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Xerox Nuvera™ 100/120 Digital Copier/Printer

SYSTEM RELEASE 6.0 (WITH FREEFLOW™ DOCUSP® 5.0)

Customer Expectations Document

Version: f

April 12, 2006

Includes:

- Xerox Nuvera™ 100/120 Digital Copier/Printer
- Optional Professional Multifunction Finisher (MFF)
- Optional Insertion Module
- Optional 2nd Sheet Feed Module
- Optional Foreign Device Interface

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INTRODUCTION

The purpose of this document is to help you understand the current features and capabilities of the Xerox Nuvera™ 100/120 Digital Copier/Printer (DC/P). Review of this material is recommended prior to your signing an order for a Xerox Nuvera™ 100/120 Digital Copier/Printer.

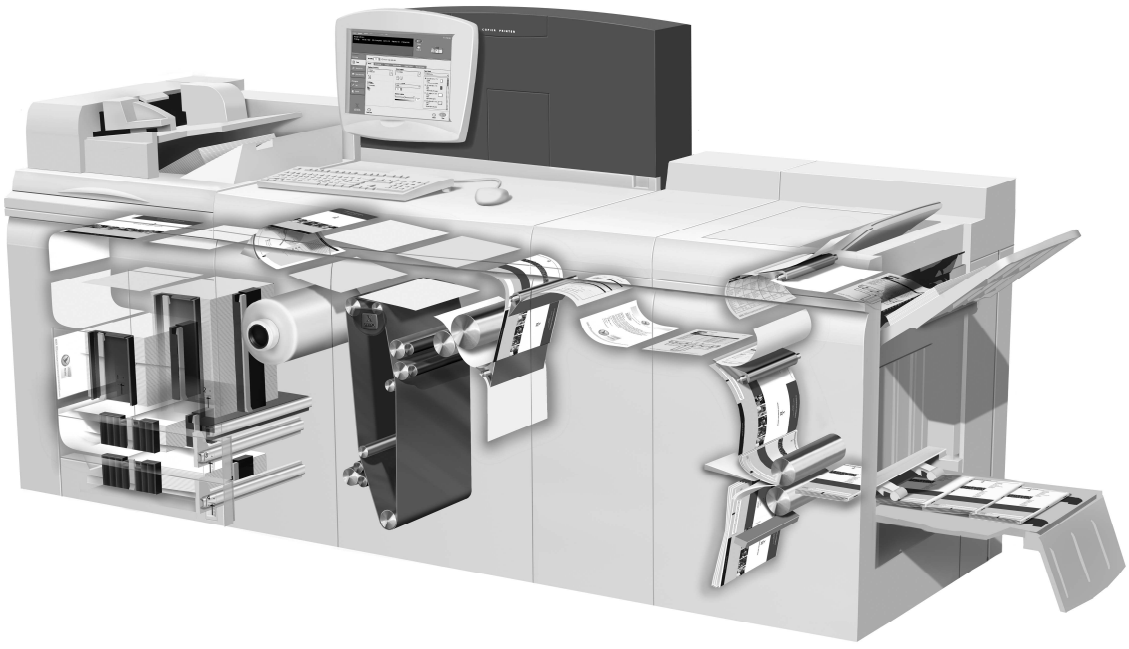
This document addresses high-level expectations. Additional details are provided in the training documentation.

PRODUCT OVERVIEW

The Xerox Nuvera™ 100/120 Digital Copier/Printer sets a new benchmark in the world of on-demand printing. It is a network-able copying and printing system comprised of multiple modules. The Xerox FreeFlow™ Document Services Platform (FreeFlow™ DocuSP®) is integrated into the Printer Module. The Scanner scans at 120 images per minute at 600 x 600 dpi, simplex or duplex, and has a 300 sheet input tray. The standard Sheet Feed Module (SFM) has four drawers that will reliably feed a wide range of stocks. Two optional Sheet Feed Modules (SFMs) are also available for use as a second SFM: one with 2 trays (having more large format media capacity), the other with 4 (this latter is the same as the standard SFM). A 4-tray SFM may also be installed after the printer module and used as an inserter. The Sheet Feed Module will reliably feed a wide range of stocks. The Printer module prints at 4800 x 600 dpi utilizing a state of the art dual beam laser ROS (Raster Output Scanner) with dedicated image processing hardware. The Multifunction Finisher module has two models to choose from – the Standard or the Professional.

The Nuvera Family of Products complies with the American Disability Act, Section 508 of the Rehabilitation Act.

For the first time, FreeFlow™ DocuSP® not only controls the printer, it now also controls the scanner. This provides the most flexible, stable copying and printing platform in the industry.



Crucial Performance Expectations

The Xerox Nuvera™ 100/120 Digital Copier/Printer is a "clean-sheet" design utilizing innovative technologies. It is the new base platform for Xerox monochrome products.

The following expectations should be explicitly set. Please see the appropriate section of the CED for more detail.

Availability

The Xerox Nuvera™ 100/120 Digital Copier/Printer will be available on a monthly average 92% to 96% of the time.

- Availability is defined as the amount of time the machine is not being serviced or waiting for service by Xerox.
- Given similar service coverage, DocuTech® availability averages up to 95%.

Media Capability

- Reinforced stocks should be limited to less than 90 loaded in a tray at one time.
- Tab jobs must be run with reverse collated tabs. Also, Running tabs requires proper use of the supplied Tab Guides.
- Tabs are supported when the number of segments is 10 or less.
- **Envelopes**
  Envelopes should be limited to 60 loaded in a tray at one time. Nuvera feeder trays feed until almost empty but not until empty, leaving 20~40 sheets remaining. When running envelopes frequent reloading of the feeder trays will be required.

  Very slight wrinkles (1/2 inch long) may occur on the trail edge of envelopes at the corners.

  Due to the nature of feeding envelopes with flap open, some mis-stacking may occur in the top tray as the envelopes catch on the open flaps.

  Envelopes can only be sent to the Top Tray, with a maximum limitation of 15.
- **Drilled Paper & Tab Jobs:** Currently most jobs are delivered face down, with the bind edge trailing to match the requirements of the finisher. When tabs are run to the MFF, the tabs must be delivered with the tab leading and this requires an inversion at the exit of the paper path and entrance into the finisher. It is quite common to run drilled paper when running tabbed jobs, and this requires the user to reverse the loading of the drilled body stock in the tray such that the drilled edge is opposite what the paper tray loading label for drilled body stock shows.
- Windowed stocks are not supported – performance (jams) maybe degraded.
- **DocuCards**
  DocuCards can only be loaded 100 at a time in a tray. Nuvera feeder trays feed until almost empty but not until empty, leaving 20~40 sheets remaining. When running DocuCards, frequent reloading of the feeder trays will be required.

  DocuCards can only be run to the Top Tray of the finisher. Some mis-stacking may occur as the DocuCards catch on the edges of the stacked sheets.

Printer Module

- This is not a print to edge system due to potential image quality defects on the edge of the page.
- Printing on SRA3 can result in inboard and outboard edge image quality defects.
- Stocks with pre-printed Xerographic color inks are not suitable for feeding from the Sheet Feed Module (SFM); such stocks can be fed from the Insertion Module (IM).

- It is highly recommended to avoid printing over pre-printed stocks with offset ink, whenever possible. When printing over offset inks, image permanence may be compromised. Toner does not adhere to pre-printed stock with heavy ink coverage. There are other factors that should be taken into account to successfully print on pre-printed – please refer to the following web site for guidance:

http://www.xerox.com/go/xrx/template/009.jsp?view=Feature&ed_name=Supply_Library_pre_printing&Xcntry=USA&Xlang=en_US

- Images printed on Mylar tabs are typically degraded by toner scatter.
- Productivity for 8.5" x 14" paper is less than that for 8.5" x 11" paper – refer to the System Productivity section.

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FreeFlow™DocuSP®

- The Token Ring option is no longer natively supported in DocuSp. Customers requiring Token Ring will need to acquire a bridge box from a vendor providing that capability to connect their Token Ring to the DocuSP® Ethernet connection.

FreeFlow Digital Workflow Collection

FreeFlow Makeready, Web Services and Process Manager, versions 3.0 and higher, provide full support for the Nuvera Digital Copier/Printer, but customers with earlier versions of these applications may need to upgrade since SPAR support will not be available.

New Capabilities in Xerox Nuvera™ System Release 6.0

- New Controller platform offering faster RIP performance for complex data streams, as well as improved GUI response.
- Automatic adjustment of fuser temperature to paper weight around nominal 190 degrees centigrade, so as to minimize curl for lighter weight stock, and to maximize fuse fix for heavier weight and rough stock. Minor impacts to productivity may occur if there are large swings in paper weight.
- CRUM (Customer Replaceable Unit Memory) function recognizes intended toner, and protects against damage from accidental use of improper toner.
- Productivity enhancement for duplex unfinished jobs with appropriate media in N to 1 face up order.
- Xerox Productivity Plus enhancement, with two separate one-day training sessions.
- Note: 'Curl Improvement Mode' is not recommended for use in the Copier/Printer system.

Optimum Product Performance

Print Volume Range

The Xerox Nuvera™ 100/120 Digital Copier/Printer is designed for a range of monthly print volumes.

System	Average Monthly Print Volume (AMPV)	Conditions
Xerox Nuvera™ 100/120 Digital Copier/Printer	100K – 500K	8.5 in x 11 in/A4

Maximum duty cycle: Up to 700K prints per month

Duty cycle is defined as:

The maximum monthly copy / print volume support under standard vendor supplied service (1X5 shift coverage). This defines the upper end of expected customer volume band for the device.

The Customer should consider higher volume machines or multiple machines if average monthly volume approaches duty cycle on a constant basis.

Prints between service calls on a digital mid-production system are dependent on customer requirements for quality, volume, applications, and throughput material. Xerox Nuvera™ trained operators can optimize performance output and help to minimize service calls.

Environmental Factors

Environmental Factor	Minimum	Maximum
Temperature	50° F (10° C) (Tested to 60° F (15.6° C))	90° F (32.2° C) (Tested to 80° F (26.7° C))
Humidity	15% RH (Tested to 15%)	85% RH (Tested to 80%)
Heat Emission (approximate) - SFM /PM/ MFF	2,465 BTU / HR (Standby)	17,537 BTU / HR (Running)
Power Consumption (approximate) - SFM/ PM/ MFF	0.723 kw (Standby)	4.275 kw (Running)
Noise (Approximate sound pressure level at operator position)	42.5 dBA (Standby)	66.3 dBA (Running)
Altitude (above sea level)	0	10,000 ft.
Nominal Voltage (Processor)	200	240

Product Space & Power Requirements

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comments
Size – Printer w/ 1 SFM & Professional MFF	131.3" (W) x 30" (D) x 61.6" (H) 3336mm x 736mm x 1565.6mm	
Width – additional SFM	31.7" (805mm)	Optional
Service Space	Fixed: 162" (W) x 113" (D) (4114.8mm x 2870.0mm) Moveable: 162" (W) x 92" (D) (4114.8mm x 2336.8mm)	- Fixed (stationary) installation: rear of the system should be at least 30" from the wall. - Moveable installation: rear of the system should be at least 10" from the wall and must be on mobility plates OR hard surface floor AND 4 modules or less.
Weight	1,753 lb. (795.1 kg) Additional SFM – 423 lbs. (191.9 kg)	With consumables loaded (except media)
Power and Agency Requirements North America	208 Volts / 30 Amp sole use, 60 Hz Two phase, 3 wire + PE (L1, L2, N, GND)	• UL & cUL compliant • Complies with the FEMP (Federal Energy Management Program) via the machine circuit breaker (CB); with the CB switched off, the system consumes less than 1 watt. • Energy Star (eStar) compliant • Environmental Choice (Canada) • Complies with Section 508 of the ADA Rehabilitation Act
Power Requirements Europe/Japan	200-240 Volts / 25 Amp sole use, 50 Hz Single phase, 2 wire + PE (L, N, GND)	• Energy Star (eStar) compliant • Units are compliant with applicable EU directives and are CE marked

System Configuration and Installation

Installation Preparation Document

This section should be used in conjunction with the ***Xerox Nuvera™ 100/120 Digital Copier/Printer Installation Planning Guide (IPG) and the Xerox Nuvera™ 100/120 Digital Copier/Printer Installation Preparation Document (IPD),*** which contain detailed specifications for size, weight, electric, and environmental conditions. Only the most important requirements are stated here.

Customer Responsibilities

The following must be completed before the system can be delivered and will be assessed in the final site check:

Item	Comments
Identify placement of the system	
Ensure the printer can be delivered to the site	
Supply the appropriate electrical connections	Dedicated power required
Install an exhaust duct to vent hot air to the air system or the outside if required	Heat Vent Kit is available for stationary system installations only. The kit lowers the system's output from approximately 17,500 BTU/hour to 8,500 BTU/hr.
Verify the strength and slope of the floor	

Item	Comments
Meet room Environmental Specifications for temperature and relative humidity year round	**This is essential to the system's ability to perform as expected; Xerox will not be able to resolve performance problems encountered when the area is not maintained within this operating range**
Install a network drop for Internet access	
Connect system to network including proxy server information	

System Installation

Allow 4 to 6 hours to complete the system installation.

Operations

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comment
Power Up	• Warm up from Power Saver - 3.5 minutes. • System ready to print queued jobs - 4 minutes, 45 seconds. (From Off) • System UI fully available for Copy programming - 7 minutes. (From Off) • The system may be powered down at night or for any extended period of time as long as the space is maintained at the specified temperature and RH.	If the environment does drift outside the specified range during the systems powered down state, some period of image degradation can be expected at startup.
First Copy Out Time (FCOT)	8.5 seconds	Copy job sent to the top tray; platen scan, simplex job, 8.5 x 11 LEF fed from tray 1; no Insertion Module
First Print Out Time (FPOT)	9.5 seconds.	Printer should not cycle down as long as it receives an image to print within 5 seconds of completing the previous sheet.
Restart Time	• System ready to print queued jobs - 3 minutes 40 seconds. • System UI fully available for Copy programming - 5 minutes, 45 seconds.	
Billing Meters	**Available via the Administration window.**	Vary by operating company / country; ask local analyst or sales representative to explain your meter operation. Automated reading of the billing meter is available, If Remote Services are enabled

Supplies and Component Yields

The consumable supplies listed below are engineered specifically for use in the Xerox Nuvera™ 100/120 Digital Copier/Printer and provide the highest and most consistent image quality, maximum machine productivity, and uptime.

All yield estimates are based on the indicated 6% area coverage at standardized conditions using 8 ½" x 11" / A4 Xerox 20 lb. (75 gsm) stock. Please note that actual yields vary greatly depending on area coverage, paper stock, and image quality control settings. The current estimates are shown below.

Consumables

Supply	Yield Estimates
Toner	110,000 prints/ 10 lb. drum @ 6% AC
100 Sheet Staple Cartridge	Comes installed in machine. Filled with 1 - 5,000 staple refill, this cartridge typically lasts the life of machine.
100 Sheet Staple Refills	5,000 staples per refill, 3 refills per carton
50 Sheet Staple Cartridge	Required for initial 50-sheet stapler capacity order. Filled with 1 - 5,000 staple refill, this cartridge typically lasts the life of machine.
50 Sheet Staple Refills	5,000 staples per refill, 3 refills per carton.
Staples Refills for MFF Booklet Maker (1 for rear and 1 for front stapler required)	2,000 staples per box; 16,000 per carton (8 Boxes per carton)

Customer Replaceable Units

CRU	Yield Estimates
Toner Waste Bottle	750,000 prints
Waste Developer Bottle	350,000 prints

Disposal Process

All Toner Waste Bottles include a prepaid return shipping label, plastic bag, and tie in the box. This is the preferred method of disposal.

Empty dry ink containers and waste containers are safe and approved for local recycling with common commercially used plastics.

More information can be found at www.Xerox.com, under Online Supplies Ordering; Cartridge Recycling Program.

System Performance Impacts

The printer should not cycle down as long as it receives a page to print within five seconds of completing the previous page. Depending on job characteristics, the following may or may not impact system performance.

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comment
Print Quality Adjustments	Brief pauses for registration or xerographic process adjustments to maintain high image quality	

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comment
Mixed Plex Printing	Switching between one-sided and two-sided printing does cause some loss of productivity. The extent of the loss is directly related to the frequency of the switch.	Adding a blank side to the job can minimize impact. (Note that this is not necessary when producing collated sets run in 1 to N order; in that case the system automatically optimizes performance.

Xerox Productivity Plus (XPP)

The Productivity Plus option enables the capability for the advanced customer to carry out certain maintenance activities. Before this capability can be enabled at a customer location, the designated customer personnel who will be performing the maintenance will need to be trained and certified by Xerox. The training is necessary, and available as an option.

prInteract (formerly Remote Services)

The Xerox Nuvera™ Digital Copier/Printer is enabled with Remote Services features, including Automated Remote Monitoring and On Demand Machine Data Transfer. These services provide the ability for the Xerox Nuvera™ Digital Copier/Printer to securely transport the device's service and engineering data to a Xerox support server within Xerox's fire walled environment. Data is transported through the network using industry standard 128-bit encryption and Secure Socket Layer (SSL) transport protocols.

Enablement of Remote Data Transfer requires two steps:

- Populating of the customer's machine serial number into the Xerox server. This occurs at order placement if the customer selects the CONNECT option.
- Installing the customer's proxy server or Firewall information address on the machine. (Reference the System Administration Guide for details.)

To sign up for Meter Assistant, customers or Sales Specialists should visit xerox.com: Customer Resources: Submit Meter Reads for more information.

Compatible Media List

The media listed on the following pages have been tested and approved for use in the Xerox Nuvera™ Digital Copier/Printer.

The Xerox Nuvera Digital Copier/Printer images on a wide range of uncoated papers. Results may vary depending on the paper used. We are pleased to consult with you to help you maximize your objectives.

The Xerox Supplies Group will be available to test particular media in a customer's application

For more information regarding specific substrates use in the Xerox Nuvera™ Digital Copier/Printer, please call Xerox Supplies at (800)822-2200.

For More Information and Pricing, contact your Xerox Supplies Representative, authorized Xerox merchant, or visit us on the web at www.xerox.com.

Digital Color Xpressions+ (96 Bright)

Reorder No.	Product Description
3R11380	24# (90 gsm) 8½ x 11
3R11381	24# (90 gsm) 8½ x 11 3-Hole
3R11382	24# (90 gsm) 8½ x 14
3R11383	24# (90 gsm) 17 x 11 SG
3R11386	28# (105 gsm) 8½ x 11
3R11392	28# (105 gsm) 8½ x 11 3-Hole
3R11386	28# (105 gsm) 17 x 11 SG
3R11394	28# (105 gsm) 18 x 12 SG
3R11387	32# (120 gsm) 8½ x 11
3R11388	32# (120 gsm) 17 x 11 SG
3R11389	32# (120 gsm) 18 x 12 SG
3R11390	60# Cover (163 gsm) 8½ x 11
3R11391	60# Cover (163 gsm) 17 x 11 SG
3R11384	60# Cover (163 gsm) 18 x 12 SG
3R11395	80# Cover (216 gsm) 8½ x 11
3R11396	80# Cover (216 gsm) 17 x 11 SG
3R11397	80# Cover (216 gsm) 18 x 12 SG

Digital Color Xpressions 98 (98 Bright)

Reorder No.	Product Description
3R5529	28# (105 gsm) 8½ x 11
3R5530	28# (105 gsm) 17 x 11 SG
3R5531	28# (105 gsm) 18 x 12 SG
3R5533	65# Cover (176 gsm) 8½ x 11
3R5534	65# Cover (176 gsm) 17 x 11 SG
3R5535	65# Cover (176 gsm) 18 x 12 SG
3R5537	80# Cover (216 gsm) 8½ x 11
3R5538	80# Cover (216 gsm) 17 x 11 SG
3R5539	80# Cover (216 gsm) 18 x 12 SG

Multipurpose Solar Flares

	24# (90 gsm)	90# (163 gsm) Index
Super Nova Blue	3R6389	3R6399
Galactic Green	3R6390	3R6400
Sunset Pink	3R6388	3R6398
Sunflare Yellow	3R6391	3R6401
Fireball Red	3R6392	3R6402
Gamma Green	3R6396	3R6406
Cosmic Orange	3R6397	3R6407
Rainbow	3R6393	3R6403

Digital Color Parchments

Reorder No.	Product Description
3R11244	24# (90 gsm) 8½ x 11 White
3R11245	24# (90 gsm) 8½ x 11 Gold

Business Multipurpose 4200 Paper

Reorder No.	Product Description
3R2047	20# (75 gsm) 8½ x 11
3R2641	20# (75 gsm) 8½ x 11 3-Hole
3R2051	20# (75 gsm) 8½ x 14
3R3761	20# (75 gsm) 11 x 17

Multipurpose Recycled Paper (30% PCW)

Reorder No.	Product Description
3R6296	20# (75 gsm) 8½ x 11
3R6297	20# (75 gsm) 8½ x 11 3-Hole
3R6298	20# (75 gsm) 8½ x 14
3R6299	20# (75 gsm) 11 x 17

Premium Multipurpose 4024 Paper

Reorder No.	Product Description
3R721	20# (75 gsm) 8½ x 11
3R2193	20# (75 gsm) 8½ x 11 3-Hole
3R727	20# (75 gsm) 8½ x 14
3R729	20# (75 gsm) 11 x 17
3R2531	24# (90 gsm) 8½ x 11
3R3317	24# (90 gsm) 8½ x 11 3-Hole
3R3871	24# (90 gsm) 11 x 17
3R2353	28# (105 gsm) 8½ x 11
3R3873	28# (105 gsm) 11 x 17
3R3041	65# Cover (176 gsm) 8½ x 11
3R3004	90# Index (163 gsm) 8½ x 11
3R5102	90# Index (163 gsm) 11 x 17
3R6383	110# Index (203 gsm) 8½ x 11

Digital Color Graphics

Reorder No.	Product Description
3R11164	28# (105 gsm) 8½ x 11 Cream White
3R11165	28# (105 gsm) 8½ x 11 Warm White
3R11168	28# (105 gsm) 17 x 11 SG Cream White
3R11169	28# (105 gsm) 17 x 11 SG Warm White
3R11172	28# (105 gsm) 18 x 12 SG Cream White
3R11173	28# (105 gsm) 18 x 12 SG Warm White
3R11176	80# Cover (216 gsm) 8½ x 11 Cream White
3R11177	80# Cover (216 gsm) 8½ x 11 Warm White
3R11180	80# Cover (216 gsm) 17 x 11 SG Cream White
3R11181	80# Cover (216 gsm) 17 x 11 SG Warm White
3R11184	80# Cover (216 gsm) 18 x 12 SG Cream White
3R11185	80# Cover (216 gsm) 18 x 12 SG Warm White

Digital Laser Opaque Paper

Reorder No.	Product Description
3R5670	18# (67.5 gsm) 8½ x 11 White
3R5672	18# (67.5 gsm) 17 x 11 SG White
3R5664	20# (75 gsm) 8½ x 11 White
3R5666	20# (75 gsm) 17 x 11 SG White
3R5675	20# (75 gsm) 8½ x 11 Natural
3R5667	24# (90 gsm) 8½ x 11 White
3R5669	24# (90 gsm) 17 x 11 SG White
3R6279	24# (90 gsm) 8½ x 11 Natural
3R5725	28# (105 gsm) 8½ x 11 White
3R5673	65# Cover (176 gsm) 8½ x 11 White
3R5674	65# Cover (176 gsm) 17 x 11 SG White
3R5678	65# Cover (176 gsm) 8½ x 11 Natural
3R5679	65# Cover (176 gsm) 17 x 11 SG Natural

Multipurpose Pastel Colors

20# (75 gsm)

	8.5 x 11	11" 3-HD	8.5 x 14	11 x 17
Blue	3R11050	3R11062	3R11074	3R11086
Green	3R11051	3R11063	3R11075	3R11087
Pink	3R11052	3R11064	3R11076	3R11088
Yellow	3R11053	3R11065	3R11077	3R11089
Buff	3R11054	3R11066	3R11078	3R11094
Goldenrod	3R11055	3R11067	3R11079	3R11093
Ivory	3R11056	3R11068	3R11080	3R11090
Gray	3R11057	3R11069	3R11081	3R11091
Salmon	3R11058	N/A	3R11084	N/A
Tan	3R11061	N/A	3R11085	N/A
Lilac	3R11059	3R11070	3R11082	3R11092
Cherry	3R11060	N/A	3R11083	N/A
Rainbow	3R11100	N/A	N/A	N/A

90# Index (163 gsm) 8.5 x 11

Blue	Yellow	Green	Gray	Ivory
3R5294	3R5295	3R55296	3R5297	3R5298

65# Cover (176 gsm) 8.5 x 11

Blue	Yellow	Green	Gray	Ivory
3R5301	3R5302	3R5303	3R5304	3R5305

Punched Papers

Reorder No.	Product Description
3R4904	19-Hole for Binders ≥½" (BMP 4200)
3R4905	19-Hole for Binders <½" (BMP 4200)
3R5134	11-Hole (BMP 4200)
3R5818	44-Hole (BMP 4200)
3R12163	2-Hole short edge (BMP 4200)
3R12164	5-Hole short edge (BMP 4200)
3R12165	5-Hole long edge (BMP 4200)
3R4299	3-Hole Ring Tuff (PMP 4024)

Tabs

Reorder No.	Product Description
3R4415	90# white 5-Bank (163 gsm) Reverse Collated Paper
3R5520	90# clear plastic 5-Bank (163 gsm) Reverse Collated Plastic
3R12366	60# Xpressions+ white 5-Bank (163 gsm) Reverse Collated Paper
3R5717	110# white 5-Bank (203 gsm) Reverse Collated Paper

Carbonless Papers

Reorder No.	Product Description
3R12374	11", 2 part str../rev., w/c
3R12375	11", 2 part, str../rev., w/p
3R12377	14", 2 part, str.,/rev., w/c
3R12378	17", 2 part, str../rev., w/c
3R12380	11", 3 part, str., w/c/p
3R12382	14", 3 part, str., w/c/p
3R12383	17", 3 part, str., w/c/p
3R12385	11", 4 part, str., w/c/p/g
3R12386	14", 4 part, str., w/c/p/g
3R12387	9" x 11", vert. Perf., 3 part, str., w/c/p
3R12388	8.5" x 11", vert. Perf., 3 part, str., w/c/p

NeverTear Paper

Reorder No.	Product Description
3R3109	8½ x 11 3-Hole
3R3118	8½ x 11

Perforated Papers

Reorder No.	Product Description
3R4160	½" from left 9 x 11 (20# PMP 4024)
3R4175	½" from left 8½ x 11 (20# PMP 4024)
3R4900	3½" from bottom 8½ x 11 (24# PMP 4024)
3R4901	3⅔" from bottom 8½ x 11 (24# PMP 4024)
3R5125	3½" from bottom 8½ x 11 (20# PMP 4024)
3R5126	3⅔" from bottom 8½ x 11 (24# PMP 4024)
3R12166	5½" from bottom 8½ x 11 (20# PMP 4024)
3R5430	Green Check Stock 8½ x 11 (24# PMP 4024)
3R5431	Blue Check Stock 8½ x 11 (24# PMP 4024)

Laser/Inkjet Labels

Reorder No.	Product Description
3R12050	33-up (label 2.83 x 1.00) 8.5 x 11
3R12051	30-up (label 2.59 x 1.00) 8.5 x 11
3R12052	24-up (label 2.65 x 1.25) 8.5 x 11
3R12053	20-up (label 4.00 x 1.00) 8.5 x 11
3R12055	10-up (label 4.00 x 2.00) 8.5 x 11
3R12056	8-up (label 4.25 x 2.74) 8.5 x 11
3R12057	1-up (label 8.5 x 11) 8.5 x 11

Transparencies

Reorder No.	Product Description
3R3108	Removable Stripe
3R6218	3-Hole Removable Stripe
3R3117	Clear
3R2780	Painted Stripe
3R3028	Paperback

Document Folders

Reorder No.	Product Description
3R4885	90# Docupac
3R5105	65# Laser Docupac

High Speed Labels

Reorder No.	Product Description
3R4476	1-up (label 8.5 x 11) 8.5 x 11
3R3146	6-up (label 4.25 x 3.66) 8.5 x 11
3R4475	8-up (label 4.25 x 2.74) 8.5 x 11
3R5719	14-up (label 4.25 x 1.59) 8.5 x 11
3R4474	24-up (label 2.83 x 1.31) 8.5 x 11
3R3139	33-up (label 2.83 x 1.00) 8.5 x 11

DuraPaper

Reorder No.	Product Description
3R12063	11 x 17
3R12064	8½ x 11
3R12065	8½ x 11 3-Hole

Product Specifications Overview by Sub-System

The following sections give more detailed descriptions of the capabilities and limitations of each of the major system components.

FreeFlow Makeready, Web Services and Process Manager

Version 4.0 of FreeFlow Makeready, Web Services and Process Manager is available and provides full support for Xerox Nuvera™ 100/120 Digital Copier/Printer image quality and job ticketing, as well as IQI (Image Quality Interoperability).

Customers with earlier versions (prior to 3.0) of FreeFlow applications may need to upgrade since SPAR support will not be available.

Earlier versions of DigiPath (3.X or below) have not and will not be changed to support the Xerox Nuvera™ 100/120 Copier / Printer as a “targeted device”. DigiPath customers with earlier software releases will be provided a “best case” print path utilizing an existing supported printer to optimize image quality.

- When scanning with the “Document Scan and Makeready” application, best Image Quality results will be achieved using “Generic Write White” when submitting from DigiPath.
- When scanning with the “Scan and Print” application, best Image Quality results will be achieved using “DT75/90” when submitting from DigiPath.
- When Image Quality is not a primary concern, select the DT6180 printer when submitting a job, for the most comprehensive set of Job Ticket Attributes.

Jobs sent from these DigiPath units will have to be held and re-programmed to ensure correct job attributes.

FreeFlow Variable Information (VI) Suite

The FreeFlow VI Software Suite provides a variable data software suite with focus on VIPP (Variable data Intelligent Postscript Printware) - a Xerox technology building on the power of postscript with the goal of a powerful Variable Data solution that can make document creation as simple as just sending the data. Print shop operators and supervisors can also easily print variable data applications in electronic format, as pdf files, with the VI PDF Originator.

Print Speed/System Performance

In general, the Xerox Nuvera™ 100/120 is capable of efficiently handling variable data jobs. The exact size of the run length will vary based on the amount of variable coverage and element demographics (size and percentage of variable text vs. images/graphics).

Overall system performance (click-to-clunk) is dependent upon many factors, including the variable data application and workflow, network environment, image quality settings, and RIP and print rates.

Variable Information Software Limitations

Note: The following limitations are specific to variable information, which may not be inclusive of the entire system independent of whether a job includes variable data.

FreeFlow VI Interpreter

Adobe Portable Document Format (PDF)

- PDF cannot be used as a direct input resource for VI Interpreter. Direct printing of PDF files within a VIPP workflow is not supported. PDF files can be converted to PostScript (using an Adobe compliant driver) and the VIPP Resource Converter or other third party PDF to PostScript converter. PostScript is an input resource supported by the VI Interpreter.
- The VI PDF Originator component of the VIPP workflow can output intelligent, interactive PDF files directly from a VIPP data file. For more information on the capabilities of the VI PDF Originator contact your Xerox representative.

Support for the FreeFlow VI Suite may also be obtained by contacting the Variable Information and Solutions Services Group (VISSG). Customers may call (888) 550-6336.

FreeFlow Print Manager / IPP

The XDS software has been discontinued. A replacement is the FreeFlow Print Manager, which is a separate, standalone product available for purchase.

Network Connectivity

The Xerox Nuvera™ 100/120 Digital Copier/Printer supports industry standard network protocols and Page Description Languages (PDL).

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comments
Connections	• Ethernet Interface (10/100/1000 BaseT)	– **Licensed option** – **Optional connection** – **Token Ring is not natively supported and requires a bridge box**
Network Protocols	• TCP/IP • LPR • IPP • HTTP • Novell (SPX,IPX) • AppleTalk • SNMP	– **Protocols available with Ethernet license**
Scan to Network Save	• SMB • FTP • Secure FTP • NFS	– **Set up Instructions for Scan To File with NFS (Network File System) can be found in the Xerox Nuvera100/120 Digital Copier/Printer Hints & Tips (701P25530)**
PDLs	• Adobe PostScript Level 3 • Adobe PDF • HP/PCL 5e & PCL6 • TIFF • Multi-Page TIFF • ASCII	– **PCL is bundled with the Network licenses in order to support ASCII printing**
Document Submission	• Microsoft Windows 95,98,ME, NT4.0, 2000, XP Printer Drivers	– **Windows 95, 98, and ME are supported via PPD only.** – **WHQL (Windows Hardware Quality Lab) certified for the PostScript and PCL 6 drivers.** – **Drivers are available for download from the Xerox.com web site.**
	• Apple Macintosh OS8, OS9, OSX Printer Drivers	– **Mac OS X Classic Mode supports the drivers and FreeFlow™ Print Manager** – **Mac OS X version 10.2.6 and above will support FreeFlow™ Print Manager**
	• Sun Microsystems Solaris 2.6, 7.x, 8.x , 9.0 , 10 • Linux 2.x	– **Mac OS X version 10.3 and up will support drivers natively in a future software release**
	• Xerox FreeFlow™ Print Manager for direct PDL submission from clients (see previous section)	– **PPD files and FreeFlow™ Print Manager for Solaris and Linux use.**
	• Xerox Web User Interface	

Scanner

Integrated scanner and document handler that utilizes a Xerox patented Dual scan head array.

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comments
Simultaneous Dual Document Feeder (SDDF)	• 300 sheet capacity (20 lb. bond) • 5.5" x 8.5" to 11" x 17" sheets (139.7 x 215.9 to 279.4 mm x 431.8mm) • 13 lb. bond to 113 lb. index (49 to 220 gsm)	
Scan Speed	• 120 images per minute one sided 8.5" x 11"/A4 120 sheets per minute • 120 images per minute two sided 8.5" x 11"/A4 60 sheets per minute	
Scan Resolution	• 600 x 600 dpi • 8-bit Gray (256 shades)	• **Copy jobs are saved at 1200 x 600 dpi, 1-bit depth** • **Copy jobs are not intended for output to other printers**

Maximum Paper Size & Maximum Image Size

The maximum paper size that can be placed on the platen is 12.6" x 18.5" / 320mm x 470mm. The maximum image size, however, is 12.0" x 18.0" / 305mm x 457mm

Color

This is not a color scanner.

Scan-to-Email

There is no "scan-to-email" feature.

Input Document substrates

Document substrates that are not recommended for use in the SDDF include envelopes, metallic cover stock, transparencies, label stock, silver photographic paper, tab stock, Never Tear (or other manufacturers' equivalent), and those substrates whose intrinsic characteristics limit or prevent the separation of documents with friction-retard feeding mechanisms without causing mis-feeds, multi-feeds, jams or document damage.

Carbonless paper

Carbonless paper passed through the document feeder may be subject to marking in areas where the document feeder's paper handling elements come in contact with the carbonless stock due to the "marking characteristics" of this stock. In extreme cases, this unintended marking could obliterate information from the page being reproduced.

Hole punched paper

The SDDF may not reliably feed GBC and similar type documents without damage to the original and without registration/skew errors. The workaround for GBC, spiral-bound and similarly punched papers is to rotate the documents to feed the unbound edge first, and then rotate the image.

File Size Limitation

Files saved as Multi-page TIFF are limited to 2GB in size. This limit may be reached after a few hundred images if the scanned originals contain many images and are scanned at 1200 x 1200 resolution.

Scan to Digital

The system is capable of scanning to the hard drive, a NFS mounted drive, any network drive or desktop, or the CD-RW drive. The following resolutions are supported.

Exported Resolution	Halftone Screen Frequency (Photo Mode)	Purpose
1200 x 1200 x 1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	Xerox Nuvera™ 100/120 CP remote printing
1200 x 600 x 1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	Saving Copy jobs
600 x 600 x 1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	DocuTech 61XX printing
400 x 400 x 1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	Good for some Fax applications
300 x 300 x1	125 lpi @ 53°, 106 lpi @ 45°, 85 lpi @ 45°	Minimal file size

Digital Front End (DFE) - FreeFlow™ DocuSP®

FreeFlow™ DocuSP® Workflow

The workflow utilizes the Xerox Document Services Platform (FreeFlow™ DocuSP®) technology, a proven system that has been continuously improved over the past 12 years and is installed in thousands of Xerox devices worldwide. This will allow training simplicity for current FreeFlow™ DocuSP® operators.

The FreeFlow™ DocuSP® controls all aspects of the system – scanning, "ripping", and printing.

Control electronics are located in an integrated tower on the unit, not in a separate server. They are easily accessible if service is required and have been architected to be replaced and upgraded if newer technology would improve system performance.

Security

TLS/SSL

When submitting a job from a WebUI, or the IPP client, invoking this feature will prevent unauthorized interception of the job by encrypting the data sent over the network.

BAA Authentication

When enabled, this feature requires users to provide a valid username and password before being able to access the WebUI interface.

IP Filtering

This feature controls the built-in-firewall, allowing the system administrator to restrict network access to the system based on the originating IP address. The restriction applies to the following print submission protocols: LPR, IPP, HTTP, HTTPS, SMB Printing, Raw TCP Printing, FTP.

Microsoft ADS Authentication

When enabled, a user will be able to authenticate by means of locally managed user accounts as well as possess the ability to log on locally using an account defined in a Microsoft ADS domain.

Disk Overwrite

This feature is intended for the high security environments that not only want files deleted after use, they want them erased, permanently. This implementation uses algorithms recommended by the Department of Defense (DOD) to ensure complete erasure of all information.

The Disk Overwrite feature is based on the current FreeFlow™ DocuSP® data overwrite feature. In addition to data overwrite on FreeFlow™ DocuSP® disk partitioning, the function is also applied to all the other disks in the product including the image disk for copy, and print transient images.

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comments
Raster Image Processor (RIP)	• Xerox Document Services Platform (FreeFlow™ DocuSP®) 5.1 (T6.0) • Solaris 10 OS • 2.0 GHz, 1 GB RAM, 160GB SATA Hard Drive, DVD/CD-RW Drive, One 10/100/1000 Megabit Ethernet port (RJ45) for customer use, 4 USB v2.0 Ports (2 are used for Keyboard + Mouse), 15" LCD display, USB Keyboard, USB Mouse - or - 650 MhZ, 1 GB of RAM, 80 GB IDE Hard Drive CD-RW/DVD drive,	– **Approximately 10 GB of hard drive space available for customer jobs; however, this space is shared with the print job spool space and should not be filled to capacity.** – **Second optional hard drive available – 146 GB**

	15" LCD display, USB Keyboard, USB Mouse	
RIP Resolution	• 600 x 600 dpi • 1200 x 600 dpi • 1200 x 1200 dpi	– The processor can RIP (process images for printing) at 600 x 600 dpi, 1200 x 600 dpi, or 1200 x 1200 dpi. – Images "ripped" at 600 dpi will provide faster performance when processing and will save files that are smaller in size. – The default setting for this unit is 600 dpi.
Halftone Screen	• 125 lpi @ 53° - 600 x 600: 96 Gray levels - 1200 x 600: 189 Gray Levels - 1200 x 1200: 256 Gray Levels	– **Optimized for the Xerox Nuvera™ 100/120 Digital Copier/Printer**
Image Quality Controls - Scanning	• Document Type • Lighter/Darker • Contrast • Sharpness • Background Suppression • Pictorial Rendering	– Mixed Text & Graphics; Text; Mixed Text & Halftones; Photo – Eleven positions – Seven positions – Seven positions – On or Off – Halftone selection
Image Quality Controls - Printing	• RIP Resolution • Lighter/Darker • DocuTech Emulation • Toner Saver	– 600 x 600, 1200 x 600, 1200 x 1200 dpi – Seven positions – Approximates the Image Quality of the DT61XX family – For less demanding image quality applications; decreases toner consumption by approximately 50%

CD-RW/DVD Drive

- CD-RW/DVD w/quartz white bezel: 32x Record CD-R, 10x Rewrite CD-RW
- CD-RW/DVD w/black bezel: 52x Record CD-R, 24x Rewrite CD-RW
- DVD drive will read (not write): DVD-ROM, DVD-R, DVD-RW, DVD-RAM

Copy Jobs

- Copy jobs can be saved; they consist of two files - a multi-page TIFF and an XPIF ticket

Print From Digital File

Configuration	Re-print Job Formats (from DVD/CD)	Comments
Copier	• Single TIFF • Multi-page TIFF	– **Single TIFF is a TIFF file known to contain** only TIFF format **in one file**
Digital Copier/Printer	• All Items listed above • PCL • PostScript • PDF • Saved Single Page TIFF • ASCII	– **Saved Single Page TIFF file is the Save operation performed in FreeFlow™ DocuSP® when selected to save as single TIFF. This file contains PostScript, and will require the PostScript license to print the file.**

Scan to Digital File

Configuration	Save Job Formats	Comments
Copier	• Multi-Page TIFF	– **Scan to File does not currently emit XPIF tickets; as mentioned above, these are available when saving copy**

		jobs.
Digital Copier/Printer	• All Items listed above • PDF • Single Page TIFF	

Saving jobs

Jobs submitted electronically, either over the network or via media, can be saved.

- Both the “ripped” (Raster Image Processed) image and the job ticket will be saved.
- Jobs can be saved to the system disk, the CD-RW or to any NFS-mounted drive.
- ***The Customer must have the Ethercon license enabled in order for the jobs to be saved as PDF.***

Kit Limitations

- The Foreign Device Interface (FDI) kit and the Removable Hard drive kit cannot be installed on the same system.

Sheet Feed Module (SFM)

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	
	Sheet Feed Module (SFM) 4 Tray	**Large Format Sheet Feed Module (LFSFM) 2 Tray**
Capacity 20 lb bond (75 gsm)	• Paper Input Capacity: 5800 sheets --Tray 1: 1,600 sheets --Tray 2: 3,100 sheets --Trays 3 & 4: 550 sheets each	• Paper Input Capacity: 3200 sheets --Trays 1 & 2: 1,600 sheets
Capacity 80gsm, 0.105 mm	• Paper Input Capacity: 5565 sheets --Tray 1: 1505 sheets --Tray 2: 3020 sheets --Trays 3 & 4: 520 sheets each	• Paper Input Capacity: 3010 sheets --Trays 1 & 2: 1505 sheets
Minimum Size	• Trays 1 & 2 --Feed Direction: 5.5 inches (140 mm) --Across Feed Direction: 8.0 inches (203 mm) • Trays 3 & 4 --Feed Direction: 7.17 inches (182 mm) --Across Feed Direction: 8.0 inches (203 mm)	• Trays 1 & 2 --Feed Direction: 7.17 inches (182 mm) --Across Feed Direction: 8.0 inches (203 mm)
Maximum Size	• Trays 1 & 2 --Feed Direction: 9.0 inches (229 mm) --Across Feed Direction: 12.6 inches (320 mm) • Trays 3 & 4 -- Feed Direction: 18.5 inches (470 mm) --Across Feed Direction: 12.6 inches (320 mm)	• Trays 1 & 2 -- Feed Direction: 18.5 inches (470 mm) --Across Feed Direction: 12.6 inches (320 mm)
Media Types	• Bond, Bristol, cover, index, offset, recycled, vellum, tabs and Mylar tabs, transparencies, carbonless, labels, Never-Tear • Booklet envelopes: 6" x 9", 7" x 10", 162mm x 229mm (C5), 178mm x 254mm • Catalog envelopes: 6" x 9", 7" x 10", 162mm x 229mm (C5), 178mm x 254mm	
Input Weight	• Uncoated: 16 lb bond to 120 lb index (56 gsm to 220 gsm) • Does not support coated stocks – image quality and performance (jams) maybe degraded	
Feeding System	Air shuttle	Air shuttle

COMMENTS.

- Auto tray switching & Load while run capability are supported. Do not open trays when the "Drawer in Use" light is lit.
- Statement tabs can only be output to the Top Tray in the finisher; they cannot be output to the Main Stacker.
- Booklet Envelopes should be fed with flaps closed and on long edge; flap side down.
- Catalog Envelopes should be fed with flaps open, towards operator, with glue side down..
- Trays do not feed to empty. When a feeder empty message is displayed, there could be as much as 80 sheets of stock remaining in the feeder tray (based on 20 lb. bond / 75 gsm). This is to maintain the best possible reliability in the feeder mechanisms.
- The use of Xerox media as listed earlier in this document is recommended. Because there is a difference in technology between offset and digital printing, there is a difference in media properties required for optimum performance with each technology. Xerox papers and specialty media are digitally optimized (paper specs - smoothness, formation, electrical properties, etc., for optimal image quality, toner adhesion and performance, and also precision sheeted - less contamination, better registration for use in Xerox digital equipment.
- A second Sheet Feed Module (4-tray or 2-tray) can be installed in tandem with (and after) the standard 4-tray Sheet Feed Module.

4-Tray SFM

SPECIAL STOCKS

Transparencies
The tray capacity for removable stripe transparencies and Mylar reinforced sheets is 90. There is no constraint for feeding painted striped transparencies or stripeless transparencies.

Carbonless
Xerox Carbonless Papers as listed earlier in this document are the only recommended carbonless media. Only simplex printing is supported on this stock type. Running carbonless paper may require additional cleaning time by the CSE during service of the machine. This time will vary based on the percentage of carbonless stock run. In the 100% carbonless usage case, service time could be up to 60 additional minutes per service call at 150,000 prints

DocuCards®
DocuCards® can only be loaded 100 at a time in a tray. Nuvera feeder trays feed until almost empty but not until empty, leaving 20~40 sheets remaining. When running DocuCards®, frequent reloading of the feeder trays will be required.
DocuCards® can only be run to the Top Tray of the finisher. Some mis-stacking may occur as the DocuCards® catch on the edges of the stacked sheets. ®.

2-tray LFSFM

Reinforced stocks
Reinforced stocks should be limited to less than 90 loaded in a tray at one time.

Tab Jobs
Jobs must be run with reverse collated tabs.
Running tabs requires proper use of the supplied Tab Guides.
Tab stock sizes supported are: Letter, 9"x11", 9.5”x11”, A5, A4.
Tabs are supported when the number of segments is 10 or less.
Images printed on Mylar tabs are typically degraded by toner scatter.

Envelopes
Envelopes should be limited to 60 loaded in a tray at one time. Nuvera feeder trays feed until almost empty but not until empty, leaving 20~40 sheets remaining. When running envelopes frequent reloading of the feeder trays will be required.
Very slight wrinkles (1/2 inch long) may occur on the trail edge of envelopes at the corners.
Due to the nature of feeding envelopes with flap open, some mis-stacking may occur in the top tray as the envelopes catch on the open flaps.
Envelopes should be sent to the Top Tray only, with a maximum limitation of 15.

Drilled Paper & Tab Jobs
Currently most jobs are delivered face down, with the bind edge trailing to match the requirements of the finisher. When tabs are run to the MFF, the tabs must be delivered with the tab leading and this requires an inversion at the exit of the paper path and entrance into the finisher. It is quite common to run drilled paper when running tabs jobs, and this requires the user to reverse the loading of the drilled body stock in the tray such that the drilled edge is opposite what the paper tray loading label for drilled body stock shows.

Insertion Module (IM)

One inserter may be installed on the output side of the printer. The specifications for the Insertion Module are the same as the 4-tray SFM (the 2-tray Large Format SFM is not available as an inserter), except as follows:

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comments
Input Sizes	• Tray 1 & 2: 7" x 10" to 9" x 12.6" (178mm x 254mm to 228.6mm x 320mm) Trays 3 & 4: 7.17" x 10.0" to 12.6" x 18.5" (182.1mm x 254mm to 320mm x 469.9mm)	– **A5 and Statement cannot be fed from any of the trays in the Insertion Module.** **Tabs cannot be fed from the Insertion Module to the MFF Finisher (tabs orientation incompatibility between the IM and the MFF).**

Printer Module

Xerographic monochrome (black and white) print engine. The printer utilizes a Discharged Area Development (DAD) system, often referred to as "write black".

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comments
Image Format	• Maximum image area 12.6" x 18.5" (320mm x 470mm)	• All sheets will have a default 3 mm (0.12 in.) border without printing, regardless of sheet size. • **Default border can be set to 0 mm, or Lead Edge Erase only by the SA; however some image quality degradation may occur up to 6mm from the edge. Also, some paper handling degradation may occur, leading to an increase in the number of jams.**
Printer Resolution	4800 x 600 dpi	No matter what resolution images are "ripped" at, the printer uses hardware imaging process to print them at 4800 x 600 dpi.
Fuser Temperature	374° F (190° C) - when printing	Users may select enhanced permanence for heavyweight paper by means of the User Interface.
Registration	Translating Electronic Registration	Benchmark registration system holds image to sheet alignment at +/- .65mm per side AND front-to-back on Letter/A4 size papers; +/- .75mm per side AND front-to-back on Tabloid/A3 size papers.
Pitches on Photoreceptor Belt **Paper dimensions along process direction**	5 5.5" ≤ Paper Size ≤ 9.0" (139.7mm ≤ Paper Size ≤ 228.6mm) 4 9.0" < Paper Size ≤ 11.7" (228.6mm < Paper Size ≤ 297.2mm) 3 11.7" < Paper Size ≤ 17.0" (297.2mm < Paper Size ≤ 431.8mm) 2 17.0" < Paper Size ≤ 18.5" (431.8mm < Paper Size ≤ 469.9mm)	5 pitch mode produces 120 ppm (100) 4 pitch mode produces 96 ppm (80) 3 pitch mode produces 72 ppm (60) 2 pitch mode produces 48 ppm (40)

Image Quality Expectations

Image Quality Parameter	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comment
Image Uniformity	**The Xerox Nuvera™ 100/120 Digital Copier/Printer is designed to render tints with a high degree of uniformity, and produce vignettes, sweeps and gradients that are smooth and even.** **Sophisticated design prevents unwanted process speed variations that plague lesser digital printing systems with banding problems.** **Half-toning algorithms and customized halftone dot designs take full advantage of the printer's high addressability imaging system to render incredibly sharp, detailed images.**	**The most discriminating judges of print quality may occasionally perceive a degree of mottle in large uniform flat tints.** **Extremely high humidity, low document area coverage or papers with poor formation can exacerbate mottle.**

Text Quality	Black text quality is excellent for sizes as low as 4 point.	
Line Quality	The Xerox Nuvera™ 100/120 Digital Copier/Printer can print solid lines all the way down to 70 microns.	
Mylar Tabs	**Toner scatter typically degrades images printed on Mylar Tabs.**	
Area Coverage	**The Xerox Nuvera™ 100/120 Digital Copier/Printer uses nested automated controls of dry ink, development, tone reproduction, and the internal environment to assure consistent printing. These closed loop process controls continuously test against the targets and adjust as required.**	The control system is designed to run within a specific range of quality. Although some variation may be noticeable in specific cases, the closed loop controls will typically deliver very acceptable quality, consistently, predictably, and without operator intervention.
Other artifacts	As with any printing process, artifacts may occur on the Xerox Nuvera™ 100/120 Digital Copier/Printer. These include streaks, mottle, banding, spots and edge deletions. For most jobs and clients, the expected level of artifacts is within the normal operational and component quality ranges of the system and will not affect the acceptability of the job.	Using Xerox stocks and maintaining your environment will help to minimize the occurrence of these artifacts.

- **Print to Edge**
  This is not a print to edge system due to potential image quality defects on the edge of the page. The system default is set for a 3 mm border erase. It can be set to 0 mm, but it is subject to image quality limitations, which may be acceptable for some applications.
  Some non-standard and custom paper sizes may have a larger border region where image quality cannot be optimized.
- **SRA3 Printing**
  Printing on SRA3 can result in inboard and outboard edge image quality defects. The defects can range from slight mottle to high contrast deletions depending on the type and condition of the substrate being printed on. The reason for this is that the Transfer Assist Blade does not completely extend to the edges of SRA3 substrates. The blade does not make contact with the last 14mm at both the inboard and outboard edges of SRA3 substrates.
- **Area Coverage**
  The system is capable of continuous printing of pages up to 33% area coverage. When documents that exceed 33% area coverage per page are continuously printed, the customer may notice that the system does not print at the rated speed.
- **Xerographic Color Prints**
  Xerographic color originals cannot be run through the fuser.

Multifunction Finisher: Standard & Professional

Two accessories are available. One is required for machine operation.

Standard Finisher

Top Tray / Offset Stacker / Stapler

- Envelopes and Statement size paper (5.5" x 8.5") will be delivered only to the top tray.
- Staple locations for non-standard size papers (e.g., standard sizes are A4, Letter size, etc.) will be slightly asymmetrical. The staple will be located in the position appropriate for the next nearest paper standard paper size.
- Certain stocks (stocks with high clay content and / or composed of other high density materials) may reduce the number of sheets that can be stapled and / or result in miss-staples.

Sub-system	Feature	Comments
Top Tray	250 sheet capacity (20 lb. bond) 5.5" x 8.5" to 12.6" x 18.5"	
Main Stacker	2000 sheet capacity 5.83" x 8.0" to 12.6" x 18.5"	• **Output is normally delivered 1-n, face down to the main tray; jobs can be programmed for face up delivery if desired but stapling position & orientation will not be optimal** • **The system will cycle down when the stacker is full; overflow will not go to the top tray** • **Sizes can be mixed in the stacker, however mixed size stacks should be closely monitored to ensure stack stability** • **The maximum stack size capability is degraded for thin stapled sets.**
Stapler	• Staples up to 100 sheets 20 lb. bond of paper sized 8.5" x 14" or less with 100 sheet staple cartridge loaded • Staples up to 50 sheets 20 lb. bond paper sized 8.5" x 14" or less with 50 sheet staple cartridge loaded • One or Two Staples	• The number of sheets that can be stapled will decrease in relationship to the weight of the paper. • Does not staple tabs or transparencies • The staple placement on the page is shown on the controller

Other 100-sheet stapler cartridge typical minimum capabilities:
- 70 sheets for 28lb (105 gsm) of paper sized 8.5" x 14 or less
- 30 sheets for 80lb cover (216gsm), all paper sizes
- 20 sheets for 28lb (105gsm) Color Expressions and equivalent papers, all paper sizes

Other 50-sheet stapler cartridge typical minimum capabilities:
- 35 sheets for 28lb (105 gsm), all paper sizes (including CX and equivalent papers)
- 15 sheets for 80lb cover (216gsm), all paper sizes
- 20 sheets for 28lb (105gsm) Color Expressions and equivalent papers

Staple Cartridge Limitation: The machine software does not distinguish between the 50 sheet staple cartridge and the 100 sheet staple cartridge. This means that if the 50 sheet staple cartridge is loaded in the machine, and a job with more than 50 sheets is sent to be stapled, a mis-staple or stapler jam will probably occur. If the 50 sheet staple cartridge is used, it is the responsibility of the operator to ensure that jobs exceeding 50 sheets are not submitted for stapling.

Professional Finisher

Includes capabilities above plus a booklet maker, and Z-fold / C-fold

- Top Tray / Offset Stacker / stapler: Same capabilities & limitations as above

This product is not DFA compatible.

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer w/ Professional Finisher	Comments
Top Tray	• Same as Standard Finisher	
Main Stacker	• Same as Standard Finisher	
Stapler	• Same as Standard Finisher	
Booklet maker	• C – fold 1 sheet Letter and A4 sizes • Z – fold 1 sheet Letter and A4 sizes • Bi – fold 5 sheet capacity (20 lb. stock), Letter (8.5" x 11"), A4, Foolscap (8.5" x 13"), Legal (8.5" x 14"), Ledger (11" x 17") and A3 sizes. • Booklets – Dual Staple 15 sheet capacity (20 lb. stock), Letter (8.5" x 11"), A4, Foolscap (8.5" x 13"), Legal (8.5" x 14"), Ledger (11" x 17") and A3 sizes.	• **C - fold and Z- fold weight range is 16 to 32 lb. (60 to 120 gsm)** • **Bi-fold & Booklet sheet capability is reduced with heavier stocks** • **No face trim** • **No Engineering folder** • **No hole punch**

Note: When using the booklet maker, some pre-printed cover sheets may exhibit tear-off from the stapled booklet, depending on the pre-printed ink area coverage and ink type. It is advisable to verify your application prior to production.

Stack Quality

The maximum stack scatter is 25.0 mm or less for:

- Unstapled sets
- Stapled sets greater than 20 sheets

The maximum stack scatter is 60.0 mm or less for:

- Stapled sets less than or equal to 20 sheets
- Stack size maybe limited for stapled sets less than or equal to 20 sheets

Within Set Registration

See Tables 1 & 2 for specification, below. Figure 1 details the correct measurement technique

Figure 1

TOP VIEW (Main Tray & Top Tray)

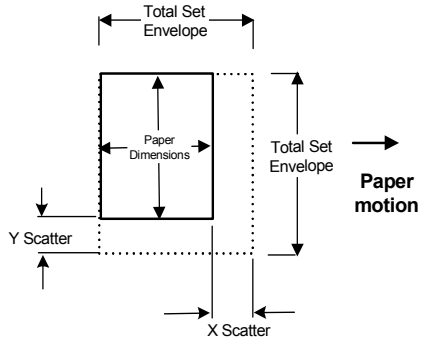

Table 1 (See Figure 1)
Unstapled Sets: Within Set Specifications

	Paper quality	Size / Weight	Relative Humidity (%)	95% of Sets	
				X (mm)	Y (mm)
Main Tray	Xerox recommended	8.5" x 11" (A4), 20 lb (80 gsm)	21 - 65	6	13
	Fair to good	All sizes & weights, 1-20 sheets per set	10 - 90	10	20
	Fair to good	All sizes & weights, >20 sheets per set	10 - 90	20	20
Top Tray	Xerox recommended	8.5" x 11" (A4), 20 lb. (80 gsm)	21 - 65	19	40
	Fair to good	All sizes & weights	10 - 90	Job integrity maintained	

Table 2 (See Figure 1)
Stapled Sets: "Within Set" Specifications

Main tray paper quality	Relative Humidity (%)	95% of Sets	
		X (mm)	Y (mm)
Single Staple			
Xerox recommended [20 lb (80gsm)]	21 - 65	1.5	1.5
Fair to good	10 - 90	3.0	3.0
2-sheet LEF Single Staple			
Xerox recommended [20 lb (80gsm)]	21 - 65	1.8	1.8
Fair to good	10 - 90	3.0	3.0
Dual Staple			
Xerox recommended [20 lb (80gsm)]	21 - 65	2.0	2.0
Fair to good	10 - 90	3.0	3.0

System Productivity:
Xerox Nuvera™ 100/120 Digital Copier/Printer

Output to Top Tray

30 page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera 100 Single-sided sheets printed per minute	Nuvera 100 Double-sided sheets printed per minute	Nuvera 120 Single-sided sheets printed per minute	Nuvera 120 Double-sided sheets printed per minute
8.5" x 11"	100	50	120	60
8.5" x 14" **	60	30	72	36
11" x 17"	60	30	72	36

** 8.5" x 14" paper feeds "Short-edge" as defined in the system.

Output to Main Stacker - Unstapled

30 page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera 100 Single-sided sheets printed per minute	Nuvera 100 Double-sided sheets printed per minute	Nuvera 120 Single-sided sheets printed per minute	Nuvera 120 Double-sided sheets printed per minute
8.5" x 11"	100	50	120	60
8.5" x 14" **	49	26	65	34
11" x 17"	49	26	65	34

** 8.5" x 14" paper feeds "Short-edge" as defined in the system.

Output to Main Stacker – Single staple

30 page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera 100 Single-sided sheets printed per minute	Nuvera 100 Double-sided sheets printed per minute	Nuvera 120 Single-sided sheets printed per minute	Nuvera 120 Double-sided sheets printed per minute
8.5" x 11"	97	48	116	58
8.5" x 14" **	51	27	67	35
11" x 17"	51	27	67	35

** 8.5" x 14" paper feeds "Short-edge" as defined in the system.

Output to Main Stacker – Double Staple

30 page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera 100 Single-sided sheets printed per minute	Nuvera 100 Double-sided sheets printed per minute	Nuvera 120 Single-sided sheets printed per minute	Nuvera 120 Double-sided sheets printed per minute
8.5" x 11" LEF	91	47	109	56
8.5" x 14" **	48	26	63	35
11" x 17"	48	26	63	35

** 8.5" x 14" paper feeds "Short-edge" as defined in the system.

Output to Fold Tray – C Fold, Z Fold, Bi-Fold

One page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera 100 Single-sided sheets printed per minute	Nuvera 100 Double-sided sheets printed per minute
8.5" x 11"	13 C or Z (for Bi-fold, 23 ppm)	13 C or Z (for Bi-fold, 47 ppm)
8.5" x 14" **	8 (Bi-fold only, 17 ppm)	8 (Bi-fold only, 33 ppm)
11" x 17"	8 (Bi-fold only, 17 ppm)	8 (Bi-fold only, 33 ppm)

**Paper fed "Short-edge" as defined in the system.

One page job, simplex to simplex; duplex to duplex

Paper Size	Nuvera 120 Single-sided sheets printed per minute	Nuvera 120 Double-sided sheets printed per minute
8.5" x 11"	16 C or Z (14 for Bi-fold, 28 ppm)	16 C or Z (14 for Bi-fold, 56 ppm)
8.5" x 14" **	10 (Bi-fold only, 20 ppm)	10 (Bi-fold only, 40 ppm)
11" x 17"	10 (Bi-fold only, 20 ppm)	10 (Bi-fold only, 40 ppm)

**Paper fed "Short-edge" as defined in the system.

Productivity for different paper sizes: Output to Fold Tray - Booklets

(Including 2 sheet Bi-fold)

Paper Size	Nuvera 100 2 Sheet Books per minute (pages per minute)	Nuvera 100 8 Sheet Books per minute (pages per minute)	Nuvera 100 15 Sheet books per minute (pages per minute)
8.5" x 11"	10 (80)	3.3 (107)	2.2 (133)
8.5" x 14" **	7.5 (60)	2.7 (88)	1.6 (88)
11" x 17"	7.5 (80)	2.7 (88)	1.6 (88)

**Paper fed "Short-edge" as defined in the system.

(Including 2 sheet Bi-fold)

Paper Size	Nuvera 120 2 Sheet Books per minute (pages per minute)	Nuvera 120 8 Sheet Books per minute (pages per minute)	Nuvera 120 15 Sheet books per minute (pages per minute)
8.5" x 11"	12 (96)	4.0 (128)	2.7 (160)
8.5" x 14" **	9 (72)	3.3 (105)	1.8 (105)
11" x 17"	9 (72)	3.3 (105)	1.8 (105)

**Paper fed "Short-edge" as defined in the system.

Post-process Uses of Xerox Nuvera™ Output

The following post-process characteristics and usages for Xerox Nuvera™ output have been evaluated:

Item	Xerox Nuvera™ 100/120 Digital Copier/Printer	Comment
Permanence	Xerographic prints are as permanent as the paper on which they are printed, under normal environmental conditions on standard substrates.	Xerographic prints are accepted as permanent records by the U.S. Patent Office.
Overprint in xerographic printer	Prints can not be successfully fed through a xerographic printer for overprinting.	Any product with a wax-based fusing system would produce the same result.

Future Features - Xerox Nuvera™ 100/120 Digital Copier/Printer

A Customer /Prospect Request (C/PR) is a product feature enhancement request submitted by a Xerox Representative on behalf of a current or perspective Xerox customer. Currently, C/PRs can be submitted for production class products only.

The C/PR web site at xww.cpr.world.xerox.com can be accessed by the Xerox Representative in order to provide a detailed description of the feature request.