from personal mobile devices such as smartphones and tablets*. Choose the SG 3110SFNw for more robust features, including PCL 5c/6 printing support and walk-up Super G3 faxing.

*Using the Smart Device Print app.



Less space, more convenience

Ricoh engineered this lightweight system to fit seamlessly into any environment and any workflow — including wireless network connectivity — for convenient placement anywhere. With the front-access design, users can program jobs, load paper, clear misfeeds and replace print cartridges quickly and easily, whether the device is placed on a desk, in a cabinet or under a counter. It combines printing, scanning, copying and faxing in a single Windows- and Macintosh-compatible device, so users can manage more everyday tasks, including affordable color output, with ease and efficiency.



Versatile media support, seamless operation

The SG 3100SNw/SG 3110SFNw comes standard with a 250-sheet paper capacity that can be expanded to 850 sheets to minimize interruptions without increasing footprint. This system accommodates a wide range of media sizes up to 8.5" x 14" and up to 90 lb. Index in paper weight. An optional 100-sheet Multi-Bypass Tray accommodates media as heavy as 140 lb. Index for envelopes, postcards and direct mail printing, plus stocks up to 51" long for in-house full-color banner and retail signage production (simplex only).



Designed to give you more control of your environment

Intuitive administration, user-friendly controls

The SG 3100SNw/SG 3110SFNw is ideal for cost-conscious users who require affordable color output and multifunction performance for minimal investment. The angled 4-line LCD control panel offers intuitive controls and step-saving function buttons to speed workflow. Plus, administrators can use Web Image Monitor to track device status in real-time via any web browser and to receive maintenance email alerts. For added convenience, the SG 3110SFNw features a front USB 2.0 Host Interface for Scan-to-USB functionality and easy printing from PictBridge™ enabled digital cameras.



Crisp, durable high-quality output

Enjoy laser quality at the inkjet price. The SG 3100SNw/SG 3110SFNw multifunction system produces brilliant color images with up to 3600 x 1200 dpi equivalent resolution for professional-looking documents. Ricoh's proprietary GELJET viscous inks are fast drying and water resistant. The viscous ink's fast-drying properties allow for reliable two-sided prints, copies, and faxes onto plain paper. Produce eye-catching color output onto heavyweight media, including postcards, menus, coupons and more – that won't smudge or bleed even when exposed to highlighters or moisture.



Eco-friendly commitment, exceptional value

The SG 3100SNw/SG 3110SFNw provides more green for you and for the environment. With automatic duplex printing, users can print on both sides of standard paper stocks to reduce paper consumption without compromising output quality. Economy Color Mode delivers high-quality drafts for about the same cost as black-and-white output. The permanent print heads never need replacing, and users can replace high-capacity print cartridges in seconds to simplify maintenance. The SG 3100SNw and SG 3110SFNw are economical and eco-friendly solutions that generate little heat and have low power consumption. In Energy Saver mode, these MFPs generate as little as 3W for the SG 3100SNw and 4W for the SG 3110SFNw.



Ricoh Aficio SG 3100SNw/SG 3110SFNw

SYSTEM SPECIFICATIONS



General Specifications

Ricoh Aficio SG 3100SNw	Part # 405777
Ricoh Aficio SG 3110SFNw	Part # 405780
Configuration	Desktop Multifunction
Ink Type	Pigment-based Viscous Ink (All four colors)
Control Panel	16 characters x 4-line monochrome LCD
Print Speed	High Speed Mode*: Black & White: 29 pages-per-minute (Letter) Full-Color: 29 pages-per-minute (Letter) *300 x 150 dpi using Ricoh Original Test Chart Speed Priority Mode**: Black & White: 10.5 pages-per-minute (Letter) Full-Color: 9.0 pages-per-minute (Letter) (SG 3100SNw – RPCS) Full-Color: 8.0 pages-per-minute (Letter) (SG 3110SFNw – PCL) **600 x 300 dpi using JEITA J6 Color Chart & JEITA J1 BW Chart
First Print Speed	Black & White: 5.5 seconds or less Full-Color: 7 seconds or less
Recovery Time to Print Ready Mode	35 seconds or less (from main power switch on)
Automatic Duplexing	Standard
Automatic Document Feeder	35 sheets
Paper Sizes	Standard Paper Tray and Optional Multi-Bypass Tray: Letter (8.5" x 11"), Legal (8.5" x 14"), Half Letter (5.5" x 8.5"), Executive (7.25" x 10.5"), F (8" x 13"), Folio (8.25" x 13"), Foolscap (8.5" x 13"), A4 (210 x 297 mm), A5 (210 x 148 mm), A6 (105 x 148 mm) Envelopes: Com10, Monarch, C6, C5, DL Custom Size (Standard Tray): 3.5" x 5.5" to 8.5" x 14" (88 x 139 mm – 216 x 356 mm) Custom Size (Optional Multi-Bypass Tray): 2.1" x 5.0" to 8.5" x 51" (55 x 127 mm – 216 x 1296 mm) Optional Paper Feed Unit: Letter (8.5" x 11"), Legal (8.5" x 14"), Executive (7.25" x 10.5"), F (8" x 13"), Folio (8.5" x 13"), Foolscap (8.25" x 13"), A4 (210 x 297 mm), A5 (210 x 148 mm), A6 (105 x 148 mm) Custom Size: 4.1" x 5.8" to 8.5" x 14" (105 x 148 mm – 216 x 356 mm) When Duplexing: 5.5" x 8.5", 7.25" x 10.5", 8.5" x 11"
Paper Weight	Standard Paper Tray: 16 – 42 lb. Bond/90 lb. Index (60 – 163 g/m) Optional Multi-Bypass Tray: 16 – 68 lb. Bond/140 lb. Index (60 – 256 g/m) Optional Paper Feed Unit: 16 – 28 lb. Bond (60 – 105 g/m)
Standard Paper Supply	250-Sheet Paper Tray
Optional Paper Supply	100-Sheet Multi-Bypass Tray 250-Sheet Paper Feed Unit (1 or 2 may be added)
Maximum Paper Capacity	850 sheets
Output Capacity	100 sheets (Face up/Face down; User Selectable via print driver menus)
Acceptable Paper Types	Standard Paper Tray: Plain Paper, Inkjet Plain Paper*, Glossy Paper*, Postcard, Inkjet Postcard, Envelope* Optional Multi-Bypass Tray: Plain Paper, Inkjet Plain Paper*, Glossy Paper*, Postcard, Inkjet Postcard, Envelope*, Thick Paper* Optional Paper Feed Units: Plain Paper, Inkjet Plain Paper*, Glossy Paper* *Simplex only
Dimensions (WxDxH)	15.7" x 17.2" x 12.9" (399 x 436.5 x 329.5 mm) (mainframe only) 33.8 lb. (15.3 kg)
Weight	
Power Requirements	100-120 V, 50/60 Hz

Power Consumption	SG 3100SNw: Printing: 30.2 W; Energy Saver: 3 W SG 3110SFNw: Printing: 30.4 W; Energy Saver: 4 W ENERGY STAR version 1.2 compliant
Safety Regulations	US: UL60950-1, FCC Part 15, Subpart B/C/E Canada: CAN/CSA C22.2 No. 60950-1, IC ES-003, IC RSS-210

Print Specifications

Processor	800 MHz
Memory	SG 3100SNw: 192 MB RAM Std./Max. (Printer: 64 MB + Scanner 128 MB) SG 3110SFNw: 256 MB RAM Std./Max. (Printer: 128 MB + Scanner 128 MB)
Print Resolution	PCL 5c/6 : 300 x 150, 600 x 300, 600 x 600 dpi RPCS : 300 x 150, 600 x 300, 600 x 600, 600 x 1200, 1200 x 1200, 3600 x 1200 dpi (equivalent)
Fonts	13 International, 45 PCL (SG 3110SFNw only)
Printer Languages/Driver	SG 3100SNw: RPCS Raster SG 3110SFNw: RPCS Raster, PCL 5c, PCL 6, PictBridge
Standard Interfaces	High-Speed USB 2.0 Type B, 10/100Base-TX Ethernet, IEEE 802.11 b/g/n Wireless LAN TCP/IP (IPv4, IPv6)
Network Protocols	Windows XP, Vista, Server 2003, Server 2008, 7 Mac OS X v.10.5+ Citrix Presentation Server 4.0+; XenApp 5.0+ Novell NetWare via 3rd party gateway
Supported Environments	Status Monitor Web Image Monitor SmartDeviceMonitor SmartDeviceMonitor for Admin Accounting Report Package @Remote (limited support) DeskTopBinder Lite TWIN Scanner Driver LAN Fax Driver (SG 3110SFNw)
Software Utilities	

Copier Specifications

Maximum Copy Speed	29 copies-per-minute in B&W and Color
Multiple Copies	Up to 99
Copy Resolution	300 x 300 dpi (default), 600 x 600 dpi
Zoom	25% - 400% in 1% increments
Preset Reduction	65%, 78%, 93%
Preset Enlargement	129%, 155%, 400%
Image Density Adjustment	Automatic and Manual (5 levels)
Original Type Selection	Text, Photo, Text & Photo
Copier Features	Combine Copy (2-in-1, 2-in-1 two-sided), Color Settings (Color Balance, Sharper/Softer, Contrast – 5 level scales), Eject Paper (face up or face down), Auto Reduce/Enlarge, Auto Tray Switching, Duplex Copy, ID Card Copy, Memory Copy, Poster Mode (RPCS only)

Scanner Specifications

Processor	258 MHz
Scanner Type	Full-color & Grayscale
Optical Scan Resolution	Up to 600 x 600 dpi maximum
TWAIN Resolutions	100/150/200/300/400/600/1200 dpi
Scan-to Functions	Scan-to-Email, Scan-to-Folder (FTP/SMB), Scan-to-USB (SG 3110SFNw only)
Scan-to Resolutions	150 dpi, 300 dpi, 600 dpi* *Monochrome only
Supported File Formats	TIFF, JPEG, PDF
Address Book Capacity	Up to 150 scan destinations (shared with Fax on SG 3110SFNw)
Maximum Original Size	Platen: 8.5" x 11.7" ADF: 8.5" x 14"

Facsimile Specifications (SG 3110SFNw only)

Compatibility	Super G3
Modem Speed	33.6 Kbps with Auto Fallback to 2,400 bps
Compression Types	MH, MR, MMR
Original Size	5.5" x 5.5" to 8.5" x 14"
Fax Scan Resolutions	200 x 100 dpi (standard), 200 x 200 dpi (detail), 200 x 400 dpi (fine)
Fax Print Resolution	600 x 600 dpi
One-Touch Dials	20 locations
Broadcasting	Up to 100 numbers
Address Book Capacity	Up to 150 fax numbers (shared with Scanner on SG 3110SFNw)
Fax Features	Auto Answer (user adjustable between 1 – 16 rings), Auto Redial, Delayed Send, Immediate Transmission, Internet Fax (T.37 Simple Mode), LAN Fax (150-entry Address Book), Memory Transmission, On Hook Dial

Hardware Options

Multi-Bypass Tray	Part # 405759
Type BY1040	
Capacity	100 sheets
Acceptable Paper Size	2.1" x 5.0" – 8.5" x 11" (55 x 127 to 216 x 1296 mm), Envelopes
Acceptable Paper Weight	16 – 68 lb. Bond/140 lb. Index (60 – 256 g/m)
Dimensions (WxDxH) Weight	14.8" x 9.2" x 9.0" (376 x 234 x 230 mm) 5 lb. (2.3 kg)
Paper Feed Unit	Part # 405760
Type TK1160	
Capacity	250 sheets (1 or 2 may be added)
Acceptable Paper Size	4.1" x 5.8" – 8.5" x 14" (105 x 148 – 216 x 356 mm)
Acceptable Paper Weight	16 – 28 lb. Bond (60 – 105 g/m)
Dimensions (WxDxH) Weight	15.7" x 14.1" x 3.5" (399 x 360 x 90 mm) 11 lb. (5 kg)
USB 2.0 A/B Cable*	Part # 004051MIU
Length	6 feet

*USB 2.0 cable is not included with main unit and must be purchased separately.

Consumables & Yields

Consumables	Part #	Yield
Regular Yield Black Print Cartridge	Part # 405761	2,500 prints*
Regular Yield Cyan Print Cartridge	Part # 405762	2,200 prints*
Regular Yield Magenta Print Cartridge	Part # 405763	2,200 prints*
Regular Yield Yellow Print Cartridge	Part # 405764	2,200 prints*
Waste Ink Collector Unit	Part # 405783	27,000 prints*

*Declared yield values in accordance with ISO/IEC 24711. Actual yields may vary based on types of images printed and other factors.

For maximum performance and yield, we recommend using genuine Ricoh parts and supplies.

Specifications subject to change without notice.

Advanced Exchange Warranty

The Ricoh Aficio SG 3100SNw and SG 3110SFNw Multifunction GeJet Printers are under warranty against defects for a period of one year from the date of purchase. Consumables are under warranty for a period of 90 days from the date of purchase or until depleted, whichever comes first. Please refer to warranty documents shipped with the product for more details.



www.ricoh-usa.com

Ricoh Americas Corporation, Five Dedrick Place, West Caldwell, NJ 07006, 1-800-63-RICOH
RICOH and the Ricoh Logo are registered trademarks of Ricoh Company, Ltd. All other trademarks are the property of their respective owners. ©2012 Ricoh Americas Corporation. All rights reserved. The content of this document, and the appearance, features and specifications of Ricoh products and services are subject to change from time to time without notice. Products are shown with optional features. While care has been taken to ensure the accuracy of this information, Ricoh makes no representation or warranties about the accuracy, completeness or adequacy of the information contained herein, and shall not be liable for any errors or omissions in these materials. Actual results will vary depending upon use of the products and services, and the conditions and factors affecting performance. The only warranties for Ricoh products and services are as set forth in the express warranty statements accompanying them.





Ricoh Aficio SG 3110SFNw



HP Officejet Pro 8610 e

BACKGROUND INFORMATION	19296/USA	12087/USA
Dataquest Segment	NA	
SRP/Street Price	\$271/\$ not avail	\$ not avail/\$129.99
Manufacturing Status	New	New
Part Number	405780	A7F64A
Domestic Intro Date	October 2012	April 2014
OEM	Ricoh (Japan)	HP (China)
Also Sold As	Lanier SG 3110SFNw; Savin SG 3110SFNw	None
Replacement Model		
Replacement Date		
Distributed By	Dealers, direct and distributors	Dealers, direct sales, retail channel and Internet
Max Monthly Duty Cycle	10,000 impressions	30,000 impressions
Recommended Monthly Volume	Info not avail	250 to 1,500 impressions
TYPE	Full-color printer, MF	Full-color printer, MF
Configuration/Scanner	Desktop,digital	Desktop,digital
Technology	Inkjet	Inkjet
GENERAL SPECIFICATIONS/PAPER HANDLING		
First Copy Time	18 sec color/18 sec black	18 sec color/14 sec black
Multicopy (Ltr/Lgl/Ldgr)	29 cpm color/29 cpm black	11 cpm color/13 cpm black
Warm-up Time	35 sec	Info not avail
Std Paper Source(s)	Single drawer	Single drawer
Std Paper Capacity	250 sheets	250 sheets
Paper Weights	16-lb bond to 90-lb index	16 to 28 lbs
Bypass/Paper Weights	Opt 100-sheet/16-lb bond to 140-lb index	None/Not applicable
Max Paper Sources	3	2
Max Paper Capacity	850 sheets	500 sheets
Max Original Size	8-1/2 x 14	8-1/2 x 14
Output Size (Min/Max)	5-1/2 x 8-1/2/8-1/2 x 14	3 x 5/8-1/2 x 14
Copy Resolution	600 x 600 dpi	600 x 600 dpi
System Memory (Std/Max)	256-MB RAM/256-MB RAM	128-MB RAM/128-MB RAM
Duplex	Auto (1:2,2:1)	Auto (1:2,2:2,2:1)
Duplex Capacity/Paper Sizes	Unlimited/5-1/2 x 8-1/2 to 8-1/2 x 11	Unlimited/3 x 5 to 8-1/2 x 14
Document Feeder	Std ADF	Std RADF
Doc Feeder Speed/Capacity	Info not avail/35 orig	Info not avail/35 orig
Paper Weights	13 to 28 lbs	16 to 24 lbs
Sorter (Bins/Capacity)	None	None
Staple Sorter	None	None
Bins/Stapling Capacity	Not applicable	Not applicable
Stapling Positions	Not applicable	Not applicable
Finisher	None	None

Tray/Stapling/Position(s)	Not applicable	Not applicable
Other		Max speed (draft) 34 cpm color/34 cpm black, up to 1200 x 600 dpi,150-sheet output tray
SECURITY SPECS		
Network User Authentication	Info not avail	Not applicable
IP Address Filtering	Yes	Not applicable
MAC Address Filtering	Info not avail	Not applicable
HDD Overwrite	Not applicable	Not applicable
Max Overwrites	Not applicable	Not applicable
HDD Encryption	Not applicable	Not applicable
Secure Print	Info not avail	Not applicable
Encrypted Secure Print	Info not avail	Not applicable
Encrypted PDF Mode (Encrypted Scanning)	Info not avail	Not applicable
IPsec	Yes	No
Secure Sockets Layer (SSL)	Yes	Yes
SNMPv3	Yes	Yes
Transport Layer Security	Yes	Yes
Other	POP, SMTP authentication	Device firewall configuration, control panel lock, password protect EWS, SSL/TLS (HTTPS), IPV6
CONTROL PANEL		
	Keypad	Color touch screen
Quantity Selector	1 to 99 (0 to 9 keypad)	1 to 99 (0 to 9 keypad)
Message Display	Yes	Yes
Help Key	No	Yes
FEATURES		
Automatic Features	ASO, ATS	Not applicable
Book Copy	No	No
Booklet Mode	No	No
Color	Std	Std
Copy Control	No	No
Covers	No	No
Editing	No	No
Energy-Save	Yes	Yes
Erase	No	Std
Image Insert	No	No
Image Overlay	No	No
Image Repeat	No	No
Image Rotate	No	No
Interrupt	No	Yes
Job Build	No	No
Job Programs	No	No
Job Time	No	No
Language	Std	Std
Margin Shift	No	Yes
Neg/Pos	No	No
OHP Interleaving	No	No
Photo Mode	Yes	Yes
Poster Mode	No	No
Preset R/E	6R, 5E	No
Program Ahead	No	No
Sheet Insertion	No	No
Stamping	No	No

Timer	No	Yes
2-in-1	Std	No
XY Zoom	Yes	No
Zoom Range	25 to 400 (1%)	25 to 400 (1%)
Other Features	User tools; economy color; ID card copy; image density adjustment; text/photo mode; sharp/soft; contrast	Lighter/darker adjustment, ID Copy, resize, cropping, copy preview
ADDITIONAL INFORMATION		
Dimensions (HxWxD)	12.9" x 15.7" x 17.2"	11.8" x 19.7" x 25.5"
Weight	33.8 lbs	33.35 lbs
Power Requirements	110-120 V, 1.2 A	110-240 V, Amps not avail
Energy Used While Power Off	.12W	0.15W
Energy Used in Power Save Mode	3.47W	2.10W
Energy Used in Ready Mode	13W	6.40W
Energy Used While Copying	31W	INA
Energy Used While Printing	30.4W	INA
Energy Used While Scanning	INA	INA
Max Power Consumption	29.49W	29W
TEC Value	.981KWh	0.42KWh
Dedicated Outlet	Not required	Not required
Energy Star Compliant	Yes	Yes
Operating Noise Level	33.7 dB	64 dB
COMMENTS	None	None
OPTIONS		
	BY1040 Bypass tray 100 sheets (405759): \$168	Paper drawer 250 sheets (A8Z70A): \$79.99
	TK1160 Paper drawer 250 sheets (405760): \$184	
	Interface USB 2.0 (004051MIU): \$8	
SUPPLIES/MAINTENANCE		
	Black ink cartridge (405761): \$41; Yield: 2,500; Coverage: ISO/IEC 24711	HP 950 Black ink starter cartridge; Yield: 1,000
	Black low-yield ink cartridge; Yield: 600	HP 951 Cyan ink starter cartridge; Yield: 700
	Cyan ink cartridge (405762): \$39; Yield: 2,200; Coverage: ISO/IEC 24711	HP 951 Magenta ink starter cartridge; Yield: 700
	Cyan low-yield ink cartridge; Yield: 600	HP 951 Yellow ink starter cartridge; Yield: 700
	Magenta ink cartridge (405763): \$39; Yield: 2,200; Coverage: ISO/IEC 24711	HP 950XL Black high-yield ink cartridge (CN045AN): \$36.99; Yield: 2,300; Coverage: ISO/IEC 24711
	Magenta low-yield ink cartridge; Yield: 600	HP 950 Black standard-yield ink cartridge (CN049AN): \$26.99; Yield: 1,000; Coverage: ISO/IEC 24711
	Yellow ink cartridge (405764): \$39; Yield: 2,200; Coverage: ISO/IEC 24711	HP 951XL Cyan high-yield ink cartridge (CN046AN): \$27.99; Yield: 1,500; Coverage: ISO/IEC 24711

	Yellow low-yield ink cartridge; Yield: 600	HP 951 Cyan standard-yield ink cartridge (CN050AN): \$19.99; Yield: 700; Coverage: ISO/IEC 24711
	Ink collector unit (405783): \$25; Yield: 27,000	HP 951XL Magenta high-yield ink cartridge (CN047AN): \$27.99; Yield: 1,500; Coverage: ISO/IEC 24711
	PM Schedule: Info not avail	HP 951 Magenta standard-yield ink cartridge (CN051AN): \$19.99; Yield: 700; Coverage: ISO/IEC 24711
		HP 951XL Yellow high-yield ink cartridge (CN048AN): \$27.99; Yield: 1,500; Coverage: ISO/IEC 24711
		HP 951 Yellow standard-yield ink cartridge (CN052AN): \$19.99; Yield: 700; Coverage: ISO/IEC 24711
		PM Schedule: None set
MULTIFUNCTION MODES		
Copier	Std	Std
Internet Fax	Std	Opt
Network Printer	Std	Std
Printer	Std	Std
Fax	Std	Opt
Network Fax	Std	No
PC Fax	Std	Std
Scanner	Std	Std
CONNECTIVITY SPECIFICATIONS		
Operating System Support	Win XP, Server 2003, Vista, Server 2008, 7, Mac OS X 10.5+	Win XP, Server 2003, Vista, Server 2008, 7, 8, 8.1, Server 2011, Server 2012, Mac OS X 10.6, 10.7, 10.8, 10.9, Linux
Parallel Interface	None	None
PC Fax/Print/Scan	Not applicable	Not applicable
Serial Interface	None	None
PC Fax/Print/Scan	Not applicable	Not applicable
USB Interface	Std 2.0	Std 2.0, std 2.0 (host) x 2
PC Fax/Print/Scan	Yes/Yes/Yes	Yes/Yes/Yes
Network Interface	Std Ethernet, std wireless	Std Ethernet, std wireless
Interface Type	10/100BaseTX, 802.11b/g/n	10/100BaseTX, 802.11b/g/n
LAN Fax/Print/Scan	Yes/Yes/Yes	Yes/Yes/Yes
Networks Supported		
NetWare	Yes	Yes
Windows NT	Yes	No
AppleTalk	Yes	Info not avail
UNIX	Info not avail	No
AS/400	Info not avail	No
Other		
Embedded Software Platform	Not applicable	Not applicable
FACSIMILE SPECIFICATIONS		
Scanner Technology	CCD	CIS

Compression Method	MH/MR/MMR	MH/MR/MMR/JBIG
Modem Speed	33.6 Kbps	33.6 Kbps
Max TX Resolution	Info not avail	300 x 300 dpi
Gray Scale/Halftones	Info not avail	256 levels
Std/Max Fax Memory	Info not avail	Info not avail/2-MB RAM
Min/Max Orig Size (WxL)	5-1/2 x 8-1/2/8-1/2 x 14	5.8 x 8.3/8-1/2 x 14
Max Paper/Print Width	8-1/2/8-1/2	8-1/2/Info not avail
Effective Scanning Width	8-1/2	8-1/2
Correct-Order Output	Info not avail	Yes
Batch Files	Info not avail	No
Battery Backup	Info not avail	No
Confid TX/RX	Yes/Info not avail	No/No
Dual Lines	Info not avail	No
Multi Access	Info not avail	No
Polling	Yes	Yes
Relay Request	Info not avail	Yes
Smoothing	Yes	No
Timers	Info not avail	Yes
Transfer Hub	Info not avail	No
DIALING CAPABILITIES		
Broadcasting (Groups/Dest)	100/150	1/51
Redial (Attempts/Intervals)	Info not avail/Info not avail	5/3 min
One Touch	20	Not applicable
Speed Dial	90	/99
Other	Fax modes: standard, detail, fine or photo	Two RJ-11 modem ports, fax stamping, fax forwarding, junk fax blocker, fax dial prefix
PRINTER SPECIFICATIONS		
Engine Mfr & Model	Ricoh/Info not avail	Info not avail/Info not avail
Compatibility	PC, Mac	PC, Mac
Speed	8 ppm color/10.5 ppm black*	14.5 ppm color/19 ppm black
First-Page-Out Time	7 sec color/5.5 sec black	13 sec color/12 sec black
Max Print Area	Info not avail	Info not avail
Enhanced Resolution	3600 x 1200 dpi	4800 x 1200 dpi
Unenhanced Resolution	1200 x 1200 dpi	1200 x 1200 dpi
Std/Max Printer Memory	Shared	Shared
Controller Mfr/Model	Ricoh/Info not avail	Info not avail
Processor/Bits/MHz	Info not avail/Info not avail//800	Info not avail/Info not avail/600
PDL/PCL	PCL5c/6, RPCS	PCL 3
Controller Mfr/Model	Not applicable	Not applicable
Processor/Bits/MHz	Not applicable	Not applicable
PDL/PCL	Not applicable	Not applicable
Controller Mfr/Model	Not applicable	Not applicable
Processor/Bits/MHz	Not applicable	Not applicable
PDL/PCL	Not applicable	Not applicable
Other	*Based on speed priority mode; std PictBridge	Mobile printing capability includes HP ePrint, Apple AirPrint, Android OS Enablement Printing
SCANNER AND IMAGE MANAGEMENT SPECIFICATIONS		
Connection Type	Network, USB	Network
Technology/Speed	CCD/5.8 ipm color, 11.6 ipm black	CIS/6 ipm color, 6 ipm black
Max Resolution	600 x 600 dpi	1200 x 1200 dpi

TWAIN Compatible	Yes	Yes
Scan Destinations		
E-mail	Yes	Yes
I-fax	Yes	No
FTP	Yes	No
SMB	INA	Yes
HDD	INA	No
URL	INA	No
LDAP Support	Yes	Yes
File Formats Supported	JPEG, PDF, TIFF	Bitmap, JPEG, PDF, PNG, Rich Text, Searchable PDF, Text, TIFF
Scan/Image Software	Opt DesktopBinder Lite	HP Scan (standard), Integrated OCR (optional)
OCR Software	Info not avail	Integrated Iris Pro (optional), Standalone Iris Pro (optional)
File Mgmt Software	Opt DesktopBinder Lite	Info not avail
Other	Scan to USB	Scan size maximum Flatbed: 8.5 x 11/216 x 279 , ADF: 8.5 x 14/216 x 356
COMMENTS		
	Utilizes GelSprinter Piezo based ink; black, cyan, magenta and yellow print cartridges; opt utilities include Web Image Monitor, SmarDeviceMonitor, DesktopBinder Lite and Remote Communication Gate S Pro	Dimensions are with trays extended; 2.65" CGD touchscreen; ships with a black starter toner cartridge yielding 1,000 pages and CMY starter cartridges each yielding 700 pages; one-year warranty

© 2015 Buyers Laboratory LLC



Ricoh Aficio SG 3110SFNw

Overall Rating	Highly Recommended
Reliability	Excellent
Test Duration	5,000 Impressions
Misfeeds	0
Misfeed Rate	0
Service Calls	0
Ease of Use	Very Good
Print Drivers	Very Good
Scan Functions	Very Good
Feedback	Very Good
Color Print Productivity	Very Good
Black Print Productivity	Very Good
Color Copy Productivity	Very Good
Black Copy Productivity	Very Good
Color Print Quality	Good
Business Graphics	Good
Photographic Images	Good
Black Print Quality	Very Good
Text	Good
Line Art	Good
Halftone Range	Very Good
Halftone Fill	Very Good
Solids	Very Good
Color Copy Quality	Fair
Business Graphics	Fair
Photographic Images	Fair
Black Copy Quality	Fair
Text	Fair
Line Art	Good
Halftone Range	Good
Halftone Fill	Fair
Solids	Fair
Setup	Very Good
Utilities	Good
Specifications	Excellent
Toner/Ink Yield	Very Good
Toner/Ink Yield Black (ISO/IEC 24712)	3,286
Toner/Ink Yield Cyan (ISO/IEC 24712)	2,967
Toner/Ink Yield Magenta (ISO/IEC 24712)	3,021
Toner/Ink Yield Yellow (ISO/IEC 24712)	3,021
Supplies Cost Per Page (ISO/IEC 24712)	5.237
Value	Excellent

The ratings included in this side-by-side comparison have been excerpted from BLI's Lab Test Reports. BLI doesn't determine a device's overall rating. Please see BLI's published Lab Test Reports for more details. Additional information is available on the Content Guides page in the Support section of bliQ.

Key

Highly Recommended:

Assigned to a device that has displayed outstanding overall performance throughout BLI's lab test.

Recommended:

Assigned to a device that has demonstrated good overall performance throughout BLI's lab test.

Recommended with Notations:

Assigned to a device that is Recommended by BLI, but with specific caveats.

Not Recommended:

Assigned to a device that has significant shortcomings in performance categories that would be important to any document imaging device buyer.

Not Applicable:

Calculation requires at least two misfeeds, service calls and/or failures to have occurred on the tested device.

Blank Cell:

Appears when that category doesn't apply to the device, c in a case where the report format has changed.

May Vary from Similar Device Tested:

Appears for an untested device that's similar to a tested device, but the results of the tested device could be different than those of the untested device.

Category Ratings:

Excellent, Very Good, Good, Fair, Poor

OJ Pro 8610e Not Submitted for Testing

weigh all aspects of performance equally;
ration on the terms used in the Ratings Ta



Ricoh Aficio SG 3110SFNw

Strengths

- Highly reliable—flawless durability performances and simple procedures for adjusting the drawer, loading media and replacing cartridges limit downtime
- Low TCO over 36 months compared with competitive inkjet and laser devices tested
- Offers excellent overall value based on TCO, performance and features
- Fast first-print times from overnight sleep and ready mode versus competitive inkjet all-in-ones and small workgroup color laser/LED MFPs tested; fast running speed when printing the job stream in color mode compared with competitive inkjet devices; fast running speeds when copying sets versus the inkjet group
- Fast scan speeds compared with competitive inkjet all-in-ones tested; scanned files are auto-compressed by default
- Full grayscale range, smooth transitions from light to dark shades in black-and-white photos, and solids had consistent coverage, all in print mode
- No visible ink transfer when water was dripped across output, or an alkaline-based highlighter was used on output; only very slight smearing when an acid-based highlighter was used
- Standard automatic duplexing and Economy Color conserve resources and help lower cost of ownership

Weaknesses

- Slow job stream speeds when printing versus competitive laser/LED MFPs
- Slow running speed when printing sets in black mode versus competitive inkjets, as well as in both modes compared with the laser group
- Slow running speeds when copying sets in both modes versus competitive inkjet and laser devices
- Color and black copy quality was grainy, inconsistent and, overall, below average

OJ Pro 8610e Not Submitted for Testing





Ricoh Aficio SG 3110SFNw

Strengths

- Highly reliable—flawless durability performances and simple procedures for adjusting the drawer, loading media and replacing cartridges limit downtime
- Low TCO over 36 months compared with competitive inkjet and laser devices tested
- Offers excellent overall value based on TCO, performance and features
- Fast first-print times from overnight sleep and ready mode versus competitive inkjet all-in-ones and small workgroup color laser/LED MFPs tested; fast running speed when printing the job stream in color mode compared with competitive inkjet devices; fast running speeds when copying sets versus the inkjet group
- Fast scan speeds compared with competitive inkjet all-in-ones tested; scanned files are auto-compressed by default
- Full grayscale range, smooth transitions from light to dark shades in black-and-white photos, and solids had consistent coverage, all in print mode
- No visible ink transfer when water was dripped across output, or an alkaline-based highlighter was used on output; only very slight smearing when an acid-based highlighter was used
- Standard automatic duplexing and Economy Color conserve resources and help lower cost of ownership

Weaknesses

- Slow job stream speeds when printing versus competitive laser/LED MFPs
- Slow running speed when printing sets in black mode versus competitive inkjets, as well as in both modes compared with the laser group
- Slow running speeds when copying sets in both modes versus competitive inkjet and laser devices
- Color and black copy quality was grainy, inconsistent and, overall, below average

OJ Pro 8610e Not Submitted for Testing





Ricoh Aficio SG 3110SFNw

Copy Productivity: Black

Manufacturer's Rated Speed	10.5 CPM		
Document Feeder First-Copy-Out Time	16.07 Seconds		
Paper Size	8-1/2" x 11"		
	# of Sets	CPM	Efficiency
1:1 Simplex Mode	1	9.7	92.5%
	5	10.9	104.0%
	10	INA	INA
	20	INA	INA
	Average		98.3%

Copy Productivity: Full Color

Manufacturer's Rated Speed	8 CPM		
Document Feeder First-Copy-Out Time	24.14 Seconds		
Paper Size	8-1/2" x 11"		
	# of Sets	CPM	Efficiency
1:1 Simplex Mode	1	5.1	63.5%
	5	8.6	107.2%
	10	INA	INA
	20	INA	INA
	Average		85.4%

Print Productivity: Black

Manufacturer's Rated Speed	10.5 PPM		
Job Stream Speed	8.3 PPM		
Job Stream Efficiency	79.4%		
Paper Size	8-1/2" x 11"		
	# of Sets	PPM	Efficiency
1:1 Simplex Mode	1	11.4	108.8%
	5	11.7	111.7%
	10	INA	INA
	20	INA	INA
	Average		110.3%

Print Productivity: Full Color

Manufacturer's Rated Speed	8 PPM		
Job Stream Speed	8.4 PPM		
Job Stream Efficiency	105.0%		
Paper Size	8-1/2" x 11"		
	# of Sets	PPM	Efficiency
1:1 Simplex Mode	1	10.7	133.9%
	5	10.9	136.0%
	10	INA	INA
	20	INA	INA
	Average		135.0%

Scan Productivity: Black	
Paper Size	8-1/2" x 11"
Scan to E-Mail Speed	IPM
Single-Sided Originals	10.5

Scan Productivity: Full Color	
Paper Size	8-1/2" x 11"
Scan to E-Mail Speed	IPM
Single-Sided Originals	3.5

Key

Manufacturer's Rated Speed:	The manufacturer's advertised speed (copies per minute [
Originals:	Describes the type of originals (single sided or two sided)
Document Feeder First-Copy-Out Time:	The time it takes in seconds for a copy to completely exit t
Job Stream Speed:	The speed at which the device runs at when completing B
Job Stream Efficiency:	The percentage of the device's advertised running speed ;
Copy Modes:	1:1 Simplex Mode: Single-sided original to single-sided copy 1:2 Duplex Mode: Single-sided original to two-sided copy 2:2 Duplex Mode: Two-sided original to two-sided copy
Print Modes:	1:1 Simplex Mode: Single-sided print 1:2 Duplex Mode: Two-sided print
# of Sets:	Indicates the number of sets produced of BLI's 10-page tw
CPM / IPM / PPM:	Copies per minute / Images per minute / Prints per minute
Efficiency:	The percentage of the device's advertised running speed ;
Average:	The overall efficiency of the device for the tests complet
INA:	Information not available. Test was not performed on the c
"--":	Not applicable

Copier productivity tests are based on tests performed by BLI using a variation of ASTM Standard Test Method F131. BLI tests a unit's copy productivity by making multiple sets (the number of sets depends on the rated speed of the device). For a two-sided test original in three copy modes (1:1, 1:2 and 2:2).

BLI tests a unit's print productivity by printing multiple sets (the number of sets depends on the rated speed of the device). The Word document test file.

BLI's job stream includes Word documents, Outlook e-mail messages, Excel spreadsheets, PowerPoint, HTML and PDF files. The test simulates the type of traffic a typical device might experience in a real-world, multi-user environment.

BLI tests a device's scan speed by sending BLI's 10-page two-sided test original to an e-mail address as a 300-dpi image. The scan speed is determined by measuring the time it takes for BLI's 10-two-sided test original to feed through the document feeder.

Additional information on productivity and BLI's test methodology is available in the Help section on bliQ. See Glossary and Table of Contents.

OJ Pro 8610e Not Submitted for Testing

cpm] or pages per
used in the scan test
the device when a copy
LI's job stream test
at which it produces
/

two-sided test original
1. Entries under this
at which the unit ran in
1. The overall efficiency
device

18 with 8-1/2" x 11"
device) of BLI's 10-page

device) of BLI's 10-page

Acrobat PDF files. The

PDF file. Scan speed

ary of Terms in the Test



Ricoh Aficio SG 3110SFNw

Overall Rating		★★★★★
Energy Consumption And Costs		★★★★★
Projected Annual Output	12,672 pages (48 per workday: 2 jobs of 19 pages each and 2 jobs of 5 pages each)	
Projected Annual Energy Consumption	21.9000 kWh	
Projected Annual CO2 Emissions	34.7 lbs	
Projected Annual Energy Cost	\$2.32	
Cost per 1,000 pages	\$0.18	
Tested Energy Use By Mode		
Simplex Monochrome Copy	0.028 kWh	
Simplex Color Copy	0.027 kWh	
Simplex Monochrome Print	0.022 kWh	
Simplex Color Print	0.022 kWh	
Duplex Monochrome Copy	0.027 kWh	
Duplex Color Copy	0.025 kWh	
Duplex Monochrome Print	0.022 kWh	
Duplex Color Print	0.022 kWh	
Idle Mode	0.012 kWh	
Sleep mode during Overnight Dormancy	0.002 kWh	
Warm-up Power from Overnight Sleep	0.0001 kWh	
Tested Toner Yield		★★★★★
Recovery Time		★★★★★
Idle Mode	9	
Sleep Mode (During Daily Use)	12	
Sleep Mode (After Sitting Dormant Overnight)	18	
Runnability with 30% Recycled Paper		★★★★★
Runnability with 75% Recycled Paper		★★★★★
Runnability with 50% Recycled Paper		★★★★★
Runnability with 100% Recycled Paper		★★★★★
Noise Emissions		★★★★★
Sound Test at Front: Document Feeder	57.5 dB	
Sound Test at Front: Simplex	57 dB @ Inner Tray	
Sound Test at Front: Duplex	61 dB @ Doc Feeder	
Sound Test at 30° Angle: Document Feeder	65 dB	
Sound Test at 30° Angle: Simplex	54 dB @ Inner Tray	
Sound Test at 30° Angle: Duplex	58 dB @ Doc Feeder	
Environmentally Friendly Features		★★★
Automatic Duplexing	Print	Yes
	Copy	Yes
Intelligent Duplex	Print	No
	Copy	No
Default Color Mode	Print	Full Color
	Copy	Full Color
Auto Color Mode	Print	No

	Copy	No
Output All Text as Black	Print	Yes
	Copy	Yes
Toner-Save Mode	Print	Yes
	Copy	Yes
Recycled Paper Mode	Print	Yes
	Copy	Yes
Job Review	Print	No
	Copy	No
Blank-Page Removal	Print	Yes
	Copy	Yes
Proof Mode	Print	No
	Copy	No
N-up Mode	Print	Up to 16
	Copy	Up to 4
Factory defaulted to duplex mode?		No
Electronic product documentation instead of		Both
While in sleep mode, does the display remain		No
Does the device fall into sleep mode at its set		No
Does the device automatically resume		Yes
Environmental Features—%Drop in Duplex Speed Versus Simplex Speed		
Color	Print 1:2	Tested Speed
		% Drop
	Copy 1:2	Tested Speed
		% Drop
Black	Print 1:2	Tested Speed
		% Drop
	Copy 1:2	Tested Speed
		% Drop
Environmental Features—Sleep Mode Functionality		
Seconds it takes for Copy menu to appear		2.22
Does the machine start scanning immediately		No
Scan/copy job into memory/network?		Yes
Fax/scan without full machine warm-up		No
Release private/stored jobs?		No
Does the operator have full access to the		No

OJ Pro 8610e Not Submitted for Testing



Ricoh Aficio SG 3110SFNw

Recycling

Packaging

Eco Product Labels

Energy Star

Yes

Chemical Emissions (mg/h)

Use of Hazardous Materials

International Directive Compliance

OJ Pro 8610e Not Submitted for Testing



Ricoh Aficio SG 3110SFNw

Strengths

- Above average tested ink yields for all four colors; tested yields exceeded rated yields
- Automatic duplexing and blank-page removal help to reduce paper use
- Ink-saving mode helps to reduce ink use
- Faster than average recovery time from sleep mode during daily use

Weaknesses

- Lack of job review and proof modes may increase paper and consumables waste
- Lacks ability to fax/scan while emerging from sleep mode

OJ Pro 8610e Not Submitted for Testing