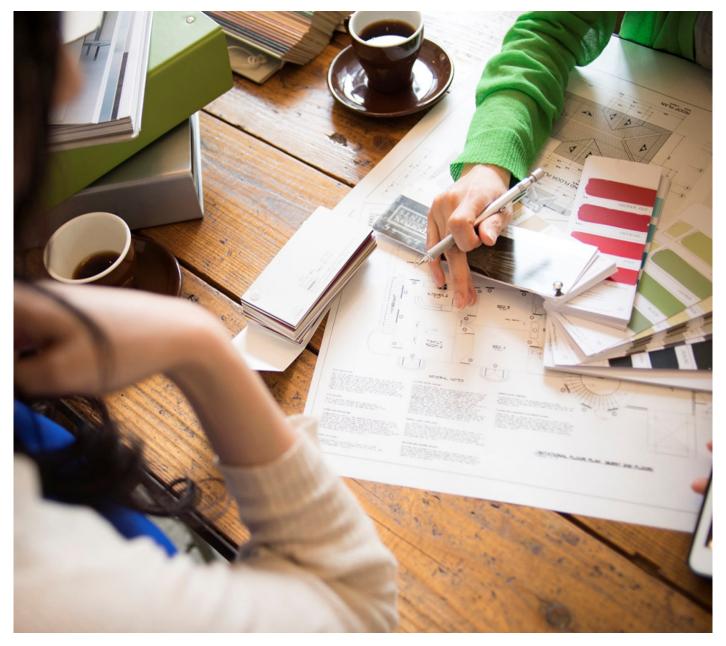
# The Xerox® Versant® Family of Presses



WHITE PAPER



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# The Xerox® Versant® Family of Presses

The Versant 180 Press and the Versant 3100 Press are the latest models in the Xerox® Versant Family of four-colour, cut-sheet production presses. These state-of-the-art digital printing systems provide two excellent options for meeting your company's production requirements. Which press is best suited to your near term business objectives and future plans? We know that a digital press is a large investment and you want to make the right decision — a decision that delivers the best results to your business and your bottom line.

As you know, deciding on the right press is not easy. There are many products available and they all claim to meet your needs. In addition, the industry has many options, each with an overabundance of product information, cryptic technical descriptions and confusing terms. It's a lot to wade through.

To help you appreciate the features of the Versant Family and understand the key differences between the Versant 180 and the Versant 3100, this paper summarises the essential technical facts that can make a difference to your operation. Armed with these facts, you'll be better able to choose the system that works best for you.

While these two presses share many important features, the Versant 3100 is in a class by itself with very advanced levels of automation and productivity. The Versant 180 is a consistent performer in the mid-production range, and ideally suited for smaller print facilities or enterprise environments. In contrast, the Versant 3100 is a production workhorse, built with robust, heavy-duty components for dependable high-speed printing. At an average of up to 250,000 prints per month and a monthly duty cycle of 1,200,000, the Versant 3100 far outpaces the Versant 180's average of up to 80,000 prints per month and 750,000 monthly duty cycle. Also, the Versant 3100 delivers a unique suite of automated workflow, run-time and production support tools to make it an ideal choice for busy print facilities that need to deliver more high-quality jobs, more efficiently, in less time.

We'll start with the technology that is common between the Versant 180 and the Versant 3100, and then outline the important differences between these remarkable presses.

#### ADVANCE, AUTOMATE, DO MORE.

If you are a print provider struggling to grow your business in the rapidly changing digital print marketplace, you know that success requires more than perseverance. It requires a good strategy – a way to drive results and make growth happen. The Xerox® Versant Family of presses offers an expedient solution for strategic

growth. Whether you're new to this challenging marketplace or ready to take your successful printing operation to the next level, there's a Versant press for you.

With the Versant® Family, you can Advance, Automate and Do More. The key is automation. In the printing industry, the term "automation" is frequently used, and we often take it for granted. But what does it really mean? Put another way, how do you value your time? Like most business owners or managers, you know that time management for a company makes the important difference between mediocre performance and excellence in execution. For a business, time really is money. It's a resource to be mindfully managed.

Time and money savings via automation is a predominant theme in all Xerox® print production technology, and it is thoughtfully engineered into our presses. We take it seriously, and make it work to help businesses like yours grow. The Versant presses are designed and built with the best technology – features that put time to work for you, instead of against you. The Versant presses will actually help you manage time and meet deadlines in your facility.

What are these important automated tools that can help you reach high levels of productivity and deliver reliable results? Some are fully automated and working under the covers of the press, while others require an operator click to initiate a function; but they all span the production workflow from job submission to finishing, and they all save operator time and preserve up-time for the press.

Without these tools, procedures take much longer, the press is down too long and too often, and there is more waste and re-printing because of operational errors. In addition, very often operators simply do not calibrate the press or create profiles for stock because the steps are too complex or they don't want to take the time needed for long procedures. The result is unreliable and inconsistent output that may not satisfy your customers.

The automated tools on the Versant presses can help transform a careless print facility culture into an efficient one that delivers quick job turns with faster setup and the ability to achieve stable, consistent and accurate print quality. For example, when operators learn that they can perform calibration with two clicks, one to start the process and one to accept the results – and it takes only two minutes and not twenty minutes – they will do it daily and take pride in the IQ results. They will gladly profile a new stock because this process also takes only two or three minutes, and requires just initiation and acceptance at the end of the process. Other built-in tools let the software do the work, and require no operator intervention, no complex steps and no difficult decisions.

A summary of key automation on the Versant 180 and Versant 3100 includes the following tools that accomplish rapid workflow setup, efficient job processing, precise paper transport, accurate and painless colour management and consistent IQ support and management. The first tools listed are specially designed for the Versant 3100 to meet the demands for higher volume production such as faster job setup and quick changeover, more precise image registration and precision in IQ adjustments for high-value applications:

**Auto Sheet Clearing** – Once the press has stopped and reported a jam, the operator only has to remove any sheets blocking the paper path. All the other sheets, before and after the jam, are automatically ejected to top trays. Paper path sensors and motors work with software controls to locate and move the paper to an output tray. This tool relieves your operators from having to open all the doors and levers along the paper path to pick out individual sheets to clear the entire path. This is a great production timesaver. Available only on the Versant 3100.

Stock Library Manager – This powerful and versatile tool provides for fast media management in a busy production environment by enabling operators to store a large listing of stock settings and retrieve them with a single click to assign to a paper tray. Also, the operator can create and name special Alignment and Fold Profiles that are quickly selected for challenging media, such as lightweight or heavyweight stocks. The Advanced Stock Setup Tool in the Stock Library Manager adjusts print engine parameters for specific stocks, so that when the stock is selected for a tray, the parameters are automatically applied for the job to achieve the best image quality. Adjustments include Fuser Temperature, Fuser Speed, Paper Speed at Transfer, Roll Nip Pressure, Primary and Secondary Voltage Transfer, Alignment Roll Pressure and many other important settings that let you optimise image quality. Available only on the Versant® 3100.

Production Accurate Registration (PAR) – This subsystem is a combination of optical and mechanical technologies that ensures a precise +/- 0.5 mm front-to-back registration from the Advanced High Capacity Feeder for stocks up to 300 gsm. PAR then achieves +/- 0.8 mm when feeding from your other paper trays. PAR uses a registration gate in the paper path to de-skew the lead edge of the paper and then a Contact Image Sensor to read the inboard lead edge sheet and adjust the sheet position. Available only on the Versant 3100.

Full Width Array (FWA) – The FWA provides automatic target reads for print server calibration and destination profiling and hands that data over to colour management software. This ensures stable, accurate and repeatable colour and eliminates the need for operators to use a time-consuming hand-held spectrophotometer. This device also baselines the press by maintaining uniformity in toner density across the page from the inboard side to the outboard side of the paper (perpendicular to the direction the paper moves through the press). The press prints test patterns that the FWA measures, and then the print engine automatically adjusts the print density settings. In addition, this tool automatically adjusts the image alignment on the paper (X/Y position, perpendicularity, skew, magnification), as well as performing an image transfer adjustment that corrects for uneven toner coverage and colour shift – issues that can occur on heavyweight stocks or textured and specialist stocks. Available only on the Versant 3100.

**Automated Colour Quality Suite (ACQS)** – ACQS is advanced colour management software that transfers the complex decisions about colour maintenance from operators to an automated system, and eliminates the time and error associated with colour management. Once initiated by an operator, ACQS automates the printing and measuring of calibration charts and then calculates and makes precise adjustments to colour tables based on the results. Available on both the Versant 3100 and Versant 180, but not the Versant 180 with the Xerox® EX-i 180 Print Server Powered by Fiery®.

Automated Image Caching and Parallel RIPing – These job processing functions occur automatically during the RIPing process on the print server and they improve the overall print time. Images that appear many times in a file are stored for re-use instead of being rasterised at every occurrence. In addition, the file is broken down into the most efficient parts and each part is assigned to a different processor so that processing can occur concurrently. Available on both the Versant 3100 and Versant 180.

Automated Run-Time Colour Controls — A subsystem of closed-loop process controls works continuously during printing to automatically maintain colour consistency and colour-to-colour registration throughout a print run. Colour patches and registration marks are placed on the image carrier between every impression. These patches are then continuously measured during a job and adjustments are made automatically by the press, as required. The result is higher colour quality and consistency with no operator involvement. Available on both the Versant 3100 and Versant 180.

**Automated Sheet Decurling** – A single-pass Decurler automatically removes any up or down curl as paper exits the print engine. This delivers flat sheets for consistent and error-free finishing. The decurling process is automatically computer controlled using data such as the paper weight being used and the temperature and humidity of the press environment. Available on the Versant 3100 and Versant 180.

**Easy Job Submission** – Job submission is flexible and fast with a variety of tools from standard PC and Mac® print drivers to faster and more automated methods such as Web submission, custom Hot Folders, EFI™ PrintMe® Cloud Service and Xerox® Mobile Print

Solution. Generally available on both the Versant 3100 and Versant 180, but EFI, PrintMe Cloud Service and Xerox® Mobile Print are only available on the Versant 180.

Job Management with Pre-Set Queues and Virtual Printers – All Versant® print servers support automatic job processing through pre-set queues or virtual printers that assign print parameters to files automatically after simple job submission. Once the queue or virtual printer is set up, all processing is automatic. Combining this feature with Hot Folders means that users can drag a print file to a folder on their desktop and the workflow is automatic all the way to finishing and stacking. Available on both the Versant 3100 and Versant 180.

X-Rite® Inline Spectrophotometer (ILS) – This scanning device is built into the paper path where it measures XRGA spectral data (X-Rite Standard for Graphic Arts) and hands that data over to colour management software (ACQS) for print server calibration and stock profiling. It ensures stable, accurate and repeatable colour and eliminates the need for operators to use a time-consuming and error-prone hand-held spectrophotometer. Available only with the Versant 180 Performance Package.

Integrated Registration Alignment (IRA) – Uses a combination of proprietary technology that automatically makes the Versant 180 registration easy, accurate and automated. IRA uses image processing called IreCT, which automatically – with high accuracy – adjusts the placement of images on the printed page. Using a dedicated integrated circuit, IRA calculates and computes the best output possible, taking advantage of advanced paper transport components on every sheet. When used in conjunction with Simple Image Quality Adjustments (SIQA), it enables you to produce higher quality jobs faster and on more media types for better output. Available on the Versant 180.

Simple Image Quality Adjustment (SIQA) – Automated Density Uniformity Adjustment – This automated process delivers consistent and uniform toner coverage across the sheet, preventing washed-out areas before they occur and safeguarding image integrity across the page. The tool adjusts print engine tables to ensure that toner is deposited uniformly and consistently across the surface of each page – from the inboard side to the outboard side. In a few minutes, you print and scan CMYK and RGB targets and the software automatically adjusts Raster Output Scanner (ROS) settings. Available on the Versant 180. Density Uniformity is achieved on the Versant 3100 using the Full Width Array.

Simple Image Quality Adjustment (SIQA) – Automated Image Transfer Adjustment – Produce unsurpassed quality printing on everything from smooth, textured and unique stocks by optimising toner coverage for your media. This tool corrects for mottle (uneven toner coverage) and colour shift, which can occur on heavyweight stocks. Once initiated, the tool automatically creates and saves an adjustment to the Bias Transfer Roll, which is the xerographic component that transfers the image from the belt

to the paper. The tool eliminates the need for operators to interpret printed targets and manually enter adjustment values. Once created for a stock, the adjustment is saved and can be either assigned to the stock for automatic use or manually selected for the stock for a print run. This gives the operator precise quality control for all jobs and all supported media. You'll get the same high-quality print regardless of stock type – even on linens, polyesters and other unique substrates. Available on the Versant 180 as a SIQA function and on the Versant 3100 as an Advanced Stock Setup tool in the Stock Library Manager.

Simple Image Quality Adjustment (SIQA) – Automated Image-to-Media Alignment – This automated adjustment ensures that each page printed is properly registered and aligned for impeccable front-to-back registration regardless of media type (size, weight, type of stock) – saving time and eliminating waste due to mis-registration or image skew. This tool generates a stock alignment profile for each stock/tray combination selected to ensure that images are placed correctly on the media. Custom profiles can be created and automatically used each time the associated stock is run, ensuring optimal print quality – simply. Available on the Versant 180. Image-to-Media Alignment is achieved on the Versant 3100 using the Full Width Array.

#### **PLATFORM TECHNOLOGY**

The Versant® 180 and Versant 3100 share common technologies engineered by Xerox specifically for this product family. The features and technology common to both presses include:

- Feeding and Finishing Modules
- Latitude in Stock Sizes, Weights and Types
- Advanced Fusing Technology
- Use of Emulsion Aggregation (EA) Toner
- Bias Charge Rolls and Auto Cleaning Technology
- Ultra HD Image Resolution with Advanced Digital Processing
- Decurling Technology to Ensure Flat Output

#### FEEDING AND FINISHING MODULES

Both the Versant 180 and the Versant 3100 have the same feeding and finishing options with two exceptions. One, the Advanced High Capacity Feeder comes as standard with the Versant 3100 but is optional for the Versant 180. And two, the Versant 180 has the option for lighter-duty business-type finishing with a Business Ready (BR) Finisher and Business Ready Finisher (BR) with Booklet Maker. These two units are described in the section on the features unique to the Versant 180. Otherwise, both presses can provide similar tray capacities and pick points (if you add the option of the Advanced High Capacity Feeder to the Versant 180). The configuration options for inline finishing are exactly the same for both presses. These common feeding and finishing options are summarised in the following pages.

#### **FEEDING MODULES**

This shows the standard feeding on the Versant® 3100 and options for the Versant 180. Note that precise paper sizes vary slightly between the two Versants. The 3100 has the ability to use up to two decimal places and the 180 one decimal place setting on sheet sizes. For precise sizes, see the Customer Expectation and Installation Guide (CEIG).



- 1 Three Internal Trays (standard on all Versants) hold 550 sheets each and feed coated and uncoated sizes 140 x 182 mm up to 330 x 488 mm.
- Bypass Tray (standard) holds 250 sheets of standard size media, 100 x 148 mm up to 330 x 488 mm. Designed for convenience, adding an accessible media pick point for feeding standard and specialist media, auto-duplexing up to 300 gsm on the Versant 180 and auto-duplexing 350 gsm on the Versant 3100. It also accommodates feeding of extra-long sheets (XLS) for banner printing of 330 x 660 mm printed simplex on uncoated and coated up to 220 gsm.
- Advanced Oversized High Capacity Feeder (Adv OHCF) (standard on the Versant 3100, an option for the Versant 180): This unit features a total paper capacity of 4,000 sheets (330 x 488 mm) in two trays (2,000 sheets each tray), with a minimum paper size of 100 x 148 mm and a maximum paper size of 330 x 488 mm. The recommended weight range is 52-350 gsm.
  - Paper stabiliser minimises skew and four blowers help feeding and improve reliability
  - Nip/Release Roller System improves paper handling and prevents misfeeds
  - Recommended for running large quantities of heavy weight, large, specialist medias, postcards and envelopes
  - Tray Inserter for postcards and envelopes

Optional Dual Advanced High Capacity Feeders: A second Advanced High Capacity Feeder (Adv OHCF) can optionally be added to the system to extend the feeding capacities by providing two additional trays. This second, chained feeder is referred to as Tray 8 and 9, and it feeds a variety of stock sizes, including standard sizes and oversized stock up to 330 x 488 mm. Each tray holds 2,000 sheets (90 gsm) with a supported weight range of 52-350 gsm

Optional One Tray Oversized High Capacity Feeder (OHCF) (not shown): This unit features a total paper capacity of 2,000 sheets of  $330 \times 488$  mm paper in one tray, with a minimum paper size of  $100 \times 148$  mm (A5 with Tray Inserter) and a maximum paper size of  $330 \times 488$  mm. Available only on the Versant® 180.

- Recommended weight range: 52-300 gsm
- Paper stabiliser minimises skew
- Four blowers help feeding and improve reliability
- Roller system helps prevent misfeeds

**High Capacity Feeder (HCF) (not shown)** holds 2,000 sheets of A4 paper with a recommended weight range of 64-220 gsm on uncoated paper only. It is ideal for long print runs for reports, presentations and mailers on A4 or letter-size sheets. Available only on the Versant 180.

#### FINISHING MODULES

#### **Production Ready Finishing**

Versatile finishing options allow you to create exactly the press you need to build your business. There's no need to choose between capacity and capability. With Versant, you can have it all – inline and hands-free.

Robust finishing options include our versatile new Production Ready Finisher, handling more pages, larger sizes and heavier weights. Mix and match options include the Xerox® Inserter, Xerox® Basic Punch and our Xerox® Crease and Two-Sided Trimmer with a buffering component to keep your Versant press printing fast. Add the Xerox® SquareFold® Trimmer to automatically create full bleed, perfect-bound-like booklets inline.

Maximum and Minimum Full Bleed Booklet Sizes possible with the Xerox® Production Ready Finisher Booklet Maker, Xerox® Crease and Two-Sided Trimmer and Xerox® SquareFold® Trimmer options.

Largest Full Bleed Booklet Size:

- Biggest paper size for PR Finisher is same as press: 330 x 488 mm
- Two-Sided Trimmer smallest cut is 6 mm from both head and foot
- SquareFold Trimmer smallest face cut is 2 mm
- Largest finished or maximum sized full bleed booklet is 242 x 318 mm

Smallest Full Bleed Booklet Size:

- Smallest paper size for PR Finisher to trim: 194 x 257 mm
- Two-Sided Trimmer smallest cut is 6 mm from both head and foot
- SquareFold® Trimmer largest face cut is 20 mm
- Smallest finished or minimum sized full bleed booklet is 108.5 x 182 mm







←9.5" / 318mm→





←4.27" / 108.5mm→





This shows the full inline finishing chain of options for both the Versant® 180 and the Versant 3100, except for Xerox Partner finishing options such as the Plockmatic Pro50/35 Booklet Maker and the GBC® eWire™.



1 - XEROXº INTERFACE DECURLER MODULE (IDM)	
Function	<ul> <li>Connects the print engine with inline finishers</li> <li>Enables communication between the print engine and finishers</li> <li>Adjusts the exit height of the paper and cools the paper</li> <li>Decurls paper to ensure flat sheets for finishing</li> </ul>
Additional Details	<ul> <li>Different version of this unit is used with the Performance Package on the Versant 180</li> <li>ILS included for the Versant 180 Performance Package; adds additional cooling and an X-Rite® Inline Spectrophotometer</li> </ul>

2 - XEROX® I	2 - XEROXº INSERTER	
Function	<ul> <li>Inserts preprinted/blank media into printed documents</li> <li>Innovative design places it up front to enable other finishing on inserted sheets such as trimming, stacking, punching, folding and stapling</li> </ul>	
Paper Stack	250 sheets	
Paper Size	<ul> <li>Smallest: 182 x 148 mm</li> <li>Largest: 330.2 x 488 mm</li> </ul>	
Paper Weight	<ul> <li>Uncoated: 52-350 gsm</li> <li>Coated: 72-350 gsm</li> </ul>	

3 - GBC® AD	3 – GBC® ADVANCEDPUNCH™ PRO	
Function	<ul> <li>Provides inline punching for all main binding styles with exchangeable modular dies</li> <li>12 die set types accommodate commonly used binding styles such as Comb, Coil, Wire, Ring, ProClick® and VeloBind®</li> </ul>	
Paper Size	Handles 10 fixed sheet sizes (A5-A3)	
Paper Weight	<ul><li>Uncoated: 75-300 gsm</li><li>Coated: 120-300 gsm</li></ul>	
Additional Details	<ul> <li>Convenient control panel shows die type and cycle count, Power On/Off,</li> <li>Chip Tray Full, Chip Tray Position, Punch Die Position, Front Door Alert, Paper Jam and access to adjustments. Extra-Long Sheet (XLS) printing not supported on Versant® 180 with GBC AdvancedPunch Pro option.</li> </ul>	

4 - XEROX® H	4 - XEROX® HIGH CAPACITY STACKER (HCS)	
Function	<ul> <li>Offsets output to large capacity stacking tray with a movable cart, or sends proof print or sheets in the top tray</li> <li>Ideal for long production runs</li> </ul>	
Paper Stack	<ul> <li>Up to 5,000 sheets in main tray of 80 gsm, A4 paper</li> <li>Up to 500 sheets in top tray</li> </ul>	
Paper Size	<ul> <li>Smallest 203 x 182 mm</li> <li>Largest 330 x 488 mm</li> </ul>	
Paper Weight	64-350 gsm	
Additional Details	Two units can be chained for double the stacking volume only on a Versant® 3100	

5 - XEROX® CREASE AND TWO-SIDED TRIMMER	
Function	<ul> <li>Trims 6-25 mm off head (top) and foot (bottom) of sheets</li> <li>Provides full bleed for booklets when face-trimmed with the Xerox® SquareFold® Trimmer</li> </ul>
Paper Size for Two-Sided Sheet Trim	<ul> <li>Minimum: 194 x 210 mm</li> <li>Maximum: 330 x 488 mm</li> </ul>
Paper Size for Two-Sided Booklet Trim	<ul> <li>Minimum: 194 x 257 mm</li> <li>Maximum: 330 x 488 mm</li> </ul>
Paper Weight	<ul> <li>Uncoated: 52-350 gsm</li> <li>Coated: 106-350 gsm</li> </ul>
Additional Details	<ul> <li>Used in creating booklets up to 30 sheets/120 pages</li> <li>Configured with the Xerox® SquareFold Trimmer for full bleed trimming</li> <li>Contains a buffer module that maximises print engine productivity</li> <li>Add up to five customisable mountain or valley creases on a sheet</li> </ul>

6 - XEROX® C	6 - XEROX® C/Z FOLDER MODULE (OPTION FOR PRODUCTION READY FINISHERS)	
Function	<ul> <li>Produces sheets with a C-Fold or Z-Fold on letter stock (A4)</li> <li>Creates an Engineering Z-Fold on A3/B4 paper</li> </ul>	
Paper Size	<ul><li>C and Z-Folds: A4</li><li>Engineering Z-Fold: A3/B4</li></ul>	
Paper Weight	Uncoated: 64-90 gsm	
Additional Details	An Engineering Z-Fold, also called a "Half Z-Fold", places a fold on A3/B4 paper and reduces the sheet to A4 size	

NOT SHOWN	NOT SHOWN - XEROX® PRODUCTION READY FINISHER	
Function	<ul> <li>Produces stapled sets with a variable-length stapler</li> <li>Provides single or dual stapling options</li> <li>100-sheet staple capacity</li> </ul>	
Stapling Paper Size	Minimum: 182 x 146 mm     Maximum: 297 x 432 mm	
Stacking Paper Size	Minimum: 148 x 146 mm     Maximum: 330 x 488 mm	
Paper Weight	<ul><li>Uncoated: 52-350 gsm</li><li>Coated: 72-350 gsm</li></ul>	
Additional Details	<ul> <li>Contains a built-in bi-directional decurler to ensure flat output</li> <li>Stacks 3,000 sheets plus a top catch tray of 500 sheets</li> </ul>	

7 - XEROX® PRODUCTION READY FINISHER BOOKLET MAKER	
Function	Delivers the same feature set as the Production Ready Finisher and also creates stapled booklets up to 30 sheets (120 imposed pages at 90 gsm)
Paper Size	<ul> <li>Minimum: 194 x 257 mm</li> <li>Maximum: 330 x 488 mm</li> </ul>
Finished Booklet Sizes	Minimum/Smallest full bleed: 108.5 x 182 mm     Maximum/Largest full bleed: 242 x 318 mm
Paper Weight	<ul><li>Uncoated: 60-350 gsm</li><li>Coated: 106-350 gsm</li></ul>
Additional Details	Stacks 2,000 sheets to the stack tray plus 500-sheet top catch tray

NOT SHOWN - XEROX® PRODUCTION READY FINISHER PLUS	
Function	<ul> <li>Provides the same functions as the Xerox® Production Ready Finisher</li> <li>Adds Transport Module that enables connection to third-party finishing</li> <li>Available finishing options include Plockmatic Pro50/35 Booklet Maker and GBC® eWire™</li> </ul>
Stapling Paper Size	<ul> <li>Minimum: 182 x 146 mm</li> <li>Maximum: 297 x 432 mm</li> </ul>
Stacking Paper Size	<ul> <li>Minimum: 148 x 146 mm</li> <li>Maximum: 330 x 488 mm</li> </ul>
Paper Weight	<ul> <li>Uncoated: 52-350 gsm</li> <li>Coated: 72-350 gsm</li> </ul>
Additional Details	Stacks 2,000 sheets to the stack tray plus 500-sheet top catch tray

NOT VISIBLE	NOT VISIBLE - XEROX® BASIC PUNCH (OPTION FOR PRODUCTION READY FINISHERS)	
Function	Provides hole punching for 2/3 hole, 2/4 hole and Swedish style 4-hole punch	
Paper Size	<ul> <li>2 hole: 297 x 431.8 mm</li> <li>3 hole: 254 x 182 mm</li> <li>4 hole: 267 x 182 mm</li> <li>Minimum sheet size: 203 x 182 mm</li> </ul>	
Paper Weight	Coated and Uncoated stocks up to 220 gsm	

8 - XEROX® SQUAREFOLD® TRIMMER (OPTION FOR PRODUCTION READY BOOKLET MAKER FINISHER)		
Function	<ul> <li>Receives booklets from the booklet maker, flattens the booklet spine making a flat finished booklet with the appearance of bound book-like edge; eliminates shingle effect with a professional face trim, up to 120 pages (30 sheets).</li> </ul>	
	• Trims 2-20 mm from face edge of the booklet	
	<ul> <li>Used with the Xerox® Crease and Two-Sided Trimmer for finished full bleed booklets with the Production Ready Booklet Maker Finisher</li> </ul>	
Paper Types	Coated and Uncoated stocks up to 350 gsm	

NOT SHOWN - PLOCKMATIC PRO50/35 BOOKLET MAKER		
Function	Produces booklets up to 35 or 50 sheets (depending on model)	
Additional Details	<ul> <li>Options include Rotate Crease and Bleed Trimmer (RCT), Cover Feeder (CF50/35), Face Trimmer (TR50/35) and Square Folder (SQF50/35)</li> <li>Requires Xerox® Production Ready Finisher Plus interface to third-party finishers</li> </ul>	
Paper Size	<ul> <li>With RCT: 206 x 275 mm up to 330 x 457.2 mm</li> <li>Without RCT: 206 x 275 mm up to 320 x 457.2 mm</li> </ul>	
Paper Weight	<ul> <li>Uncoated: 64-300 gsm</li> <li>Coated: 105-300 gsm</li> </ul>	
Booklet Size	206 x 137.5 mm up to 320 x 228.6 mm	

NOT SHOWN - GBC® EWIRE™		
Function	Automated inline binding system using traditional twin-loop wire binding, eliminating the need for manual binding of books and calendars in letter and A4	
Paper Size	A4 (297 x 210 mm), A5	
Paper Weight	75-300 gsm	
Additional Details	• Requires GBC AdvancedPunch™ Pro and the Xerox® Production Ready Finisher Plus	

#### LATITUDE IN STOCK SIZES, WEIGHTS AND TYPES

Both the Versant® 180 and the Versant 3100 handle the same weight range and same size range for stocks. The exception to the common media latitude between the Versant 180 and the Versant 3100 is the Auto-Duplex Maximum Weight. The Versant 3100 supports auto-duplexing on media up to 350 gsm, while the Versant 180 supports this feature on media up to 300 gsm. Additionally, the 3100 has the ability to use up to two decimal places and the 180 one decimal place setting on sheet sizes. For precise sizes, see the Customer Expectation and Installation Guide (CEIG). Both presses support coated and uncoated paper with these specifications:

#### Size Range

 Minimum: 140 x 182 mm, 102 x 152 mm with optional Postcard Inserter

• Maximum: 330 x 488 mm

#### Tray 5 Bypass Tray

 Maximum using Extra-Long Sheet (XLS) feature: 330 x 660 mm

• Minimum: 98 x 146 mm

#### Maximum Auto-Duplex Weight

For both coated and uncoated stocks for 4/4 printing:

- 300 gsm for the Versant 180
- 350 gsm for the Versant 3100

#### Weight Range

Rated weights range from 52-350 gsm

- 52-256 gsm from Trays 1-3
- 52-350 gsm from Tray 5 (Bypass Tray)
- 52-350 gsm from Trays 6 and 7 (Advanced High Capacity Feeder)

#### Type of Media

- Coated and uncoated paper
- Tabs
- Labels
- Envelopes
- Transparencies
- Special substrates such as linen, poly, vinyl and magnet stock
- Special media such as business cards, greeting cards, ID cards, signs, posters and menus









#### PRINTING EXTRA LONG SHEETS (XLS)

On both the Versant® 180 and the Versant 3100, you can print on long sheets up to 660 mm using the standard XLS feature. This lets you create banners, advertisements, book covers, calendars and long sheet prints.

XLS specifications include:

• Print Speed: Up to 9 ppm, Simplex Mode only

• Paper Weights: Uncoated 52-220 gsm; Coated 72-220 gsm

• Maximum Paper Size: 330 x 660 mm

• Maximum Printable Area: 323 x 654 mm

To use this feature, sheets must be fed from the Bypass Tray 5 and sent to an output destination of the Offset Catch Tray or Top Tray of the HCF or Finisher. XLS printing is not supported on a Versant 180 Press if configured with a GBC® AdvancedPunch™ Pro.



Extra long sheet printing – maximum paper size 330 x 660 mm

#### ADVANCED FUSING TECHNOLOGY

Both the Versant® 180 and the Versant 3100 use a Compact Belt Fuser. This important component supports a diverse range of paper types and can print at high speeds while maintaining high image quality.

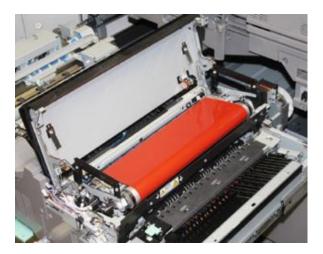
The fuser uses two heat rolls located inside the fusing belt. By using a fusing belt with a low heat capacity, the belt can be heated using the minimum amount necessary for toner fusing. Also, because of the large area of contact between the heat rolls and the fusing belt, the belt can be efficiently and uniformly heated to the required temperature. Once toner fusing is completed, the two heat rolls replenish the heat that was lost through fusing to maintain a constant fusing belt temperature, achieving a consistent image quality. This process makes it possible to print continuously, even on heavyweight paper, without the fusing belt temperature falling. The result is consistent image quality at very high speeds.

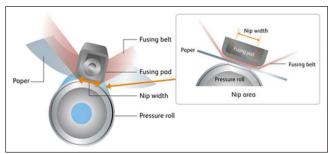
Toner is fused onto the paper by applying both heat and pressure. The paper passes between the fusing belt and a pressure roll, where it undergoes rapid heating under pressure as the toner is fused to the paper. The heat needed is generated through a series of lamps in the pressure pad and in rolls within the fuser belt assembly. Pressure is applied by the fusing roll, which deforms slightly beneath the paper. The area of surface contact is called the "nip."

The Versant Family features a newly designed fusing pad that is flat. The flat surface of the fusing pad results in a larger nip area for contact with the paper during the fusing process. This has a number of important benefits:

- First, pressure is applied more evenly over a larger surface area as the toner is fused. As a result, stress on the paper is reduced, and so is the likelihood of deformation in the paper. This is particularly important for coated paper, which can sometimes blister in the fusing process.
- Second, special stocks like envelopes are less likely to wrinkle in the fusing process. This means that a wider range of stock types can be handled by the press with excellent results.

This compact belt fuser is designed for long life. The assembly is a customer replaceable unit for Key Technical Operators who have been trained by Xerox. By training a local operator, you can avoid a service call and keep the press productive when fuser replacement is required.





Fuser Belt Pressure and Heat Control

#### USE OF EMULSION AGGREGATION (EA) TONER

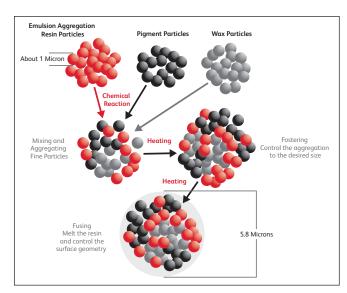
Both presses use low-melt Emulsion Aggregation Toner or Dry Ink. The conventional toner manufacturing process consists of starting with plastic, melt-mixing in pigment and special ingredients, and pulverising the resulting block of composite plastic to a fine powder. Then, the powder still has to be processed to remove oversized chunks and ultra-fine particles. This multistep process results in non-uniform angular particles with a somewhat wide size and shape distribution.

By contrast, the Versant® 180 and 3100 feature EA Toner, which is a chemical toner prepared by an entirely different process called emulsion aggregation. This is a chemical process that "grows" very small, uniform particle sizes from even smaller sub-micron particles. The EA process delivers optimal particle size and distribution for outstanding colour image quality. This small size, and the relative uniformity of all the particles in a particular batch of toner, is more predictable than the conventional mechanical process of pulverising extruded plastic for toner. The process is also less energy intensive.

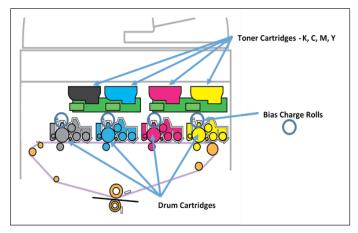
EA toner produces outstanding quality with less dry ink and no fuser oil. The press uses these Dry Ink Cartridges: K or Black Dry Ink (two cartridges for the Versant 3100 and one for the Versant 180); C or Cyan Dry Ink; M or Magenta Dry Ink; and Y or Yellow Dry Ink. These cartridges are keyed so that an operator cannot mistakenly install a cartridge in the wrong housing. Note that the Versant 3100 is equipped with larger Dry Ink Cartridges than the Versant 180 to support its more robust volume production.

## BIAS CHARGE ROLLS AND AUTO CLEANING TECHNOLOGY

The Versant 180 and Versant 3100 both use Bias Charge Rolls. The Bias Charge Rolls are an essential element to Drum Cartridges in the press. The Drum Cartridge, a key xerographic component, consists of a Drum, a Bias Charge Roll and a Cleaning Assembly. The Bias Charge Rolls apply a uniform negative charge to the Drum, which is used to attract the toner to the surface of the drum. Because the charge is uniformly applied, the result is smoother halftones on the printed output. Another advantage to this xerographic assembly includes automatic cleaning built into the process and requiring no press down-time or operator intervention. The Drum Cartridges are designed as a single Customer Replaceable Unit (CRU) for both the Drum Cartridge and the Bias Charge Roll, and this makes maintenance easier and faster for these components.



EA Toner Manufacturing Process



Bias Charge Rolls generate a uniform electrical charge across the Drum Cartridges, which produces smoother halftones than other technology.

## ULTRA HD IMAGE RESOLUTION WITH ADVANCED DIGITAL PROCESSING

Both the Versant® 180 and Versant 3100 deliver a print resolution of 2400 x 2400 dpi using a proprietary image processing and image transfer technology called Ultra High Definition, or simply, Ultra HD. Ultra HD is a precise combination of increased RIP resolution, a proprietary imaging path through the system and VCSEL ROS (Vertical-Cavity Surface-Emitting Laser Raster Output Scanner) technology (the laser used in the xerographic printing process). Together, these technologies produce high levels of image quality for vector images, fine lines, text and ultra-smooth gradients without visible stepping.

Ultra HD at the Print Server

The print server renders images at  $1200 \times 1200 \times 10$  dpi. The EFI<sup>M</sup> print servers available for the Versant Family feature the ability to resolve colour to a depth of 10 bits per colour. The 10 bit colour depth is a unique Xerox feature that means that files are rendered at 10 bits per pixel versus the industry standard of only 8 bits per pixel. This means that the print server can resolve up to 1,024 levels of colour for each CMYK separation. This is a far greater resolution than in previous generation presses, which used a colour depth of only 8 bits. EFI has branded this technology "Fiery Ultra Smooth Gradients" because of its ability to reduce stepping or banding in a gradient blend and deliver superb image-smoothing.

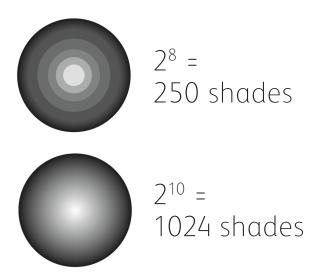
In a special white paper on Versant's advances in imaging, InfoTrends, the leading market research and consulting firm for document solutions, writes:

"In the class of cut-sheet colour electro-photographic products with Fiery front ends, no other system provider has a print engine capable of receiving 10-bit data. This sets the bar for all other systems whose print engines currently can only accept 8-bit data. This is a significant technological advance, and is an important differentiator for the Versant product family."

Ultra HD Resolution on the Xerox® Versant 2100 Press received the prestigious 2016 InterTech™ Technology Award. This award is granted by an independent panel of experts, sponsored by the Printing Industries of America, evaluating technology that will have the most significant impact to the future of print. This identical award-winning technology is included in the Xerox® Versant 3100 and Versant 180 Presses. The award stated:

"Ultra HD Resolution is new technology that is designed to generate and maintain the highest possible image quality throughout the entire imaging chain, from the print server, through data transfer to the print engine and the xerographic components of press itself. Ultra HD Resolution is a precise combination of increased RIP resolution, a proprietary imaging path through the system, and VCSEL ROS technology (the laser used in the xerographic printing process). As a complementary set of core technologies, Ultra HD includes features that optimise RIP resolution, colour depth, half toning and print imaging density. Together, these technologies produce dramatic new levels of image quality for vector images, fine lines, text, and ultra-smooth gradients without visible stepping."

The judges' final analysis was "Ultra HD Resolution lets companies print more colour levels and produce jobs at...a quadruple increase in resolution from previous generation presses. The judges were amazed by the print quality, noting that with the resolution increase there's no longer a reason to avoid the elements that used to be a problem for digital print – gradients, thin fonts, and vector graphics."



This illustrates how the extra color depth delivers thousands of addressable shades in a vector gradient to smooth out transitions.



#### Ultra HD at Imaging Transfer

Between the print server and the print engine, a Common Device Interface (CDI) cable with wide bandwidth completes the data transfer. This is a dual-cable, high-speed serial transmission connection to the print engine that supports the 10-bit colour depth. The transfer process involves complicated computations and large amounts of bandwidth for the transfer. Large bandwidth is required because the size of the data stream is much larger due to the increased resolution and colour depth. The Versant® Family video pathway transfers the bit stream in its entirety, without the need for "down-sampling" or reducing the data. Since down-sampling the image is not necessary, the full resolution that the print server is capable of producing is now presented to the print engine.

#### Ultra HD at the Print Engine

Halftoning, the process of laying down physical toner dots on the printed page, is a sophisticated process that transforms the four toner inks (Cyan, Magenta, Yellow and Black) into the optical appearance of the full colour gamut of which the press is capable. The press does not do this by physically mixing colours, as a painter might; it achieves a similar result by printing very small physical dots of the four primary colours in extremely close proximity to one another in varying combinations, sizes and geometries. These collections of tiny physical ink dots produce a logical "dot" that appears as a specific colour and tonal density from a distance. These geometric dots are themselves so small that they cannot normally be detected by the naked eye without magnification.

The Versant photoreceptor plays a crucial role in the imaging process. Photoreceptors are multi-layer thin film devices that convert light into electrostatic images. The Versant photoreceptor receives light from an imaging device called the VCSEL ROS (Vertical-Cavity Surface-Emitting Laser Raster Output Scanner). The ROS uses thin beams of light that scan from one side of the photoreceptor to the other to lay down a series of dots. Eight sets of four beams (32 beams in total) are used in parallel for simultaneous scanning. One series of dots is called a line, and the ROS lays down line after line of dots on the photoreceptor to create an image. The resolution of the image is a function of the number of dots on a line, and the number of lines on a page. Using this technology, both the Versant 180 and Versant 3100 deliver a print resolution of 2400 x 2400 dpi.

During this xerographic process, anywhere light touches the drum, a small spot of ink will result on the printed page. Anywhere light is prevented from touching the surface, no ink will be deposited. Halftone screening is the process of deciding where light should and should not be permitted through to the drum. Screening is needed for each toner colour in the press.

The Versant Family offers an expanded array of halftone screens or dots that differ in geometry, resolution and ink consumption. These halftone dots or "frequencies" are designed to yield either smoother, crisper resolution of objects or improved uniform tinted areas (smooth, less mottle or grain).

These halftone screens can be selected by the operator according to the needs of the print job:

HALFTONE SCREEN	DOT
Clustered Dot Screens	150 175 200 300 600
Rotated Line Screens	150 200
FM Screen	Stochastic

You can select a higher halftone dot frequency to bring out the details and definition in the print images or use a lower halftone dot frequency to maximise the uniformity of tints across large colour areas. A higher frequency might be used to bring out the detail in text and photos, whereas a lower frequency would be helpful to maintain a uniform appearance for an image with large sweeps of sky, ocean or just straight tint. In addition, the Versant print servers enable operators to select halftones for different object types within the printed page.

## DECURLING TECHNOLOGY TO ENSURE FLAT OUTPUT FOR FINISHING

A Decurler is standard equipment on all Versant presses, and it is built right into the print engine. This is important because the fusing process induces curl in the prints. The amount and direction of the curl, upward or downward, depends on many factors such as media type, ambient humidity and run mode. Both presses use a Decurler that removes or reduces the curl to prevent curl-induced jams and ensure flat sheets for finishing.

The decurling process is computer-controlled using data such as the paper weight being used, as well as the temperature and humidity of the press environment.

The Decurler is located in the Transfer Drawer, immediately after the Fuser. You can easily create Custom Paper Setting profiles that automatically change Decurler settings for specific stocks. There are additional decurling units in the Xerox® Interface Decurler Module and the Xerox® Production Ready Finisher that also ensure perfectly flat finished output.



Print Engine Decurler

#### FEATURES UNIQUE TO THE XEROX® VERSANT® 180

The Versant 180 has a number of features and associated technologies that distinguish it from the Versant 3100. When evaluating the suitability of these two presses for your business, these differences are helpful to keep in mind. They include:

- Print Speed of 80 ppm and up to 80,000 prints for Average Monthly Print Volume;
- a Duty Cycle of 750,000 pages per month
- Smaller Footprint
- All Stocks Rated Speeds (with optional Productivity Package)
- X-Rite® Inline Spectrophotometer for IQ and Colour Management (with optional Productivity Package)
- IQ Management with IRA, SIQA and Custom Paper Profiles
- Built-In Copying and Scanning Features
- Finishing Options for lighter production environments: The Business Ready Finishers
- Value Option for Integrated Print Server

#### Print Speed of 80 pages per minute (ppm)

With a print speed of 80 ppm, the Versant 180 delivers a consistent Average Monthly Print Volume (AMPV) up to 80,000 prints. This print volume is lower than the Versant 3100, which delivers an AMPV of between 75,000 to 250,000 prints. In fact, the productivity of the Versant 3100 starts at about where the Versant 180 leaves off. However, if your business does not require the high production output of a Versant 3100, the Versant 180 may be a better match for your business needs. At a lower cost, and with a smaller footprint, the Versant 180 fits perfectly and modestly into most environments. The Duty Cycle of the Versant 180 is 750,000 pages per month, compared to 1,200,000 pages per month for the Versant 3100.

#### **Smaller Footprint**

The footprint of the Versant 180 is generally smaller than the Versant 3100 because the print engine is smaller. The higher production capability of the Versant 3100 translates into heavier, more robust and larger print engine components to support its output. While all the feeding and finishing modules are the same size, a Versant 180 is usually configured with fewer feeding and finishing units. You may need to consider this when looking at which press better fits your environment. The Versant 180 is more compact and may fit better into selected spaces. Your Xerox support team will help you decide which optional modules you need and the overall size of the planned configuration. You can explore what configuration might work best for you at http://www.explorexeroxproducts.com/.

The relative sizes for the footprints of the Versant presses can be seen below. For both presses, the front and top views of the minimum configuration is shown without advanced finishing options.



Xerox® Versant® 180 (Front and Top View)





Xerox® Versant® 3100 (Front and Top View)

#### All Stocks Rated Speeds, with Optional Performance Package

For the Versant® 180, an option is available called the Performance Package. The Performance Package enhances the capabilities of the base Versant 180 Press with greater speed on heavier weight stocks and also provides tools for automated colour management.

Greater speed on heavyweight stocks is referred to as All Stocks Rated Speed (ASRS). This feature improves productivity by extending the rated speed of the press for each stock size

to every stock weight for that size, up to 350 gsm. Typically, heavier stocks slow down a press because they absorb heat more slowly and less evenly than lighter weight media. The All Stocks Rated Speed feature eliminates the speed bottleneck created by heavier weight stocks. With ASRS, the speed of the press is governed by the size of the stock only, and not by its weight. This means that all stock weights up to 350 gsm for a given sheet size will run at the rated speed – the top speed – for that stock size. The bottom line is, if you run heavy stock, the Performance Package will give you 25% faster output. This chart shows the speed difference with the optional Performance Package:

MEDIA SIZE	PRINT SPEED	
Print Speeds (Simplex) Coated or Uncoated Paper	With Performance Package	Without Performance Package
Maximum Print Speed A4 (LEF)	80 ppm for stocks 52-350 gsm	80 ppm
Maximum Print Speed A3 (SEF)	44 ppm for stocks 52-350 gsm	44 ppm
Maximum Print Speed SRA3 (SEF)	37 ppm for stocks 52-350 gsm	• 37 ppm for stocks 52-220 gsm • 29 ppm for stocks 52-230 gsm
Maximum Print Speed 330 mm x 488 mm (SEF)	37 ppm for stocks 52-350 gsm	• 37 ppm of 29 ppm for stocks for stocks 52-220 gsm 221-350 gsm

The Performance Package must be ordered prior to installation. It is not possible to upgrade the Versant 180 with the Performance Package at a customer location after the system has been ordered and installed.

## X-Rite<sup>®</sup> Inline Spectrophotometer for IQ and Colour Management (with Optional Productivity Package)

The optional Performance Package includes an Inline Spectrophotometer (ILS) built into the paper path and housed in the Xerox® Interface Decurler Module (IDM). The ILS is a sophisticated X-Rite scanning device that measures spectral data and hands that data over to the colour management software for the press. This software, called the Automated Colour Quality Suite (ACQS), ensures stable, accurate and repeatable colour. It also eliminates the need for operators to use a hand-held spectrophotometer during print server calibrations. The ILS and the ACQS software also facilitate the creation of custom destination profiles for each stock that the press can print on. Once set up, the measurement process and calculations are all automatic for both calibration and profiling. The ILS uses the industry-standard XRGA (X-Rite Standard for Graphic Arts).

Note that the ILS is superior to both hand-held spectrophotometers and densitometers. Hand-held spectrophotometers are labour-intensive while inline densitometers are less capable devices. Densitometers do not permit inline profiling or real calibration because they only measure ink density and not the light wavelengths that can be converted into independent colour space. With the ILS, you benefit from the automatic measurements that hand-held spectrophotometers can't deliver, as well as the spectrum wavelength measurements that an inline densitometer can't generate.

The ILS reduces time-consuming manual colour maintenance tasks and also eliminates operator errors. Additionally, operators are more likely to complete calibration and profiling regularly to maintain optimum IQ because it is pain-free and easier.

#### IQ Management with IRA, SIQA and Custom Paper Settings

The Versant® 180's Integrated Registration Alignment (IRA) is a combination of Xerox® proprietary technology that automatically gives you remarkable registration – making Versant registration easy, accurate and automated. IRA uses image processing called IreCT, which automatically – with extremely high accuracy – adjusts the placement of images on the printed page. Using a dedicated integrated circuit, IRA calculates and computes the best output possible, taking advantage of advanced paper transport components on every sheet – automatically. When used in conjunction with Simple Image Quality Adjustments (SIQA), your Versant 180 becomes even more capable – allowing you to produce higher quality jobs faster and on more media types for better output and less waste.

SIQA is a set of maintenance tools that adjusts the quality of the printed images generated by the Versant 180 Press. SIQA performs three types of adjustments:

#### Image-to-Media Alignment Adjustment

SIQA uses 256 reference points to adjust alignment for Skew, Image Magnification, Registration and Perpendicularity. After SIQA is run, the image is properly registered. The Alignment procedure generates an individual alignment Custom Paper Setting for the stock/tray combination selected when performing the procedure. These Custom Paper Settings are profiles that ensure that images are placed correctly on the media. You can create up to 50 profiles. Each created profile is linked to a tray and will then be automatically used each time the associated stock is used, ensuring amazing front-to-back registration on all types, sizes and weights of stock.



The X-Rite® Inline Spectrophotometer automates the collection of XRGA data for calibration and profiling.

#### Density Uniformity Adjustment

The Density Uniformity procedure adjusts print engine tables to ensure that ink is deposited uniformly and consistently across the entire surface of a page from the inboard side of the page to the outboard side of the page. This direction is across the page opposite from the direction of the paper flow through the press. The Density Uniformity Adjustment is especially important when multiple images are printed on one sheet as done for business cards. Without this tool, cards on one side of the sheet may look different from cards on the other side of the sheet, because the density of the toner across the page may vary. With the Density Uniformity Adjustment, the xerographic system automatically adjusts the thickness of the toner so there is no unwanted variation. This ensures consistent colour across the entire printed image.

#### Image Transfer Adjustment

Image Transfer corrects for uneven toner coverage and colour shift – issues that can occur on heavyweight stocks or textured and other specialist stocks. This procedure creates and saves an Image Transfer Adjustment to the Bias Transfer Roll in the press. The Bias Transfer Roll is where the image is transferred from the belt to the paper. Once created for a stock, the adjustment is saved in a profile and can be selected for that stock for any tray.

These three adjustments require printing and scanning targets, and then saving the data. SIQA automates the creation of the adjustment and eliminates the need for you to interpret printed targets and manually enter adjustment values. This saves a lot of time and also avoids errors. Without SIQA, the manual process consists of performing extensive visual inspections, manually resetting values, re-printing, re-inspecting and continuing with a repetitive and time-consuming trial-and-error process.

#### Business Workflows with Copying and Scanning Features

While the Versant® 3100 is more productive than the Versant 180, the Versant 180 has additional flexibility for office workflow with a high-quality single-pass copier/scanner as standard equipment. A dual-head colour scanner, which simultaneously scans both sides of each page, provides a copy and scan duplex speed of 200 ppm for black and white as well as colour at 400 dpi resolution. At 600 dpi, the speed is 150 ppm for colour and 200 ppm for black and white. This speed, combined with the large capacity 250-sheet Duplexing Automatic Document Feeder (DADF), delivers excellent copying and scanning productivity. The document handler holds original sizes from A5 to A3.

In addition to copying, the scanning output options include scan to a local folder, scan to a USB drive (optional), scan to email, scan to the network and scan to a computer. You can also set the scan feature to scan to a cloud storage location such as Google Drive $^{\mathbb{M}}$ , Dropbox $^{\mathbb{M}}$  or Adobe $^{\mathbb{G}}$  Creative Cloud $^{\mathbb{G}}$ .

The Xerox Extensible Interface Platform® is another office option unique to the Versant 180. This is a technology built into the press that enables third-party developed applications to run right from the Control Panel. These applications are not supported on the Versant 3100.

#### Finishing Option: The Business Ready Finishers

The finishing options for the Versant® 180 and the Versant 3100 are exactly the same with the exception of two additional business finishers that are available only for the Versant 180. These Business Ready (BR) Finishers are basic units ideally suited for a low production print facility or enterprise environment.



FINISHER	DESCRIPTION
Business Ready (BR) Finisher	Lighter-production option for finishing and stacking; staple up to 50 sheets uncoated or up to 15 sheets coated; includes hole punch and two output trays: 500-sheet top tray and up to 3,000 sheets using standard or custom sizes (maximum 330 x 488 mm to minimum 203 x 182 mm) up to 350 gsm uncoated and coated
Business Ready Finisher with Booklet Maker	Booklet making plus all of the features of the Business Ready Finisher; 500-sheet top tray, 1,500-sheet stack tray, add a third tray to output saddle-stitch booklets up to 64 pages (up to 16 sheets/90 gsm uncoated or up to seven sheets/to 176 gsm coated). Booklets on uncoated and coated stocks to 300 gsm, maximum sheet 330 x 457.2 mm, half-fold up to five sheets on 220 gsm.

#### Bustled EX-i 180 Print Server Option

While both the Versant® 180 and the Versant 3100 can support a choice of one of two EFI Print Servers – there are some important differences in these options. One is better equipped to support high-end production workflows and the other lighter. However, one of the Fiery options for the Versant 180 is a smaller bustled version of EFI™ Fiery® technology that does not require a separate standalone unit.

The EX-i 180 integrated print server is designed for lighter production environments or where the additional speed and flexibility offered by the EX 180 Print Server is not required. This server is physically attached to the back of the press, out of sight, to achieve a smaller footprint. With this EX-i 180 option, instead of accessing the device and job management through a system server, operators use a PC on the network with a remote version of EFI's Command WorkStation® (CWS).

This value-based option is well suited for an office or enterprise environment. Although generally less sophisticated than the other options, the EX-i 180 Print Server does support Ultra HD Resolution with 10-bit colour rendering and the GreyFont technology used to optimise edge thickness and definition for text and graphics.

However, the EX-i 180 Print Server does not support the Versant 180 Performance Package, complex variable data workflow, Adobe® PDF Print Engine® (APPE), Job Definition Format (JDF), Fiery Compose and the EFI Graphic Arts Package, Premium Edition. The standalone production-featured EX 180 Print Server does support these features.



#### FEATURES UNIQUE TO THE XEROX® VERSANT® 3100

The Versant 3100 has a number of important features and associated technologies that distinguish it from the Versant 180. When evaluating the suitability of these two presses for your business, these differences are useful to understand. They include:

- Print Speed of 100 ppm and up to 250,000 prints for Average Monthly Print Volume; a Duty Cycle of 1,200,000 pages per month
- Auto-Duplex up to 350 gsm, and the ability to feed 350 gsm with a base configuration (Versant 180 requires Advance High Capacity Paper Feeder)
- Full Width Array for IQ Adjustments, Calibration and Profiling
- Media Library for Stock Management
- Production Accurate Registration (PAR)
- Automatic Jam Clearance
- Print Engine Productivity Settings
- Print Engine Cooling Module

#### Print Speed of 100 pages per minute (ppm)

With a print speed up to 100 ppm, the Versant 3100 delivers a consistent Average Monthly Print Volume (AMPV) between 75,000 to 250,000 prints. This print volume is much higher than the Versant 180, which delivers an AMPV of up to 80,000 prints. If your primary objective is higher production in the 75,000 to 250,000 range, then the Versant 3100 is your best choice. The Duty Cycle of the Versant 3100 is 1,200,000 pages, compared to 750,000 pages for the Versant 180.

#### Auto-Duplex up to 350 gsm

The Versant 3100 can auto-duplex jobs with sheet weights up to 350 gsm. This weight range is wider than the Versant 180, which can auto-duplex up to 300 gsm.

#### Full Width Array for IQ Adjustments, Calibration and Profiling

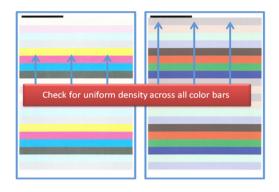
The Full Width Array (FWA) is an inline scanning assembly located in the paper path right after the print engine Decurler. This device provides two print engine IQ adjustments and also provides semi-automatic print server calibration and destination profiling.

The FWA consists of a series of automated RGB sensors that spans the entire width of the paper path. As xenon lamps illuminate test patterns or calibration prints moving along the paper path, a Charge Coupled Device (CCD) scanner assembly, similar to what is in a digital camera with hundreds of tiny LED lights, reads the reflected light from the lamps and measures the red, green and blue light separately. The CCD converts the light into analog voltage signals and sends this data to the unit's processor for analysis.

Using the FWA, an operator with a few simple menu selections accomplishes highly technical tasks that on competitive presses might require a service engineer to complete.

Colour calibration is no longer a time-consuming, labour-intensive chore with the Versant 3100's FWA and Xerox Automated Colour Quality (ACQS) software that work together to ensure every page of output achieves the desired target.

The Full Width Array also adjusts Density Uniformity, safequarding image integrity across the page, delivering



consistent and uniform toner coverage and preventing washedout areas before they occur, as well as Image-to-Media Alignment, saving time and eliminating costly waste caused by registration errors or image skew – for perfect front-to-back registration regardless of media type or sheet size.

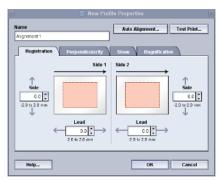
An automated Image Transfer Adjustment prevents uneven toner coverage and colour shift that can occur on textured and heavier-weight stocks – ensuring the same high quality regardless of stock type – even on linens, polyesters and other unique substrates.

The Full Width Array automates time-consuming and error-prone setup tasks. Everything – from setting up a new stock with perfect front-to-back registration, to calibrating the press and creating a custom stock profile – is easy, integrated and fast. Your press is ready for optimal performance before the job starts running, minimising costly interruptions and maximising performance.



Full Width Array (FWA)





Automatic Image-to-Media Alignment

#### Media Library for Stock Management

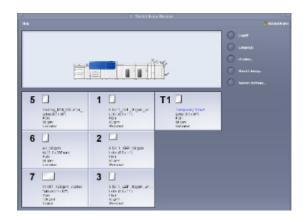
The Stock Library Manager is an application that runs on the print server, so operators can access it quickly for setting up jobs. This useful tool provides a number of key setup and run-time tasks associated with media and media handling. Operators or administrators can:

- Create and manage a library of frequently used stocks for easy selection when loading media.
- Quickly assign a library stock to a specific tray.
- Program a new stock for a tray by entering its properties, if this stock is not in the library.
- From the Versant<sup>®</sup> 3100 Recommended Media List (RML), add stocks to the library or assign them to a tray. The RML is a Xerox-supplied list of recommended stocks for the press.
- Create and name profiles for challenging media, such as lightweight or heavyweight stocks. The profiles can be set to 1) adjust image alignment (Lead and Side Registration, Perpendicularity, Skew and Magnification); 2) adjust document folds (Half-folds, C-Folds,
- Z-Folds and Half Sheet Z-Folds); and/or 3) adjust sheet trimming (Half-fold sheets). Once created, profiles are saved and easily selected by operators from a Tray Properties window.
- Use the Advanced Stock Setup Tool to adjust print engine parameters for specific stocks, so that when the stock is selected, the parameters are automatically applied for a job to achieve the best image quality. Parameters include Paper Curl Correction, Fuser Temperature Adjustment, Fuser Speed Adjustment, Paper Speed at Transfer, Transfer Output Adjustment for Trail Edge, Secondary Voltage Transfer Adjustment and Primary Transfer Current.

#### Production Accurate Registration (PAR)

The Versant 3100 employs a special Production Accurate Registration (PAR) subsystem to maintain precise front-to-back registration during printing. While the registration system on the Versant 180 delivers alignment to within +/- 1 mm, the PAR system on the Versant 3100 delivers a more precise +/- 0.5 mm accuracy for stocks up to 300 gsm from the Advanced High Capacity Feeder. For heavier stock, PAR maintains a registration of +/- 0.8 mm.

This is accomplished with sheet-handling mechanisms in both the High Capacity Feeders and the Aligner Transport. First, the Nip Release Rollers in the High Capacity Feeders help sheets remain flat and positioned by preventing them from being pushed and pulled at the same time. The stock then moves from the feeder to the Aligner Transport Registration Gate. The paper stops at the gate, forming a buckle that helps to de-skew it. Then the gate drops and the sheet moves under a Contact Image Sensor (CIS) that detects the inboard lead edge corner and provides adjustments to centre the media. The paper is then transported to the Intermediate Transfer Belt (IBT) in the correct position to meet the image being transferred from the belt.





The Aligner Transport helps register the paper to +/- 0.5 mm.



A Registration Gate de-skews the paper and then drops as the sheet advances to the Contact Image Sensor for additional adjustment.

#### Automatic Jam Clearance Auto Sheet Clearing

The Automatic Jam Clearance feature on the Versant® 3100 helps to quickly ready the press for printing after a paper jam occurs. With Automatic Jam Clearance, once the press has stopped and reported a jam, the operator only has to remove any sheets blocking the paper path. All the other sheets, before and after the jam, are automatically ejected to top trays. To accomplish this clearing, paper path sensors and motors work with software controls to locate and move the paper to an output tray. This tool relieves your operators from having to open all the doors and levers along the paper path to pick out individual sheets to clear the entire path.

#### **Print Engine Productivity Settings**

#### Auto-Duplex Up to 350 gsm

If you print on media above 300 gsm, the auto-duplexing capability of the Versant 3100 will be important to you. The Versant 3100 can print duplex jobs on media up to 350 gsm without operators having to manually handle the stacks and flip them over for Side-2 printing. This 350 gsm auto-duplex capability eclipses the Versant 180's limit of 300 gsm, and can save a lot of time for heavyweight production jobs.

#### Productivity on Mixed Media

Productivity Mode is a setting that lets you optimise the speed of the press when printing with mixed media. The default is Optimise for Speed. If you are not satisfied with the image quality on a mixed media job, you can change this setting to Optimise for Image Quality. The press will then print slower, because the fuser adjusts more to the weight of the paper to improve the IQ.

Both the Versant 180 and the Versant 3100 have these two options. However, the Versant 3100 has a third setting that is not available on the Versant 180: Optimise for Speed for Mixed Weight Papers Above 300 gsm.

This setting dramatically improves productivity whenever you have heavyweight paper above 300 gsm in a mixed media job. This setting prints faster than the Optimise for Speed setting with mixed stock over 300 gsm and will help your productivity. The three options for the Versant 3100 are:

- **Optimise for Speed** Prints mixed media at a fast rate with fewer fuser temperature adjustments. This is the default setting.
- Optimise for Image Quality Instructs the fuser to adjust its temperature to maintain the best image quality when printing with mixed media.
- Optimise for Speed for Mixed Weight Papers Above 300 gsm Use this setting when at least some of the mixed stock in a job is above 300 gsm. This provides the fastest speed when using mixed stock with some paper over 300 gsm.



Automatic Jam Clearance Auto Sheet Clearing



The Versant 3100 has a third setting: Optimise for Speed for Mixed Weight Papers Above 300 gsm.

#### **Print Engine Cooling Module**

The print engine on the Versant® 3100 is equipped with a special Cooling Module that lowers the temperature of sheets after they exit the fuser and pass beneath it. This unit is shaped like a rectangular block and has a lightweight but strong and flexible material that rotates around it. The material is the same material that is used in the image transfer belt in the xerographic subsystem. For the cooling unit, the belt material simply rotates around the block and transports the printed sheets underneath the unit. As the sheets pass beneath, the heat from each sheet is transferred through the belt to the core of the module. Fans then draw air through a channel in the centre of the block to discharge the absorbed heat. This cooling technology is important for a high-speed press like the Versant 3100, because it ensures that pages do not adhere to each other in the output stacks — an event known as "bricking."



## THREE PRESSES. THREE LEVELS OF AUTOMATION. A SINGULAR STANDARD FOR QUALITY, VERSATILITY AND RESULTS.

The Xerox® Versant® Family of Presses (Versant 180 Press, Versant 180 Press with Performance Package and the Versant 3100 Press) takes automation to the extreme. Incredibly, you'll get higher quality, greater media latitude and advanced capabilities while spending less time on complicated and time-consuming calibration, alignment and high-overhead offline processes.

#### More Performance

With increased duty cycles and the ability to print from 80 to 100 pages per minute on stocks up to 350 gsm, you're ready to go – fast. Innovative Xerox® technologies – like our Compact Belt Fuser and Full Width Array – provide benchmark registration, image-to-media alignment and density uniformity, and other automated quality-boosting and productivity-enhancing benefits.

#### More Image Quality

Stunning Ultra HD Resolution provides four times more pixels than the industry standard. When combined with our EA Toner and our Automated Colour Quality Suite – delivered via an inline spectrophotometer or Full Width Array (model dependent) and process controls – you'll produce offset quality on every digital job.

#### More Versatility

Three Versant presses give you the flexibility to craft what you need. Advanced feeding capabilities allow for longer, uninterrupted runs on top of the unsurpassed uptime, speed, automation and productivity built into the presses. Enjoy the ease of powerful workflow possibilities that range from walkup copy or scan to full automation with the Xerox® FreeFlow® Digital Workflow Collection and XMPie®.

#### More Results

In short, you'll be more productive and see real results with a Versant press. Less down time, reduced waste, faster turnaround times and the ability to run a wide range of high-value applications add up to better margins and higher profits. More results that help you advance, automate and do more with your print operation.

#### Xerox® Versant® 180 Press

#### More Performance

- Speeds up to 80 ppm
- Supports stocks and substrates up to 350 gsm
- Up to 80,000 AMPV, 750,000 Duty Cycle
- Compact Belt Fuser
- Simple Image Quality Adjustment (SIQA)

#### More Image Quality

- 2400 x 2400 dpi Ultra HD Resolution with 10-bit RIP rendering
- Offline Colour Calibration
- Semi-automated SIQA, image-to-media alignment, density uniformity and image transfer
- Emulsion Aggregation (EA) Toner
- Closed-loop process controls for colour consistency throughout print run

#### More Versatility

- Supports production printing as well as walkup office applications (copy and scan)
- 66 cm extra-long sheet for banner printing
- Envelope printing
- Feeding and Finishing options
- EFI™ Fiery® DFE
- Xerox® FreeFlow® Digital Workflow Collection



#### Xerox® Versant® 180 Press with Performance Package

#### More Performance

- 80 ppm for all paper weights
- Full rated speed on all stocks and substrates up to 350 gsm
- Up to 80,000 AMPV, 750,000 Duty Cycle
- Compact Belt Fuser
- SIQA/Inline Spectrophotometer
- Performance Package

#### More Image Quality

- 2400 x 2400 dpi Ultra HD Resolution with 10-bit RIP rendering
- Automated Colour Quality Suite (ACQS) with Inline Spectrophotometer powered by X-Rite
- Semi-automated SIQA, image-to-media alignment, density uniformity and image transfer
- Emulsion Aggregation (EA) Toner
- Closed-loop process controls for colour consistency throughout print run

#### More Versatility

- Supports production printing as well as walkup office applications (copy and scan)
- 66 cm extra-long sheet for banner printing
- Envelope printing
- Feeding and Finishing options
- EFI Fiery DFE
- Xerox® FreeFlow® Digital Workflow Collection



#### Xerox® Versant® 3100 Press

#### More Performance

- Speeds up to 100 ppm
- Supports stocks and substrates up to 350 gsm
- Auto-Duplex on 350 gsm stocks
- Up to 250,000 AMPV, 1,200,000 Duty Cycle
- Compact Belt Fuser
- Full Width Array fully automates setup and delivers optimal performance
- Auto Sheet Clearing to locate and remove jams

#### More Image Quality

- 2400 x 2400 dpi Ultra HD Resolution with 10-bit RIP rendering
- ACQS with Full Width Array
- Fully automated image-to-media alignment, density uniformity and image transfer via Full Width Array
- Production Speed Cooling Module
- +/- 0.5 mm front-to-back registration via Production Accurate Registration (PAR) technology
- Emulsion Aggregation (EA) Toner
- Closed-loop process controls for colour consistency throughout print run

#### More Versatility

- More robust production press, with larger frame for larger volumes
- Stock Library Manager for faster media management from the DFE
- 66 cm extra-long sheet for banner printing
- Envelope printing
- Feeding and Finishing options
- EFI™ Fiery® DFE
- Xerox® FreeFlow® Digital Workflow Collection





Which Versant is right for you? Find out more and explore options at: www.xerox.com/versant180 or www.xerox.com/versant3100

