



KONICA MINOLTA

AccurioJet KM-1e

# GROWTH WITHOUT COMPROMISE

RETHINK CREATIVITY



Giving Shape to Ideas

# PRODUCTION AT THE HIGHEST LEVEL

## RETHINK PRINT VALUE

With the AccurioJet KM-1, Konica Minolta innovated inkjet production and made sheet-fed inkjet a reality. Creating a highly stable, colour-accurate digital press platform, the AccurioJet KM-1e now incorporates an even more advanced inkjet print head design with patented Dot Freeze Technology™ paired with unheard-of versatility in offset substrate handling. Our latest digital UV inkjet press combines the print materials and stability characteristic of offset presses with the benefits of latest digital technology. Take advantage of its amazing media flexibility and zero make-ready for variable data printing and production on oversized B2 sheets.

### Unprecedented media flexibility

Increase your scope with the AccurioJet KM-1e – say yes to new customers and jobs that are more profitable! Work with an unprecedented array of specialist media including heavy textured, canvas, metallic, translucent, packaging carton stock and plastics\* – our “Swiss army knife of printing technologies” makes multitasking a breeze and lets you switch between applications easily and efficiently without compromising on quality.

### Outstanding image quality

Extend and enhance your application capabilities with LED UV inkjet and Konica Minolta’s patented Dot Freeze Technology™. Our proprietary edge-processing technology achieves a sharper text quality while true 1200 x 1200 dpi resolution and an amazingly wide colour gamut give you virtually unlimited creative applications.

### Singular reliability and consistency

Impress your customers with superb results from the first print to thousands of printed pages of identical top quality, guaranteed by the AccurioJet KM-1e’s absolute colour consistency and singular registration accuracy. Inline sensors ensure continuous image quality control and automatic correction, effectively ruling out image quality degradation. Mechanical front and side lays combined with material grippers deliver best in class registration.

### Amazing productivity

Achieve highest volume printing with ease! Up to 3,000 sheets per hour, automatic duplex printing with no delay for ink drying, flexible imposition onto the wide B2+ format (585 x 750 mm), large-capacity media input and output, minimal downtime thanks to self-maintenance by the operator – all this adds up to shortest turnaround times and extreme time savings compared to offset production! Important advantages that, as a commercial printer or other high-end press user, you know to appreciate.

\* Due to their nature, some plastics may require pre-treatment such as Corona or primer.

# CUTTING-EDGE INNOVATIONS

## RETHINK TECHNOLOGY

### Patented Dot Freeze Technology™

For its unique, proprietary Dot Freeze Technology™, Konica Minolta developed a variety of inkjet technologies including an innovative 1200 dpi printhead as well as a patented ink formulation. Further enhancing the output quality, an image correction system checks the print quality of every printed sheet – giving you peace of mind because your customers will always get top print quality as well as perfectly matched colours within a tolerance of  $\Delta E$  1.5.

### Patented LED UV B2+ inkjet process

Developed in-house, Konica Minolta's Dot Freeze Technology™ is a patented LED UV curable inkjet printing process that prints perfected high definition images in a single print process on the widest range of materials without any need for priming or post coating – whether coated or uncoated and independent of sheet thickness or material type.

### High viscosity ink system

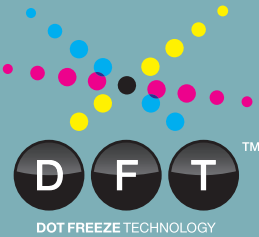
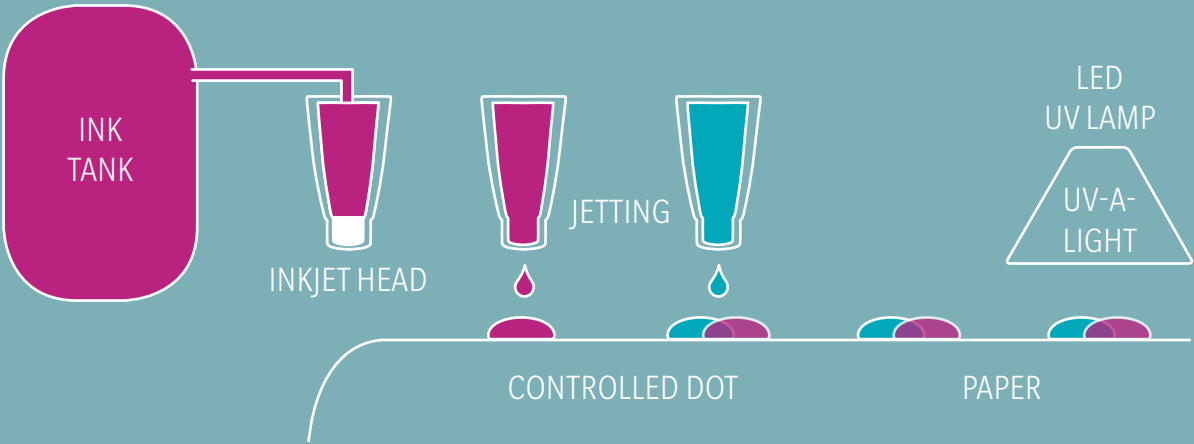
Our unique Dot Freeze Technology™ controls each printed dot on contact with the material, preventing ink dots from coalescing or bleeding. This is achieved with a unique high viscosity ink system that allows reliable jetting due to much lower viscosity at that moment but instantly “freezes” the ink upon contact with the substrate – thus preventing uncontrolled movement of the ink dot and avoiding too deep penetration of the ink into uncoated materials. The result is exceptional colour stability on both coated and uncoated materials in the widest working temperature environment of any digital press in the world. Users achieve sharp crisp text and a wide gamut with vibrant colours that jump off the page.

### Consistent print results

LED UV curing technology applies minimal heat to the substrate and is designed to deliver consistent results for thousands of hours of operation. Since UV curable inks are used, there is no water to be driven out of the print, eliminating typical issues associated with drying such as material distortion, ability to perfect and excessive heat.

KONICA MINOLTA LED UV INK “DOT FREEZE TECHNOLOGY™”

PROCESS	INK TANK	JETTING	ON PAPER	CURED BY LED UV
HIGH VISCOSITY	HIGH VISCOSITY			HIGH VISCOSITY FOR CONTROLLED DOT
LOW VISCOSITY		LOW VISCOSITY FOR STABLE JETTING		





# THE ESSENTIAL PRODUCTION MACHINE

## RETHINK DIGITAL

The AccurioJet KM-1e, Konica Minolta's innovative digital inkjet press, incorporates special UV ink, high-performance inkjet print heads and unique imaging technologies as well as a revolutionary image processing system. Combining these proprietary technologies, we have realized several aspects that are essential for the performance of a production machine: highest image quality, amazing stability, outstanding productivity and unheard-of flexibility.

To you as a printing professional, the new KM-1e offers important merits for streamlined production processes and sped-up operation, as well as diversification and the creation of new business – all to help you strengthen your business relationships with existing and new customers.

## REAP ATTRACTIVE BENEFITS WITH THESE MAJOR ASSETS!

### Provide unlimited print services with the AccurioJet KM-1e, thanks to:

- Wide range of paper thicknesses: 0.06 to 0.6 mm
- Processing of extensive media selection:  
Clear film, metallic media, canvas, embossed paper,  
and many more
- No pre-coating required for normal substrates

### Expand your business with these innovative technologies:

- Combination of proprietary Konica Minolta print  
heads and revolutionary UV ink
- Inline sensors for consistent and reliable print results
- Stable media transport system comparable to  
media processing on an offset press

### Achieve shortest turnarounds and highest efficiency with:

- High productivity of 3,000 sheets/hour
- Automatic duplex printing with no waiting  
time for ink drying
- Flexible imposition on wide media size of  
585 x 750 mm
- Large-capacity media handling for  
highest-volume print runs

### Impress your customers with top reliability and absolute consistency based on:

- Superb colour consistency
- Greatest registration accuracy
- Inline sensor for image quality control
- Paper handling technologies equivalent to  
an offset printing system

### Produce outstanding image quality supported by:

- 1,200 x 1,200 dpi output resolution
- FOGRA-certified wide colour gamut
- Sharp text quality
- No damage to paper

### Create efficient workflows thanks to KM-1e's excellent operability, including:

- IJ Manager enhanced data processing system
- Easy incorporation into existing offset workflows
- Inline interface for third party post-press equipment
- Newly adopted tape inserter



# HIGHEST PRODUCTION EFFICIENCY & SHORTEST TURNAROUND

## RETHINK PRODUCTIVITY

Opting for the AccurioJet KM-1e will enable you to offer your customers the very shortest of delivery times – achieving top productivity like never before!

### Highly productive with max. 3,000 printed sheets/hour

The AccurioJet KM-1e can deliver an hourly output of up to 3,000 sheets in simplex mode on the maximum paper size (585 x 750 mm); in automatic duplex mode, it still produces up to 1,500 prints/hour.

### Automatic duplex printing with no drying time

The unique inkjet print process of the AccurioJet KM-1e requires no drying time even when duplex printing, which is therefore fully automatic. This eliminates waiting times and much reduces the time required for production. Auto duplex printing is possible on 0.06 to 0.45 mm substrate thickness.

#### COMMON B2+: 530 X 750 MM

#### KM-1E B2+: 585 X 750 MM

Small size package



8.5 x 11 inch Letter size



### Improved flexibility and productivity with wider media size

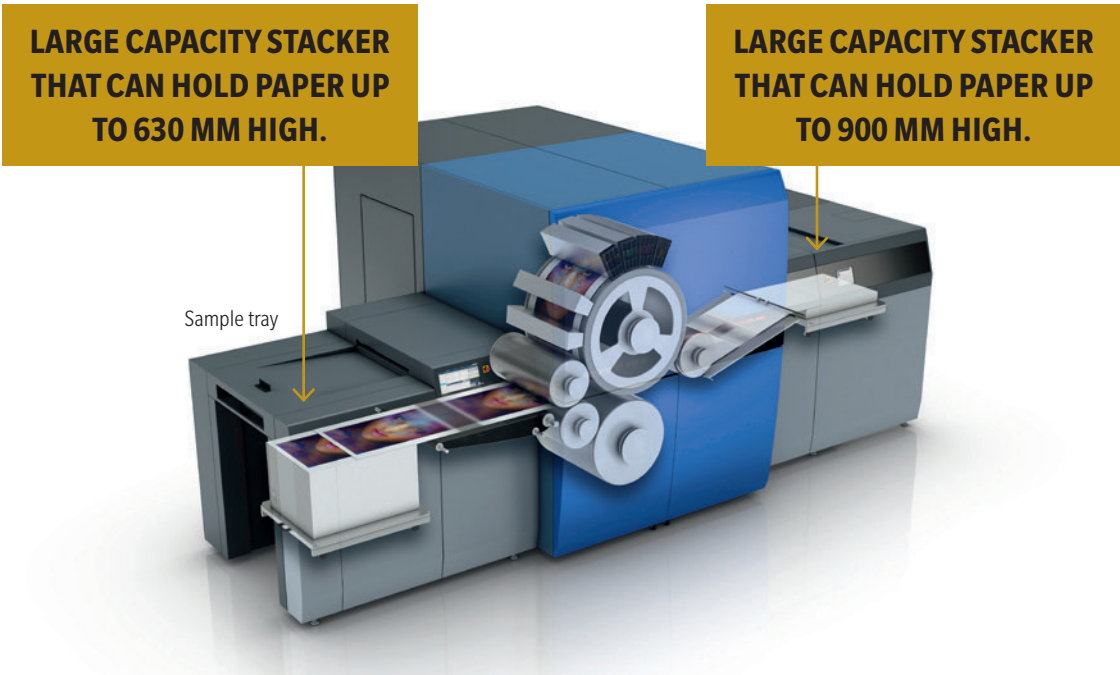
The wider B2+ size of 585 x 750 mm enhances the imposition flexibility achieving an even better productivity.

**Minimized idle times thanks to operator maintenance**

Designed to be largely maintained by the operator, the AccurioJet KM-1e helps maximize production as down-time due to visits from service engineers is avoided – contributing to a much-improved operating ratio.

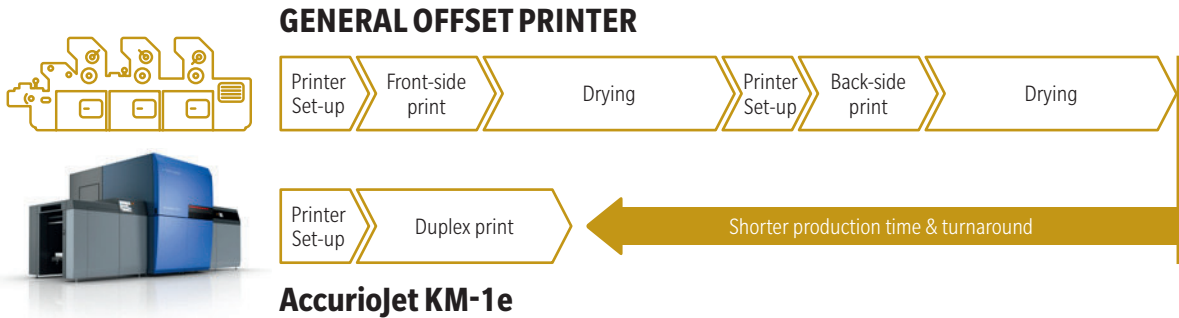
**Efficient paper processing enables highest-volume print runs**

The feeder accepts paper input of up to 900 mm height; prints can be stacked up to 680 mm high. For added convenience, a sample tray facilitates quick quality checks as well as small lot printing.



**Outstanding overall productivity for shortest turnarounds**

With inkjet printing, the need to make and set plates in the press is eliminated, much shortening setup times. Together with the auto duplex printing capability, this helps achieve an outstanding overall productivity.





# UNLIMITED PRINT SERVICES RETHINK VERSATILITY

Enhance and expand your printing services with the AccurioJet KM-1e! Its compatibility with the widest range of substrates including translucent, metallic, coloured and plastic media is made possible through newly adopted media sensors – as well as, of course, the unique properties of our revolutionary UV ink.

## Substrates as thin as 0.06 mm

The AccurioJet KM-1e is capable of printing on thin paper without curling or wrinkling, which is usually caused by the swelling and drying processes that aqueous inkjet systems require.

## Media as thick as 0.6 mm

Thanks to its ability to print on thick paper of up to 0.6 mm, the AccurioJet KM-1e is extremely versatile in its range of printing applications, which may include items like packaging, tags, table-top calendars, menus, direct-mail, simple photo albums, and many more.

## Translucent media

Also printing on translucent media, the AccurioJet KM-1e facilitates creating new print offerings such as backlit posters and signage with high image durability.

## Synthetic media and canvas

Restaurant menus without lamination, maps, figurines and displays for outdoor use can be easily created thanks to Konica Minolta's unique UV inkjet technology. In addition, this also allows high-quality printing on canvas.

## Textured and embossed media

Business cards, shop coupons, invitations, certificates, etc. – all this is possible thanks to the combination of UV ink and the non-contact inkjet printing process, which achieves top results.

## Metallic and coloured media

With its capability to print on metallic and coloured media, the AccurioJet KM-1e expands your printing services, especially for products such as creative business cards, shop cards and packaging.

## Clear film

Take advantage of the AccurioJet KM-1e's capability to print on clear plastic and film to add new applications to your print offering, such as specialty packages and clear folders.

# SUPERB RELIABILITY & CONSISTENCY

## RETHINK RELIANCE

Incorporating the same paper-handling technology as offset printers, the AccurioJet KM-1e is extensively dependable in its stable paper processing – reliably producing print products of highest quality. At the same time, the use of our proprietary UV ink ensures highly accurate registration and minimal nozzle clogging to deliver top-level and perfectly stable image quality.



### Superb colour consistency

Colour matching of jobs is near perfect, with repeatable results within a tolerance of  $\Delta E$  1.5. Our patented process ensures perfect inkjet operation: jobs can be instantly moved to finishing, which saves you time and money.

### Greater registration accuracy

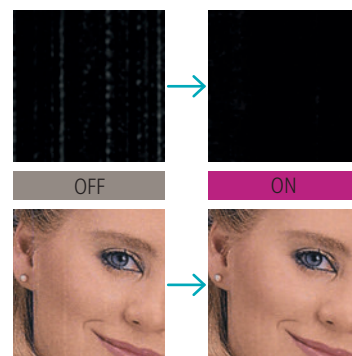
The use of UV ink eliminates problems such as waviness or curling – something that commonly occurs during processes like thermal fixing and drying. This way, the AccurioJet KM-1e achieves superb print quality and highly accurate registration.

## Paper-handling technology identical to that of offset printers

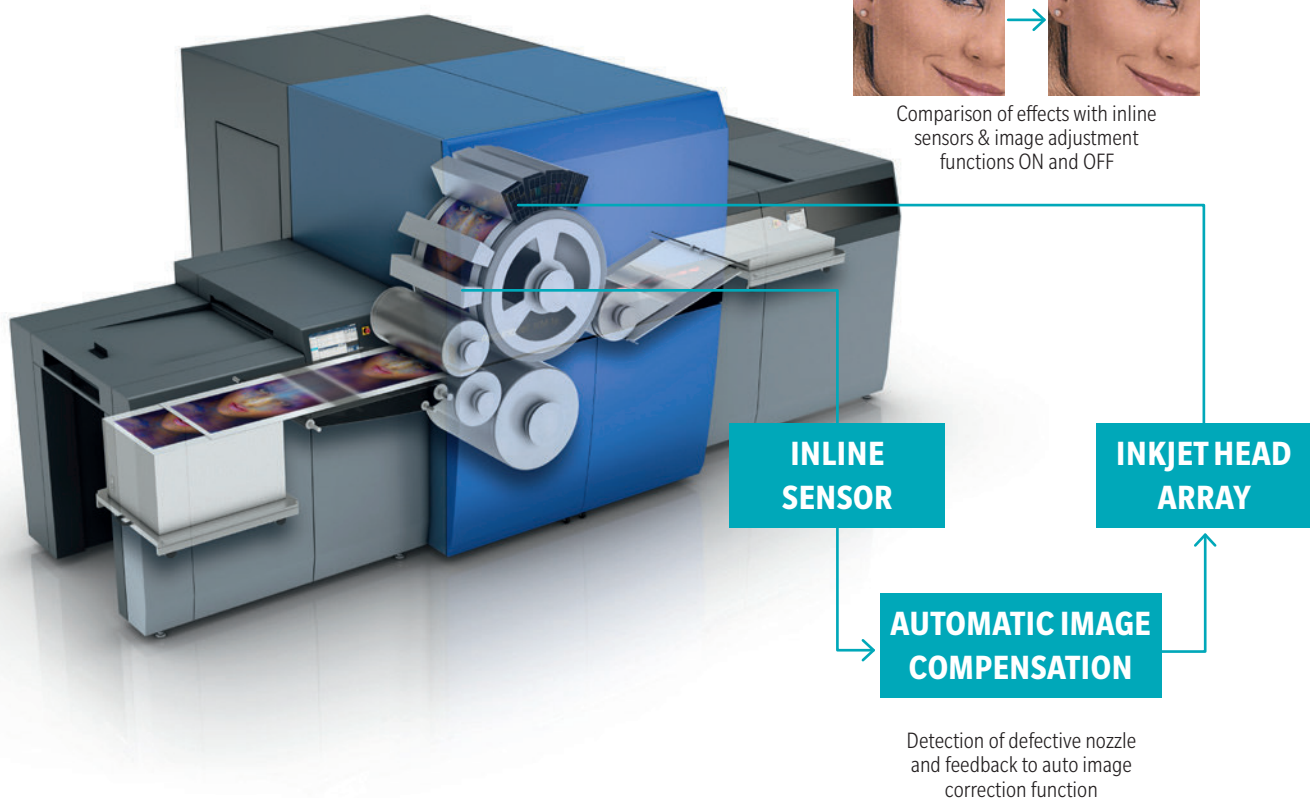
The AccurioJet KM-1e is equipped with an off-set-equivalent transport mechanism including functions such as air blower, vacuum suction, dram suction, paper stretch suction and claw grip feeding – all of which ensure stable paper transport and highly accurate registration.

## Image quality controlled by inline sensor

AccurioJet KM-1e features an internal inline sensor that automatically detects and corrects image flaws. This inline sensor minimises image quality degradation that might otherwise be caused by nozzle defects in the inkjet system.



Comparison of effects with inline sensors & image adjustment functions ON and OFF



# YOUR ADVANTAGES WITH THE AccurioJet KM-1e

## RETHINK INKJET

### UV INKJET INK

UV ink allows printing on a wide range of media, including offset stock, without the need for pre-coating. Damage to the paper is reduced because light-curable UV ink does not require heat drying – the AccurioJet KM-1e thus consistently produces high-quality prints.

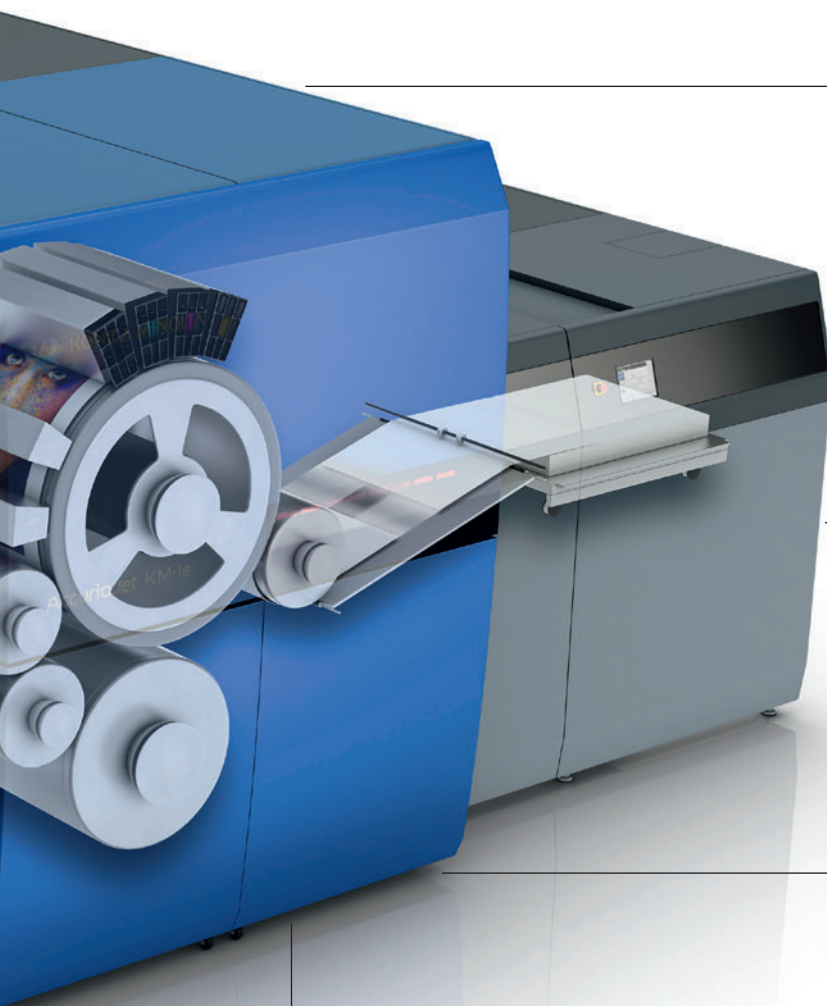
### LONG LIFE UV LEDs

UV LEDs have a longer life and provide highly consistent UV light. Their various merits mean less damage to the paper, as they generate almost no heat nor any ozone emissions. Another advantage is the shorter heating and cooling time.



### INLINE SENSORS

Detection of imaging errors by inline sensors ensures consistently high-quality image output.



## HIGH-PRECISION INKJET HEADS

High-resolution output of 1,200 dpi is achieved via two high-density inkjet heads with 600 nozzles per inch that are incorporated into an inkjet head module.

## INKJET HEAD MODULE

The print bar is composed of an array of high-resolution/high-frequency heads. High quality images are reproduced in a single pass at speed as high as 3,000 sheets/hour.

## HIGHLY STABLE PAPER TRANSPORT

To ensure stable paper support without fail, the AccurioJet KM-1e is equipped with an offset-equivalent transport mechanism including functions such as air blower, vacuum suction, dram suction, paper stretch suction and claw grip feeding.

## NEW MEDIA SENSORS

The AccurioJet KM-1e features various new media sensors to ensure the reliable processing of special media including transparent, metallic and coloured substrates – thus enabling print providers to expand their range of print products.



# OUTSTANDING RESULTS

## RETHINK IMAGE QUALITY

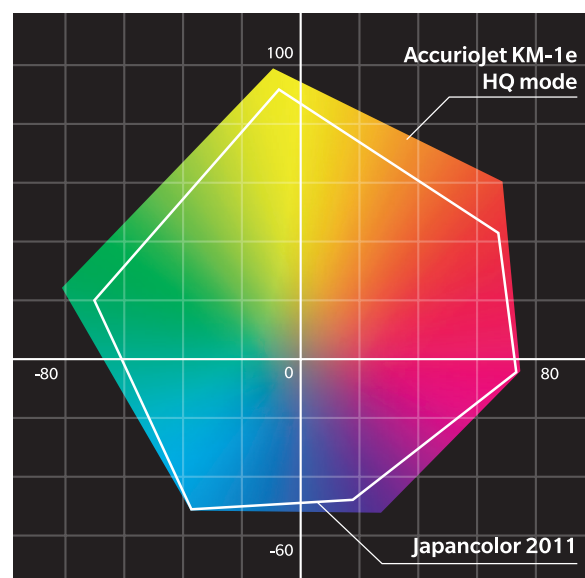
Equipped with new high-definition print heads, the AccurioJet KM-1e provides top image quality facilitating the creation of special effects like superb skin tone with minimal graininess, or a natural-gloss look.

### Top image quality of 1200 x 1200 dpi

The cutting-edge inkjet print heads, unique UV ink and innovative half-tone processing technologies in the AccurioJet KM-1e achieve an impressive 1,200 dpi image quality – for picture-perfect print results.

### Sharp text quality

Konica Minolta's original proprietary font edge-processing technology realizes excellent text quality with sharpness and legibility even for small and very small font sizes.



### Wider colour gamut

Sufficient to even cover Japan colour standards, the AccurioJet KM-1e's wide colour gamut ensures accurate colour reproduction, no matter what's required.





## AccurioJet KM-1e

### Highly functional and accurate colour management system

Konica Minolta's professional colour management software provides absolute consistency in colour reproduction.

### Accurate registration and print quality

Employing UV ink, the AccurioJet KM-1e avoids any waving and curling of paper usually associated with the heat fixing and drying aqueous inkjet systems require. Instead, our digital inkjet press produces perfect high-quality prints with highest registration accuracy.

### Adjustable ink volume to match paper and printing objectives

In addition to its standard mode, the AccurioJet KM-1e offers two additional print modes, one for coated paper that requires high-quality imaging, and another for uncoated paper that requires a matte texture.



# STREAMLINED WORKFLOWS RETHINK OPERABILITY

Operating the AccurioJet KM-1e is a breeze, not least because of the IJ Manager, its integrated enhanced data processing system, due to which the KM-1e can easily be incorporated into existing offset workflows. Also new is an intelligent interface for inline connection with a range of post-press equipment, including a newly adopted tape inserter to improve work efficiency in post-press operation.

## IJ Manager

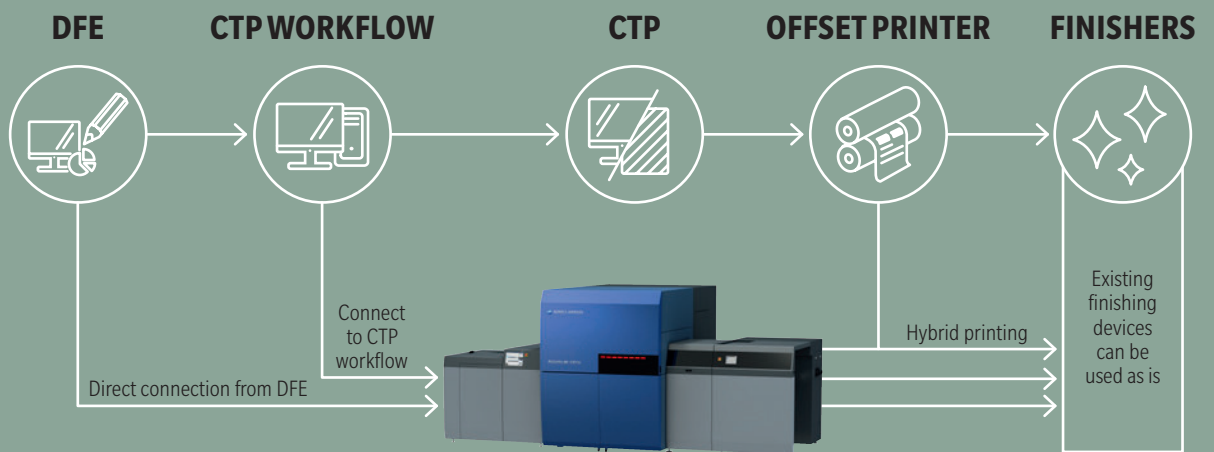
Much facilitating your work, the AccurioJet KM-1e's very own enhanced data processing system incorporates a high-speed RIP for full VD processing, sensors to detect the nozzle jet status and an algorithm to compensate for defective nozzles on the fly.

## Variable data printing (VDP)

Compatible with PPML 2.2, the KM-1e lets you create new business from producing print products that would not be possible using only offset printing.

## Hybrid printing support

Not only can the KM-1e receive files from general DFE (Digital Front End) or CTP workflow RIP and output the prints accordingly. It also supports hybrid workflows where the operator can freely choose between offset printing and digital printing just as required.

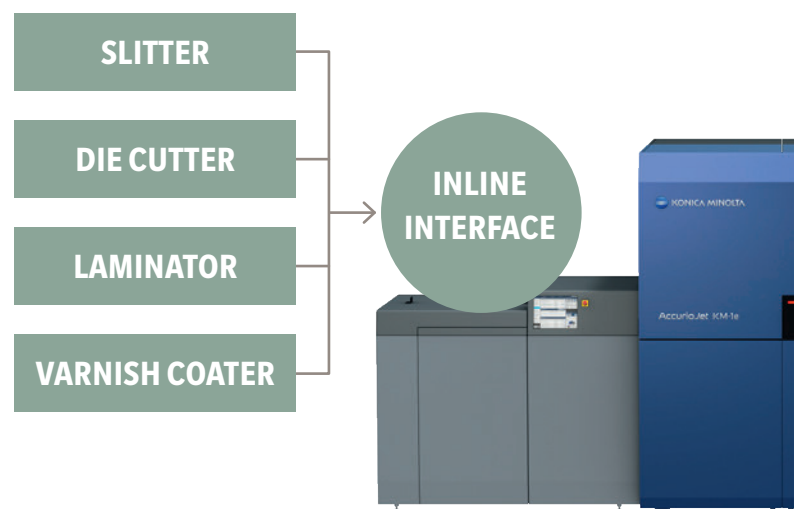


## New tape inserter

The simple but clever process of automatically inserting tape between different jobs much enhances your work efficiency during post-press operation.

## Inline interface for 3<sup>rd</sup>-party post-press equipment

With a newly developed interface, post-processing can now easily be completed in-line, improving your overall work efficiency and facilitating shorter turnarounds.



# RANGE OF APPLICATIONS

## RETHINK FLEXIBILITY

With the AccurioJet KM-1e, you gain the flexibility to print on almost any substrate – from heavy textured, canvas, metallic, translucent stock, folding carton or Bible paper to never-tear materials and plastics\*, expanding your sales mix and enhancing your market potential. LED UV printing achieves outstanding results with a wide range of applications, especially but not exclusively for the commercial sector.

### EXPAND YOUR SALES MIX WITH:



**Packaging materials,  
folding carton**



**Posters, banners,  
signage**



**Books, book jackets,  
brochures, magazines**



**Fine art, photography,  
photo books, photo merchandise**



**Greeting cards, business cards,  
plastic (ID) cards**



**Gift packaging on clear film,  
metallic & translucent media**



**Personalized direct mailings,  
inserts, coupons**



**Restaurant menus**

### A word on Variable Data Printing

The AccurioJet KM-1e offers the shortest-ever turnaround thanks to perfecting and the patented LED UV ink requiring absolutely no drying time. This guarantees outstanding overall productivity and is especially advantageous for variable data print jobs. Personalized prints, such as direct mailings, are produced in a single production step and do not require overprinting of the individualized component. As a result, you will save substantial amounts of time, can handle more jobs per day and reliably meet even the shortest deadlines demanded by your customers.

\* Due to their nature, some plastics may require pre-treatment such as Corona or primer.

# ANYTHING BUT RUN-OF-THE-MILL RETHINK SUPPORT

## THE KM-1e SERVICE CONCEPT

From site survey to final function test and beyond, our KM-1e support is exceptional. From day one, the Konica Minolta field service specialists take care of all eventualities to avoid any hitch in connection with placing your KM-1e into operation. The installation site is carefully checked beforehand for meeting all technical requirements of your digital UV inkjet press. We tightly monitor the delivery process to ensure timely arrival of all components. Assembly is carried out by our experts with diligence, including final testing according to previously agreed criteria. Our operator training not only focuses on the press but also includes its maintenance routines. Before you finally approve the machine handover, your KM-1e will be up and running and your operators happy with the initial machine performance.

Still going further, the KM-1e service concept includes ramp-up support for several months to get you up to speed with your new inkjet press. Our field service specialists remain at your disposal guiding your operators and helping them develop a daily routine in running and servicing the equipment.

## PROKOM – CONNECT WITH INDUSTRY CONSULTANTS

Konica Minolta is a proud supporter of the independent user association PROKOM, who offers its members the option to connect with industry consultants and gain valuable insights. Structured learning programs provide support for all aspects of your business. From business planning through sales and marketing advice, you will gain the opportunity to link in with the PROKOM team, connecting you with companies across both Europe and North America.

**For more details, visit:**  
**[www.prokom.org](http://www.prokom.org)**

# TECHNICAL SPECIFICATIONS

## RETHINK INKJET

### SYSTEM SPECIFICATIONS

Type	B2+ perfecting sheet-fed full colour UV inkjet digital press
Resolution	1,200 x 1,200 dpi
Ink	LED UV ink
Number of colours	4 (extended gamut CMYK)
Print speed	3,000 sheets/hour 1,500 sheets/hour
Sheet size	Up to 585 x 750 mm
Max. printable area	575 x 735 mm (simplex) 575 x 730 mm (duplex)
Sheet thickness	0.06 to 0.6 mm (simplex) 0.06 to 0.45 mm (duplex)
Processable substrates	Uncoated, coated, coated art paper; coloured paper; metallic paper; transparencies; plastic substrates; canvas; mineral paper
Data format	PDF Ver.1.7, PDF/X 1a.3.4.5, PDF/VT-1, TIFF Ver.6 compliant, PPML Ver.2.2
Print mode	Rich Standard Economy (ink saving mode)
Power source	3 phase 200V 335A (50Hz/60Hz)
Device dimensions (WxDxH)	5,369 x 2,947 x 2,325 mm
Device weight	Main body: approx. 8,100 kg Ancillary facility: approx. 2,000 kg

- Inkjet LED UV ink developed by Konica Minolta for high-definition, single-pass applications
- 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
- Specifications 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 the above specifications are subject to change without notice
- All brand and product names may be registered trademarks or trademarks of their respective holders and are hereby acknowledged