Wirth Consulting

What You Should Know

Digital-Imaging Product Evaluation

Tuesday, October 16, 2012 2:39:19 PM

Ricoh

Aficio SP 4100NL

Enterprise-Ready A4 B/W Laser/LED Printers

Online, Direct and Ricoh Dealers

Product Overview

Worth Consideration

Meets or exceeds our qualifications for an enterprise-ready printer with optional duplex; generous standard and expandable media supply; PCL, Adobe PostScript and Universal Print Driver support; SNMPv3 (network user authentication) and data encryption, (executable) SmartDeviceMonitor for Client/Admin; and optional Web SmartDeviceMonitor. Other value-add features include: user authentication with tracking and usage/feature access restrictions; highly configurable with options; and optional 40 GB Hard Drive with optional DOSS overwrite enables Sample, Hold, Locked and Stored print modes.

Key Specifications and Pricing

Functions	Print	Std Media Capacity (sheets)		600	Price	$549.00	€422.73
Imaging Technology	Laser	Max Media Capacity (sheets)		1,600	Duplex	$195.00	€150.15
Max Mo. Duty Cycle (pages)	100,000	Max Media Sources		4	Print		
BW/Color Print Speed (PPM)	31	Max Media Width (inches/mm)	8.5	215.9	Network		
Max Print Resolution (DPI)	1,200x600	Max Media Length (inches/mm)	14.0	355.6	Scan		
Standard Memory (MB)	192	Max Media Wt. (bond, lbs./gsm	43.0	161.7	Doc Feeder		
Maximum Memory (MB)	384	Height (inches/mm)	13.60	345.44	Media Trays	500-Sheet PFUs	
Hard Drive (GB)	Optional 40 GB	Width (inches/mm)	15.30	388.62	Price	$275.00	€211.75
HD Overwrite/Encryption	Yes/Yes	Depth (inches/mm)	17.80	452.12	LCT		
Wireless/Ethernet Networking	Yes/Yes	Weight (pounds/kg)	38.6	17.5	Finisher		
User/Network Authentication	Yes/Yes	Max Power Draw (watts)		960	Price		

Feature Analysis, Ratings (from 0-5, with 5 being best) and Composite Scores

Value 3.0

Overall Score	**24.5**
Full System Price	$744.00
Black Cost per Page	$0.0239
Color Cost per Page	
Black TCO* (5k/mo)	$7,727.67
Color TCO* (5k/mo)	
Mixed** TCO* (5k/mo)	

*Base Price; **67% BW and 33% Color

Copying 0.0

Copier Score	**0.0**
Duplex Document Feeder	☐
Touch Screen	☐
Hard Drive	☐
ID Copy	☐

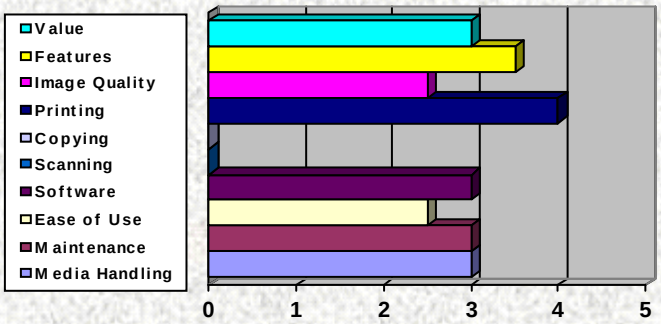
Scanning 0.0

Scanner Score	**0.0**
Color Scanning	☐
Network Scanning	☐
WSD Scanning	☐
LDAP Lookup	☐

Printing 4.0

Printer Score	**24.5**		
Print Processor (MHz)	400		
Maximum Memory (MB)	384		
Black/Color Print Speed	31		
Windows	☑	Linux	☑
Apple Mac	☑	PCL	☑
GDI Printing	☑	PostScript	☑
Secure Print	☑	UPD	☑

Wirth Consulting Performance Ratings (from 0-5, with 5 being best)



Features 3.5

USB Convenience Port	☐
Media Card Slots	☐
PC Fax	☐
Walk-Up Fax	☐
Duplex Printing	☑
Mobile Printing	☐

Image Quality 2.5

Imaging Technology	**Laser**
Max. Resolution	**1,200x600**
BW Office IQ	☑
Color Office IQ	☐
Professional IQ	☐
Photographic IQ	☐

Media Handling 3.0

Max Media Sources	4
Max Wt. (bond, lbs.)	43.0
Feeds 110-lb. Index Stock	☐
Max Weight from all Sources	☐
Finishing	☐

Maintenance 3.0

Black Page Yield	7,500
CYM Page Yield	
All-in-One Print Cartridge	☑
Holds Full Ream of Media	☑

Software 3.0

Desktop Software	☑
Embedded Web Server	☑
Adobe PostScript	☑
Open Platform	☐

Ease of Use 2.5

Usability Score	**8.5**
Graphic Display	☐
Touch Screen	☐
Navigation Keys	☑
Holds Full Ream of Media	☑

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Consumables Pricing and Yields

*Based on an original area coverage of 5% per color. **Yield in pages

Consumable	Price	Yield**	Dev Price	Dev Yield**	Drum Price	Drum Yield**
Black Ink/Toner	$161.69	7,500				
Cyan Ink/Toner						
Magenta Ink/Toner						
Yellow Ink/Toner						
Multicolor Ink						
Other Type						
Other						
Maintenance Kit	$213.32	90,000				

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Supply Cost Per Page and Total Cost of Ownership*

*CPP and TCO include the base price depreciated over a five-year period (not including service) **Based on 66% Black/33% Color

Monthly Volume	Black CPP	Color CPP	Black TCO	Color TCO	Mixed TCO**
50 pages	**$0.207**		**$613.68**		
100 pages	**$0.115**		**$678.35**		
250 pages	**$0.061**		**$872.38**		
500 pages	**$0.042**		**$1,195.76**		
1,000 pages	**$0.033**		**$1,842.52**		
2,000 pages	**$0.029**		**$3,420.47**		
3,000 pages	**$0.027**		**$4,856.20**		
4,000 pages	**$0.026**		**$6,291.93**		
5,000 pages	**$0.026**		**$7,727.67**		

Consumables CPP

(Based on an original area coverage of 5% per color)

Black Cost Per Page

Black Consumables Cost per Page

$0.0239

Color Cost Per Page

Color Consumables Cost per Page

Strengths

•RPCS (GDI), PCL5e/6, Adobe PostScript 3 and Universal print drivers; optional IPDS support.
•Optional 40 GB Hard Drive with optional DOSS hard-drive overwrite.
•Sample, Hold, Locked and Stored print modes (required optional Hard Drive); PDF Direct print.
•SmartDeviceMonitor for Client/Admin and optional Web SmartDeviceMonitor support.
•Includes Printer Utility for Mac, Agfa Font Manager 2000 and DeskTopBinder Lite (combine print jobs from any Windows application into a single print job); optional DeskTopBinder Professional software.
•Data Encryption (password/address book encryption); PDF DirectPrint Password. Protection; Locked (Secure) Print; User authentication; 200 User Codes (monitor usage and restrict usage and access).

Limitations

•Ships with reduced-yield "Starter" toner cartridge (3,000 pages).
•Optional IPDS (Unix/Linux) support.
•No mobile or remote printing support.
•No wireless 802.11g/n support.
•USB host port is optional.

Notes

•Options: Wireless 802.11b ($395); USB Host Interface ($140); 128/256 MB SDRAM ($378/$452); 40 GB Hard Drive ($400); Gigabit Ethernet ($357); VM Card ($99); Data Storage Card ($40); Hard Drive (DOSS) Overwrite ($235); Envelope Feeder ($120--requires Paper Feed Unit); IPDS Unit ($508).
•Backlit 2-line LCD display
•Pricing obtained from Ricoh 07/12 MSRP price list; Energy Star-certified.

Best Use

With its solid enterprise-level printer/network manageability and security, plus a range options that include Hard Drive, DOSS hard-drive overwrite, VM Card and Gigabit networking, Ricoh's Aficio SP 4100NL can be configured to perform in virtually any role. Even though its Cost Per Page and Total Cost of Ownership are on the high side in this group, it's Worth Consideration for micro/small workgroups in companies or enterprises that do not require remote/mobile printing and/or wireless networking, and can negotiate a lower Cost Per Page or a Managed Print Services contract with a lower Cost Per Page.

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