Hydra Ink Supply System







Hydra Ink Supply System

Designed for easy integration Reduced time-to-market Run stand-alone or monitored through a PC

Xaar's Hydra ink supply solution ensures optimal performance and reliability

Xaar's Hydra Ink Supply System is a recirculating ink supply system which supports Xaar 1003-based and previous versions Xaar 1001 and Xaar 1002, single-pass industrial printers ensuring optimal **performance** and **reliability**. As single-pass applications become more complex and users demand that printers handle a wider variety of jobs and faster turn-around, the overall printer performance and uptime have become critical elements.

The Hydra Ink Supply System is part of Xaar's range of systems components which accelerate OEM **time-to-market** by easing development, saving time and cost whilst ensuring optimal performance of Xaar printheads.

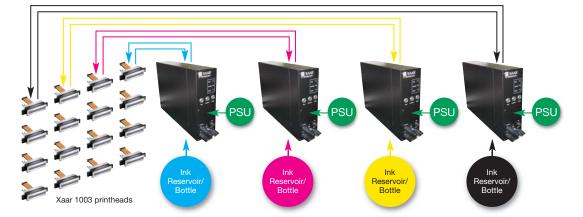
The compact Hydra can be combined with the Hydra Power Supply Unit (PSU), and the Hydra Sensor Manifold, to control nozzle pressure, ink flow rate and temperature. This **complete solution** can support up to four Xaar 1003 printheads. An additional option available for the Hydra PSU is a UPS (Uninterruptable Power Supply) and allows a controlled shut down in the event of power failure preventing ink drying in the printer.

Key features of the Hydra solution are:

- Precise nozzle pressure and ink flow rate control ensuring reliable operation
- Exact temperature control enabling the widest range of fluid viscosities
- Intuitive User Interface either via a PC or when operating the Xaar Hydra in stand-alone mode – for easy monitoring of the nozzle pressure, ink flow rate and temperature control
- Supports Xaar 1003-based and previous versions Xaar 1001 and Xaar 1002 printers, used in a wide range of applications providing the widest possible flexibility and applicability.

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Hydra recirculating ink supply system specification



XAAR

| Features | Specification |
|---|---|
| Number of printheads that can be fed per Hydra system | Up to 4 |
| Printhead orientation | Downshooter |
| Number of Hydra Ink Systems required | One for each fluid colour or type |
| Printhead meniscus pressure | -5mbar to -25mbar +/- 2mbar |
| Flow rate | 3:1 to 15:1 |
| Fluid temperature range | Ambient to 50 °C +/- 0.5 °C |
| Fluid viscosity (at jetting temperature) | 7 - 25 cP |
| Built-in filter | 10 μm - field replaceable |
| Unit to printhead manifold distance | 4m as standard |
| Ink system volume | 1 litre (approx) |
| Typical startup time | ~ 20 mins |
| Typical shutdown time | ~ 4 mins |
| Connections | Fluid input from fluid store (including level-sensor) Fluid output to printheads and fluid input to system from printheads Drip tray port USB to Windows PC Control power Uninterruptable power supply (UPS) Heater power |
| Software control | Using supplied application |
| Customer supplied hardware | Windows PC to run controller software Uninterruptable Power Supply (UPS) |
| Voltage (volts) | 110 or 230 |
| ISS dimensions (D x H x W mm) | 477 x 389 x 110 |
| PSU dimensions (D x H x W mm) | 400 x 310 x 120 |
| Manifold dimensions (D x H x W mm) | 27 x 56 x 174 |



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