

Xaar 1201



High print quality, highly versatile and easy to integrate

The Xaar 1201 is a Thin Film Piezo Silicon MEMS technology printhead designed for producing wide-format graphics (WFG) and printing on textiles. It has 1280 nozzles arranged in 4 rows, printing either 1 or 2 colours at 600 dpi or 4 colours at 300 dpi native resolution. With high print speed, accuracy and reliability achieved by the MEMS technology, the printhead is suitable for either static or multi-pass scanning applications.

The Xaar 1201 offers a unique combination of high print quality and productivity, combined with a compact and versatile 4 colour design, making it ideal for manufacturers looking to develop entry-level or mid-range multi-pass printers. The printhead is easy to integrate; therefore time-to-market is minimised.

Xaar has partnered with a wide range of ink manufacturers to develop high quality aqueous, eco-solvent and UV inks compatible with the Xaar 1201. This proven versatility of the printhead broadens the choice of substrates for printing.

Worldwide technical support is provided to all of Xaar's customers by our team of highly skilled Field Applications Engineers who deliver a professional and highly supportive service. Our team has extensive knowledge of inkjet and its application for the print sector, as well as considerable field experience. Therefore the team can deliver valuable support in the successful design, build, commissioning and post-installation of all Xaar-based inkjet systems.

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XAAR[®]

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Best-in-class print quality

The Xaar 1201 delivers a high print quality superior to other printheads in its class.

- 8 grey levels at 600 npi give an apparent resolution of better than 1440 dpi
- Two printheads can be mounted inline to create an economical 4 colour printer delivering 600 npi native resolution per colour
- Alternatively with just four printheads, OEMs can design printers with 1200 npi by 1200 npi native resolution
- The small drop size of 2.5 pL delivers the best combination of throughput and print quality for a range of applications
- Variable drop size allows small drops for ultra-close viewing and large drops for long distance viewing.

Highly versatile

The Xaar 1201 incorporates a number of features which make it an extremely versatile printhead.

- Capable of printing 1, 2 or 4 colours per printhead
- The printhead can be configured to print 4 colours at 300 npi or 2 colours at 600 npi depending on the price-point and end user profile that OEMs wish to target
- Two pairs of interleaved rows means that OEMs have a choice of native resolution – the default resolution when running 4 colours is 300 npi
- Running 2 colours per printhead takes advantage of the nozzle row pair pre-alignment to achieve 600 npi per colour
- The Xaar 1201 jets solvent-based or aqueous inks, enabling it to print on a range of substrates including photo paper, vinyl, canvas and textiles.

Easy to integrate

The Xaar 1201 delivers simple integration for manufacturers looking for a flexible yet affordable printhead for a low cost wide-format graphics or textiles printer.

- Electrical interfacing via a top mounted flexible flat cable ensures easy and accessible connections when mounted into a scanning printer, giving better protection against ink ingress and possible damage compared with similar printheads
- Luer lockable ink fittings and lockable electrical connections enable an easy, accurate and secure printhead installation, preventing mechanical and electrical damage, and ink spillage
- A gravity-fed ink system makes ink supply design simple and straightforward, reducing time-to-market
- A single printhead can serve a complete 4 colour (CMYK) printer which makes it incredibly easy to integrate mechanically, electrically and fluidically
- Alignment datum ensures easy multiple printhead alignment.

Physical attributes	Xaar 1201
Active nozzles	1280
Print swathe width	27 mm
Number of rows	4
Colours	1, 2 or 4
Nozzle pitch (interleaved)	42.3 µm
Drop velocity	7 m/s
Nozzle density	600 npi
Printhead weight (dry)	95 g
Ink type	Aqueous, eco-solvent, UV
Drop volume*	2.5 pL
Number of grey levels*	Up to 8
Maximum firing frequency*	50 kHz
Dimensions (WxDxH)	52.7 x 45 x 76.2 mm

* Ink and application dependent



Approved inks

Xaar actively partners with a wide range of ink manufacturers to develop high-quality ink solutions for its printheads. The Xaar 1201 is designed to be compatible with a range of eco-solvent, dye sublimation, aqueous and UV inks.