

bizhub PRESS 1052/1250/1250P



bizhub PRESS # 1052/1250/1250P

B/W PRODUCTION PRINTING SYSTEM



DIGITAL PRINTING AT ITS BEST

In the bizhub PRESS 1250 series, Konica Minolta has combined important assets with amazing black & white print quality. With different A4 production speeds, the bizhub PRESS 1250, the bizhub PRESS 1250P and the bizhub PRESS 1052 unify the same capabilities in oustanding quality and productivity and a huge variety of features that enable your success in digital printing.

- Growing demands from internal and external customers make it essential for you as a print provider to be able to easily adapt and upgrade your production facilities to changing requirements. You need to expand your service offerings continuously and find new ways to attract customers. At the same time, cost savings and the economic provision of print products are essential for you to remain competitive.
- In today's world of multimedia communication, your keys to success are profitability as well as offering highest print quality for the complete print product. To achieve this, consistency and reliability of your output must be first class; and tools to easily control and maintain the output quality are of top importance for you.
- Meeting tightest deadlines, completing print jobs within hours rather than days, and the flexible production of smaller-volume jobs are your other key requirements for digital print production. You must be able to rely on a system that supports these high productivity demands. And you want to keep operator intervention to a minimum, with manual operation steps in the print process reduced as much as possible.

If these are your requirements, don't hesitate to take a closer look at the bizhub PRESS 1250 series. You will most likely find that it can do more for you than you ever thought possible!

THE SECRET OF BUSINESS SUCCESS: **PROFITABILITY**

In the production printing environment profitability depends on speed, efficiency, flexibility, productivity and reliability. In addition to flawless quality, these are essential factors for digital print providers, commercial printers and in-house print rooms to diversify their services, ensure top performance and outdo their competitors.

Versatile finishing

The bizhub PRESS 1250 series offers flexibility at its best: it effectively lowers labour times and thus provides higher margins. This makes you more than equal to any demand from your customer base.

The bizhub PRESS 1250 series gives you the best paper feeding and inline finishing variety in the market: Paper feed units with professional vacuum technology or traditional friction feed as well as great media flexibility (300 gsm in duplex printing and 350 gsm from PFU trays) and finishing from perfect binding to professional saddle stitching - all delivered in a modular concept that enables individual system configurations to your exact requirements.

Outstanding print quality

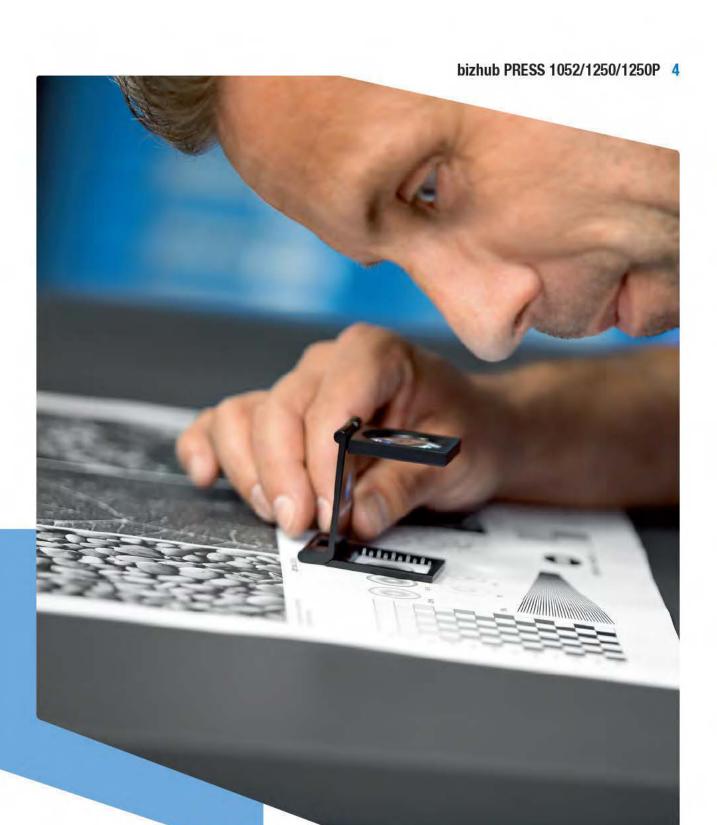
You can rely on getting the best print results for your print jobs - guaranteeing the satisfaction of your customers in

Konica Minolta's unique Simitri® HD polymerised toner ensures precise text and lines and consistent reproduction with the combination of 1,200 x 1,200 dpi LED print resolution. The Tone Curve Utility tool provides operators with complete control and flexible optimisation possibilities for each and every print job. It is these great features that work with you and for you to deliver the best print output results and form the basis for long-term customer satisfaction.

Reliable productivity

Meet and exceed today's demands in black & white print products and work more profitably thanks to the unmatched productivity offered by the bizhub PRESS 1250 series! The bizhub PRESS 1250/P offers not only highest productivity, but an overall productivity you as a professional printer can rely on. With up to 125 ppm A4 / 70 ppm A3 with bizhub PRESS 1250/P and up to 105 ppm A4 / 60 ppm A3 with bizhub PRESS 1052, these digital presses provide maximised print performance while tools like CS Remote Care maximise turn-arounds in production environments where deadlines are an everyday occurrence.





bizhub PRESS 1250 SERIES TECHNOLOGY

The bizhub PRESS 1250 series delivers success in print thanks to a wide choice of unique proprietary technologies which together ensure high-definition images as the basis for top-quality printouts. The image quality is truly consistent from the very first to the very last page, and from print job to print job. It is the ultimate guarantee of professional results that are able to impress even the most demanding customers.

1,200 x 1,200 dpi LED print head

The bizhub PRESS 1250 series achieves two-way 1,200 dpi print resolution thanks to the inclusion of a state-of-the-art LED print head (LPH). This technology improves the reproduction of even small fonts, while the high number of screen raster lines effectively smoothes the reproduction of half tones.

Simitri® HD toner

Simitri® HD toner is a Konica Minolta in-house development which uses polymerised processing techniques to produce smaller, more consistently shaped particles to raise printing resolution. This polymerised toner also has a lower fixing temperature and helps reduce paper curl. And because fixing is oil-free, the result is a natural-looking gloss with reduced glare, producing an output of a quality that rivals even that of offset printers. The toner material recipe contains around 10% biomass, helping to reduce the environmental impact.



Belt transfer system

The bizhub PRESS 1250 series is equipped with a stateof-the-art belt transfer system designed from scratch to improve paper feeding as well as the quality of the transferred images. The full-area adherence of the paper to the belt eliminates any gaps and ensures that the toner is applied to the paper consistently and absolutely evenly.

User-defined screens for setting and Tone Curve Utility

The introduction of predefined setting masks (two types with three patterns each) plus a choice of dot screen settings allow users to select the best screen for each specific print job. The print station also comes with a standard controller plus the proprietary Tone Curve Utility tool to help you adjust and correct print data to better match customer specifications. These techniques allow for adjustment of image brightness and contrast over a wide range, without affecting text, to still deliver 100% density. The system allows individual customer settings to be stored and recalled as and when needed.

For jobs that involve the reproduction of colour documents in black and white, the CIE colour space allows the operator to achieve highly accurate colour conversion by precise greyscale calibration and controlled collapse of shadowed areas.

Schedule management

The schedule management application implemented in the bizhub PRESS 1250 series gives operators an overview of the information needed to best handle all queued print jobs. The display includes all current jobs plus helpful detailed information including the kind of paper in use, and displays a timeline to indicate capacities. The operator can access updated and detailed overviews of suspended and reserved jobs.

Multi-sheet detection sensor

The paper feed unit supplying the central print engine is fitted with a multi-feed paper detection sensor that prevents blank sheets getting mixed in with the printed output. The sensors use ultrasound technology to monitor paper feeding from all trays; if a blank sheet is detected, printing is automatically suspended to prevent misprints and wastage of high-quality paper.

Paper skew detection sensor

The sensor installed to prevent paper skew measures the skew angle based on the time gap and the linear velocity of paper during transfer, and automatically stops printing as soon as the paper skew detected exceeds a preset limit. This pre-empts printing errors and shuts the door on post-processing problems before they even happen.



bizhub PRESS 1250 SERIES **BUSINESS OPPORTUNITIES**

The production print market is undergoing significant changes today. Accelerated by the recent economic downturn, the number of printing businesses is in decline, total print volume is decreasing and an increasing number of print applications are being transferred to electronic media. Informed printing companies know that they need to grow their print business, increase profit margins and generate new revenues. To support customers in achieving this, Konica Minolta has launched

Digital1234; a comprehensive business development program that puts the focus upon the customer's needs to enable his business.

The key question is 'How can we enable your business today?' The solution to most business challenges can simply be answered with "by saving you money, increasing your profit, adding new services and making you more productive." The Digital 1234 business building program has been designed for simplicity and encourages businesses to take an opportunity-based approach – to start driving a better business. Using four practical steps the customer is guided and coached on how to identify, assess, justify and implement new business opportunities.

The basic concept features these four steps, giving advice through the business process: Why should I invest in this opportunity? How can I fit this into my existing business? Who has experienced it and can tell me about it? What steps should I take to be successful with this new opportunity?

Starting with "why", Digital 1234 uses simple opportunity-based papers written by credible industry partners, who explore each business opportunity. The second step focuses upon the "how", by using simple assessment questions set by a panel of international and independent business experts. The third step, the "who", describes the story behind the business success while the fourth step provides business resources for download to help customers prosper in their business, such as business focused implementation guides written by industry consultants.



Digital1234

The Digital 1234 business development program is designed to encourage print businesses to focus on the opportunities to save money, increase profits, add new services and to improve productivity.

Using four practical steps the customer is guided and coached on how to identify, assess, justify and implement new business opportunities.

Web to print

- In the past all print jobs were submitted and processed manually.
- With the rise of Internet usage, most printer businesses have recognised the value to offer customers a web portal where they can submit their print jobs.
- Web submission includes: uploading the print data, getting a price quote, getting a proof, tracking information on the status of the print job, automatic link to payment and administration, etc.
- Web to print enables your company to be online 24/7, to automate the print job submission process, improve efficiency, eliminate manual elements in the job submission process.





Variable data printing

- What is most unique about digital printing?
 - You can customise every page within one print run and thus create a unique, targeted and relevant message for each recipient.
 - This is called "Variable Data Printing" (or VDP).
- Direct mail can be more personal:
 - "Dear Sir or Madam" will become "Dear Paul".
- This is the unique value proposition with digital printing that cannot be achieved with traditional printing.
- Studies have shown: the more you zoom in on your readers, the more effective your message will be.
- On average personalised marketing collateral leads to 31% greater profits compared to general marketing materials.
- As a print provider you can charge more for VDP jobs, and your customer gets a better response per piece.
- More profit for you more business for your customer.

bizhub PRESS 1250 SERIES



VARIOUS INLINE FINISHING OPTIONS

- For highest modularity (more than 50 system configurations)
 For enormous productivity
 Thanks to multi (GBC) punch unit, folding and punching unit, 100 sheet stapling unit with cutting mechanism, 50 sheet booklet making unit with trimming, perfect binding unit for books of up to 30 mm thickness, auto ring binder for books of up to 102 sheets.

HIGHEST PAPER OUTPUT CAPACITY

Thanks to 15,000 sheets trolley-based output capacity separate sub trays



POST INSERTION UNIT

- For the production of high quality print products with preprinted colour inserts Thanks to 3 trays with vacuum feed technology for up to 5,000 sheets Additionally two post insertion trays with up to 1,000 sheets including punching and folding of post inserts



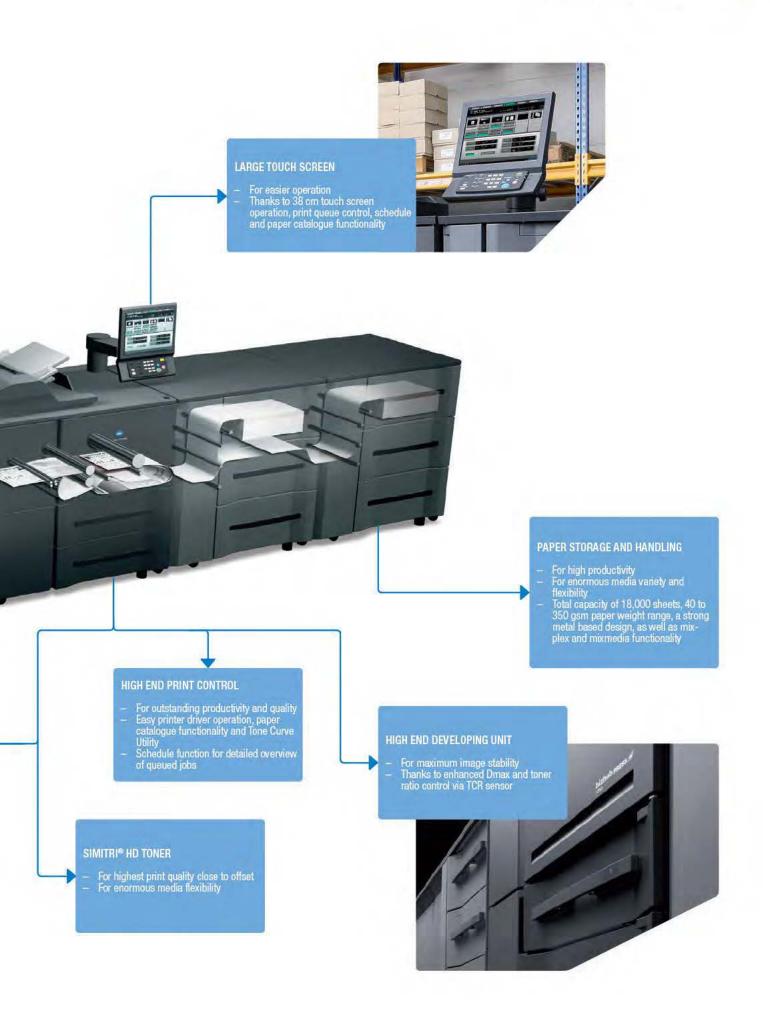
ENHANCED IMAGE TECHNOLOGY

For outstanding media flexibility Thanks to soft roller and fusing NIP technology changing fusing pressure instead of fusing temperature of fusing temperature



TRANSFER BELT TECHNOLOGY

For outstanding image accuracy For lowest possible front to back registration tolerance





bizhub PRESS 1250 SERIES CONTROLLER

Optimised job processing

Featuring the kind of RIP speed previously unavailable in this class, the bizhub PRESS 1250 series easily handles even the most comprehensive of jobs, and features JDF-JMF compliance to ensure full and easy integration into any working environment. This is optimised job processing at its very best, boasting the kind of capacities needed to produce high volumes in minimum time. Featuring outstanding CIE functionality, the controller enhances the reproduction of colour-based documents wherever necessary. RGB colour data is transposed into the CIE colour space to produce much finer grey scaling with high degrees of differentiation, far exceeding what is achievable when printing colour data without transformation.

production demands and satisfy customer specifications. The controller is fitted out with the very latest Intel platform and integrated into the main body.

Tone Curve Utility

Konica Minolta's unique Tone Curve Utility places a tool at your fingertips to help make intelligent RIP adjustments, such as screening and tone curves, along with the ability to customise the screening angle and dot shape. Operators have the choice of a variety of predefined tone curves and can quickly and simply create individual curves using

a straightforward drag&drop functionality, e.g. setting customised profiles such as the controller default or storing them on the RIP ready for instant recall in the printer driver. It is this level of comprehensive functionality which means operators have complete and flexible control over print quality optimisation.



EFI Fiery Central Solo

- The EFI Fiery® Central Solo enables printer operation and control via the popular and successful Fiery Command Workstation.
- It unifies the operational environment by managing multiple printers with one single intuitive interface.
- The optional Fiery Impose-JobMaster bundle is the perfect assistant to help you professionally impose and perform complex document composition including importing scans, tab creation and page editing and numbering during job preparation.
- The benefits of the multi Fiery driven engine environment
 - Administration transparency across the entire printing fleet: all printers can be controlled from one interface.
 - Up to three engines can be connected and grouped for use in workflows (e.g. Color Split, Volume Balancing, automatic rerouting on job error, etc.).

Paper catalogue

The paper catalogue is another feature of the bizhub PRESS 1250 series that complements the device's other outstanding capabilities to maximise operational speed and efficiency. After programming the paper catalogue just once, the operator no longer needs to think about whether the paper type required for a specific job is stored. When preparing production, the operator simply selects the desired type of media from the paper catalogue. The functionality includes the option of allocating individual names to different types of paper, like "Corporate Blue". This is a way of speeding up recognition and raises the benchmark of user convenience even higher.





INIMITABLE VERSATILITY FROM START TO FINISH

Professional finishing of the printed product is an integral part of any production run – with flexibility as the key for success. A comprehensive range of highly versatile finishing equipment facilitates suitable upgrading of Konica Minolta's digital production printing presses for varied applications and ensures perfect integration into any production environment.

Paper feed unit PF-706 & PP-701

The large capacity paper feed unit PF-706 extends the paper capacity with three paper trays and capacities of up to 6,000 sheets, at the same time enhancing the media processing capabilities to cover paper weights between 40 and 350 gsm. Attractive additional flexibility comes from the ability to feed all paper sizes from all trays. The optional paper feed kit PP-701 for preprinted media provides enhanced take-up performance thanks to the application of airflow separation in the PFU tray.



Two-sided printing/



One-sided printing



Mixmedia white/colour sheets from different trays



Mixplex one-/twosided during operation



Combined mixplex/ mixmedia



Paper feed unit PF-703, PI-PFU & HT-505

The large capacity paper feed unit PF-703 extends the paper capacity by three paper trays holding up to 5,000 sheets and enables the processing of media between 40 and 350 gsm. All paper sizes can be fed from all trays. The PF-703 incorporates vacuum feed technology for continous large capacity feeding even for imprints on preprinted media. The optional heating unit HT-505 can optimise the paper feeding on offset and coated stock and in high humidity zones.



Two-sided printing/ duplex



One-sided printing



Mixmedia white/colour sheets from different trays



Mixplex one-/twosided during



Combined mixplex/ mixmedia



Colour sheet insertion



Auto ring binder GP-502

The intelligent choice for customers who are looking for a unit to detect the right binding size and then bind sheets using a one-fits-all binding element. The GP-502 adds the ability to bind up to 102 sheets in one book, giving print providers the production technology to produce high value documents in a very short time.





Booklet making unit SD-506

The SD-506 is ideal to create saddle stitched and trimmed booklets with heavy covers, and speeds up inline production of the most diverse print products and in-house materials. The SD-506 produces brochures of up to 200 pages (50 sheets), including automatic image shift and trimming, and has an output capacity for up to 50 booklets. For a professional finish, booklets can be combined with heavy covers printed on up to 200 gsm paper. In addition, the SD-506's multi-letter fold-in and multi-half-fold functionality for up to 5 sheets accelerates the creation of mailings. For print providers being able to offer print products with such attractive enhancements means an interesting diversification and a boost to sales and profits.



(folding and saddle stitching)



binding with



binding with



Trimming







Folding & punching unit FD-503

An ideal choice for the production of mailings, flyers, etc., the FD-503 is used to its best advantage in combination with the booklet maker, staple finisher or perfect binder. The folding and punching unit provides six different folding schemes, two- or four-hole punching with 100% productivity, and the post insertion of preprinted sheets and covers. With the FD-503, compiling even complex, professionally finished documents merely requires a single fully automatic operation, which saves key operators and print providers valuable time that can be used for more important tasks.



Two-hole



Half-fold









parallel-fold



Sheet insertion



Multi (GBC) punching unit GP-501

The multi punching unit offers high performance multi-hole (GBC) punching of sheets at full system speed in preparation for offline spiral binding. Various available die sets correspond to the most popular punching schemes, such as metal-based coil (velo) and plastic (comb) binding. Gaining flexibility with the GP-501, print providers find it easy to diversify their portfolio of print products, thus satisfying the varying demands of existing as well as new customers.



punching



Stacking unit LS-505

With the large capacity stacking unit, the Konica Minolta bizhub PRESS series are perfectly equipped for easy integration into environments with existing finishing facilities. Up to 5,000 sheets of offset, i.e. shifted, output can also be stacked in the trolley-mounted stacker; with an integrated paper clamp mechanism, transport is always safe. The trolley much enhances flexibility in the print shop: Being able to wheel the prints directly to an offline finishing or enveloping machine without having to let them dry or cool down saves key operators valuable time which can be better used for more complex tasks.







Perfect binding unit PB-503

This is the finisher for inline production of all kinds of perfect-bound books. The functionality includes Z-fold insertion and insertion of preprinted colour covers and sheets. Book binding is possible for books with up to 30 mm spine width and includes inline cover trimming. The integrated cover tray has a capacity for up to 1,000 sheets. The PB-503 incorporates a trolley stacker to output perfect bound books and can also be mounted in conjunction with the stapling unit, offering the combination of perfect binding and stapling in one system. With the PB-503, print providers wanting to surprise their customers with sophisticated bound books that e.g. combine different substrates have found the right solution for such challenging applications. They can offer enhanced flexibility and add attractive variety to their portfolio meeting any customer's needs and increasing orders, turnover and with that profit.



binding with Z-fold



Stacking with frolley for perfect bound







cover insertion



Perfect sheet insertion

Stapling unit FS-532

Equipping a bizhub production printing system with the FS-532 stapling unit gives print providers a multi-position stapling system with the capability to produce manuals, reports and other extensive documentation with ease and dependability. This unit can staple up to 100 sheets at a speed that is able to match the production capacity, and cuts the one-fits-all staple to size during processing. Auto-shift sorting and grouping is also available; this unit gives an output capacity of up to 4,200 sheets. The FS-532 can be upgraded with optional punching and post insertion.



Comer stapling

Colour cover



Two-point stapling



Two-hole



Four-hole punching



Colour sheet



Auto-shift

Variable staple

All-in-one finisher FS-532 & SD-510

The combination of the FS-532 with the SD-510 means the staple finisher is now able to make booklets. The fully automated booklet making capacity is up to 20 sheets (80 pages) per booklet, has two folding functions, centre fold and letter fold, with further options available, including punching and post insertion of printed sheets.



Corner





Two-point stapling



Colour sheet



Two-hole

Letter fold





ALL-ROUND AVAILABILITY

Professional printers simply need dependable hardware and highly reliable printing technology. Which is why reliability was a top priority in the development of the bizhub production printing systems. Its quality of workmanship and robust metal construction guarantee absolutely sound and secure operation. Various tools and system features enhance the all-round usability

Toner and paper refill on the fly

Toner and paper refill on the fly largely avoid production interruptions.

Customer Maintenance Support

In addition, Konica Minolta's Customer Maintenance Support (CMS) concept permits the fast and simple exchange of certain system components and working parts by the operator. Print providers welcome being able to solve such minor system problems instantly in-house as this further enhances their flexibility.



CS Remote Care

Via CS Remote Care, Konica Minolta's remote service tool for counter readings, system errors and maintenance requirements of bizhub PRESS and PRO systems can be automatically transmitted to the Konica Minolta service.

This enables early analysis of the system status and preventive maintenance if required, before concrete problems occur. It also helps minimise system downtimes and administrative efforts on user side, saving print providers time and money, helping them keep their sanity, and offering them the benefits of virtually allround system availability and maximised productivity.



Technical specifications

PRINTER SPECIFICATIONS

Print speed A4	Up to 105 ppm (bizhub PRESS 1052)	
	Up to 125 ppm (bizhub PRESS 1250/P)	
Print speed A3	Up to 60 ppm (bizhub PRESS 1052)	
	Up to 70 ppm (bizhub PRESS 1250/P)	
Print resolution	1,200 x 1,200 dpl	
Gradations	Up to 256 levels	

SYSTEM SPECIFICATIONS

Paper weight	40-350 gsm
Duplex unit	Non-stacking type; 50-300 gsm
Paper sizes	A5 to A3+ (SRA3); min. 95 x 139 mm; max. 324 x 483 mm (with PF-703)
Maximum image area	314 x 483 mm (with PF-703)
Paper input capacity	Max.: 18,000 sheets; main unit: up to 3,000 sheets
Paper output capacity	Max.: 15,000 sheets (plus sub trays)
Warm-up time	Less than 420 sec.
Main unit dimensions	990 x 780 (910 w. controller) x 1,233 (1,464 w. panel) mm
(W x D x H)	
Main unit weight	37.5 kg

CONTROLLER SPECIFICATIONS

Hardware	Embedded controller
CPU	Pentium G6950 2.8 GHz
RAM	2 GB
HDD	250 GB or above
Page description	PCL 5e/XL (PCL 6); Adobe PS 3; TIFF; PDF
languages	125 ON CONTROL OF ANY DESTRUCTION OF THE PROPERTY OF THE PROPE

SCANNER SPECIFICATIONS

Scan speed A4	Up to 105 opm	
Scan speed A3	Up to 60 opm	
Scan resolution	Up to 1,200 x 1,200 dpi	
Scan modes	TWAIN scan; Scan-to-HDD; Scan-to-FTP; Scan-to-SMB;	
	Scan-to-eMail	
Scan formats	PDF; TIFF; secured PDF; XPS	

COPIER SPECIFICATIONS

Copy speed A4	Up to 105 ppm (bizhub PRESS 1052)
	Up to 125 ppm (bizhub PRESS 1250/P)
Copy speed A3	Up to 60 ppm (bizhub PRESS 1052)
	Up to 70 ppm (bizhub PRESS 1250/P)
Gradations	256 gradations
FCOT	Less than 2.8 sec. (A4 LEF)
Magnification	25-400% in 0.1% steps
Multiple copies	1-9,999

- All specifications refer to A4-size paper of 80 gsm quality.
 The support and availability of the listed specifications and functionalities varies depending on operating systems, applications and network protocols as well as network and system configurations.
 The stated life expectancy of each consumable is based on specific operating conditions such as page coverage for a perticular page size (5% coverage of A4). The actual life of each consumable will vary depending on use and other printing variables including page coverage, page size, media type, continuous or intermittent printing, ambient temperature and humidity.
 Some of the product illustrations contain optional accessories.
- Specifications and accessories are based on the information available at the time of printing and are subject to change without notice.

 Konica Minolta does not warrant that any prices or specifications mentioned will be error-free.
- All brand and product names may be registered trademarks or trademarks of their respective holders and are hereby acknowledged.

ACCESSORIES

Automatic document feeder	Max.: 100 sheets
Paper feed unit PF-706	3 magazines; paper capacity: up to 6,000 sheets; paper weight: 40–350 gsm; standard paper sizes; A5 to A3+ (SRA3); min. paper size: 95 x 139 mm; max. paper size: 324 x 463 mm; optional preprinted paper feed kit PP-701 available
Paper feed unit PF-703	3 magazines with air-suction technology; paper capacity: up to 5,000 sheets; paper weight: 40–350 gsm; standard paper sizes: A5 to A3+; min. paper size: 95 x 139 mm; max. paper size: 324 x 483 mm; optional heating unit HT-505 available
Relay unit RU-510 *	Sheet reverser; adapts processing speed to 125 ppm
Folding and punching unit FD-503	Preprinted sheet insertion (PI): 2 PI trays for 500 sheets each punching (2 and 4 hole); folding (half-fold, Z-fold, gate-fold, letter fold-in, letter fold-out, double-parallel-fold); sub tray for up to 200 sheets
Multi (GBC) punching unit GP-501	Multi punching of A4 sheets; user replaceable die sets for: velo blnd, plastic comb, wire blnd, colour coll, pro click; paper weight: 75–216 gsm
Auto ring binder GP-502	Stacking, punching and binding of books, up to 102 sheets; self-adjusting bind elements (one size fits all); paper weight: content 75–120 gsm; cover 163–216 gsm
Bookiet making unit SD-506	Booklet making of up to 50 sheets (200 images); saddle stitching, trimming; output tray for up to 50 booklets; sub tray for up to 200 sheets; Multi-letter fold-in (up to 5 sheets); multi-half-fold (up to 5 sheets)
Stacking unit LS-505	Up to 5,000 sheets stacking capacity; up to three units can be installed; up to 15,000 sheets stacking capacity; trolley mounted stacker; auto-shift stacking; sub tray for up to 200 sheets; paper clamp mechanism
Perfect binding unit PB-503	Hot melt glue binding system; integrated 1-side trimming of cover sheets; books from A5 up to A4+ (307 x 221 mm); books from 10 sheets up to 30 mm spine width; cover paper tray for up to 1,000 sheets; sub tray for up to 200 sheets; book stacking capacity; 3,300 sheets; (2 stacks)
Stapling unit FS-532	Stapling of up to 100 sheets; two-point and corner stapling; variable staple length (cutting mechanism); output for up to 4,200 sheets (A4); sub tray for up to 200 sheets; auto-shift sorting and grouping
Saddle stitching kif SD-510 (for FS-532)	Booklet making of up to 20 sheets (80 images); saddle stitching cover sheets from 50 to 300 gsm; output tray for booklets; multi-letter fold-in (up to 3 sheets); multi-half-fold (up to 5 sheets)
Punch kit PK-522 (for FS-532)	Punching (2 and 4 holes selectable)
Post insertion unit PI-502 (for FS-532)	Insertion of preprinted sheets; Pl trays for 200 sheets each
Humidifler unit HM-102	Humidification decurler















