XAAR 501 GS8

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Exceptional print quality

Industrial reliability

Flexible and easy integration

Gain competitive advantage with the Xaar 501 GS8

Reach higher levels of performance in Wide-Format Graphics (WFG) with the Xaar 501 GS8 printhead. Whether printing large exterior banners or indoor point-of-sale material, this premium printhead delivers exceptional print quality, excellent reliability and high production up-time.

Value added effects such as printing on transparent or coloured substrates or adding varnishes are made easy with the Xaar 501 GS8. The ability to print high viscosity or heavily pigmented inks such as white becomes a practical reality with TF Technology in Pulsed mode.

The unique PrecisionPlus architecture of the Xaar 501 GS8 builds on Xaar's incredibly successful Hybrid Side Shooter architecture, proven in the market-leading Xaar 1003 printhead. This new architecture optimises the actuator performance giving more uniform drop formation and stability across the print swathe and therefore exceptional print quality for stunning graphics.

Print service providers will appreciate the even, flat tints and sharp text achievable with the Xaar 501 GS8. For OEMs the remarkable uniform print swathe allows printheads to be mounted together easily. This, along with a combination of innovative features, ensures trouble-free integration, fast time-to-market and short servicing times.

The Xaar 501 GS8 has been designed by Xaar to ensure its customers remain at the leading edge of print performance. Xaar is a world-leader in the development and manufacture of industrial inkjet technologies with around 25 years' experience. The company is headquartered in the UK and has offices in the USA, China and India. Today, Xaar's state-of the art manufacturing facilities in the UK are among the most innovative in the world.

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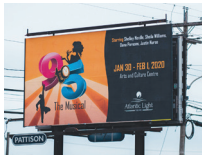
Approved inks

Xaar actively partners with a wide range of ink manufacturers to develop high-quality ink solutions for its printheads.

The Xaar 501 GS8 is designed to be compatible with a range of oil and UV curable inks.



Exceptional print quality

The Xaar 501 GS8 and the revolutionary PrecisionPlus architecture deliver smooth tints, graduations and excellent edge definition for printing text and graphics.

- The enhanced actuator gives exceptionally uniform drop formation delivering even colour density across the swathe width
- Together with PrecisionPlus architecture, the 500 individually lasered nozzles deliver unprecedented drop placement accuracy resulting in excellent print quality
- The Xaar 501 GS8 is capable of printing in binary mode with a smallest drop size of 8 pL or with up to 4 more grey levels to increase productivity with high effective resolution.

Industrial reliability

The Xaar 501 GS8 printhead is designed to deliver industrial reliability and robustness resulting in increased production up-time even in harsh environments.

- As an option, market-proven TF Technology recirculates ink to keep nozzles clear of unwanted particles and air bubbles preventing sedimentation when using heavily pigmented inks. This radically improves reliability even in the most demanding production environments
- Internal temperature management and an industrial design allow the printhead to work with a wide range of fluid viscosities in varying ambient temperatures. This ensures high reliability all year round
- A robust metal body and recessed nozzle plate protect against costly damage from media crashes or other mechanical impacts.

Flexible and easy integration

The Xaar 501 GS8 offers a flexible range of ink supply options and easy printhead integration to ensure maximum versatility, fast manufacturing and minimum servicing time. The internal architecture enables quick and easy printhead priming, automatic nozzle priming and self-recovery, all resulting in higher productivity and less ink waste.

- The flexible printhead architecture enables a choice of ink supply options to allow OEMs to choose the best solution to fit their application. The Xaar 501 GS8 can use a vacuum controlled ink supply or Xaar's TF Technology in Pulsed or High Flow modes
- As the Xaar 501 GS8 is fully compatible with the vacuum controlled ink supplies most often used in wide-format scanning printers, integration with existing ink systems is easy
- TF Technology in High Flow mode and the PrecisionPlus architecture ensure continuous ink flow at a high rate directly past the back of the nozzle during drop ejection. This means that any air bubbles and unwanted particles present in the fluid are carried away. This radically improves reliability even in the harshest industrial environments
- TF Technology in the Pulsed mode allows ink to be recirculated directly past the back of the nozzle only when the printhead is not jetting. This allows ink recirculation to be implemented with the minimum of complexity and cost. TF Technology in Pulsed mode improves reliability, extends maintenance cycles and reduces sedimentation when using heavily pigmented inks such as white
- The Xaar 501 GS8 has a simple and accurate mounting system enabling multiple printheads to be mounted together with minimal adjustments for fast installation
- Industry standard ink fittings, an integrated filter module and simple ink priming enable easy, clean and secure connection to ink systems.

Physical attributes	Xaar 501 GS80†	Xaar 501 GS80R	Xaar 501 GS8U†	Xaar 501 GS8UR
Active nozzles	500	500	500	500
Print swathe width	70.5 mm	70.5 mm	70.5 mm	70.5 mm
Number of rows	1	1	1	1
Nozzle pitch	141.1 µm	141.1 µm	141.1 µm	141.1 µm
Nozzle density (nozzles per inch)	180 npi	180 npi	180 npi	180 npi
Nozzle guard	WFG	WFG	WFG	WFG
Printhead weight (dry)	208 g	205 g	208 g	205 g
Ink types	Oil	Oil	UV	UV
Drop volume*	8-40 pL	8-40 pL	8-40 pL	8-40 pL
TF Technology mode	None, Pulsed	High Flow	None, Pulsed	High Flow
Number of grey levels*	6	6	6	6
Typical firing frequency @ Max DPD*	8 kHz	8 kHz	8 kHz	8 kHz
Dimensions (WxDxH)	104x17x113 mm	104x17x100 mm	104x17x113 mm	104x17x100 mm

*Dependent on ink used and system integration †Includes filter module

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