

MR-3000 Modular Recirculating Ink Supply



Expandable Ink Supply Built to Meet Your Requirements

The PPSI MR-3000 Recirculating Ink Supply System is a compact, modular ink supply system designed for inkjet integrators who want to implement a “ready to run” ink supply system for industrial inkjet printheads with recirculation requirements. This is a 3rd generation ink supply system for inkjet printheads such as the FujiFilm Kyocera, Konica Minolta, Ricoh, and Xaar 1003. The ink supply system can be controlled via web browser on your own host computer.

The system operates like a web server and is accessed via IP address and a web interface. The MR-3000 ink supply is a hardcoat aluminum manifold that is mounted a fixed height above the printheads. This manifold supplies ink at the correct pressure and temperature for the array of printheads. The ink supply manifold is composed of a series of printhead supply blocks that are bolted together. Each printhead supply block is dedicated to a single printhead. These printhead supplies can be added or removed, creating an ink supply that is the appropriate width for any specific application.



Each ink supply is a modular unit that can support between 1 and 12 printheads. The ink supply is self-contained and designed to provide maximum operating performance with UV-curable, aqueous and solvent-based inks. Each ink supply includes:

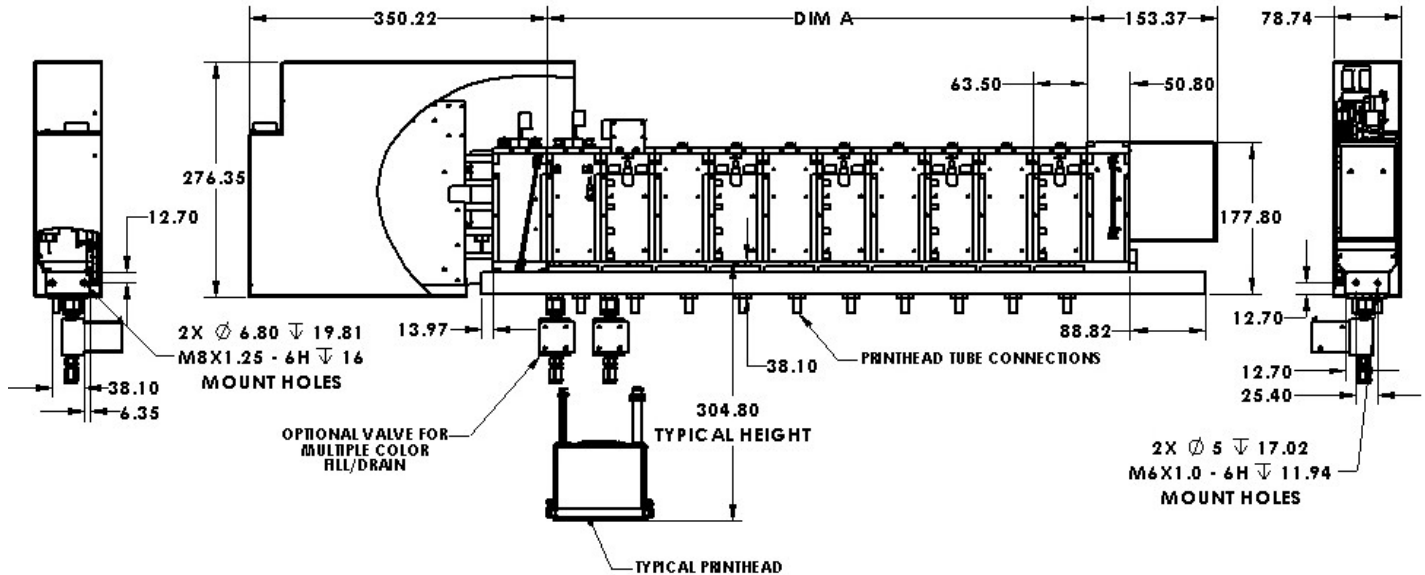
1. Ink supply control circuit board
2. Recirculation and vacuum pumps
3. Printhead supply block (one per printhead)



Web Interface



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Unique Features

- Modular and easily expandable from 1 to 12 printheads
- Precise control of temperature, pressure and flow rate ensures reliable jetting and freedom from print defects caused by ink supply variations.
- Consistent ink performance as the ink is continually filtered, mixed and freed of air bubbles.
- The vacuum system is contained, not allowing inks to outgas, and change viscosity
- The system supports the use of UV curable, aqueous or solvent based inks
- The single unit design and simple API makes it easy to integrate
- Low operating ink volume in the system saves cost with expensive materials (e.g. nano-silver inks etc)
- Can be controlled via a web interface or ModBus making it simple to control from any device
- Integrated temperature controller for ink supply
- Temperature control supports remote print bar heater

Specifications

Dimensions (L x W x H)	(567 x 79 x 276mm) additional print head adds 63.5mm in length
Ports	Inflow outflow tubes for up to 12 printheads
Capacities	Heat Supply 15 ml, 10 micron filter
Connections	Ethernet Cable, Power Cable
Power	24vDC @ 3.5-16A (depending on # of print-heads)
Input/Output Pressure Variation	+/- 0.2 kPa
Temperature Control	+/- 1 deg C
Printheads Supported	Xaar 1003 GS6, GS12, GS40 Fujifilm SG1024, Samba Kyocera KJ4 Konica Minolta - KM1800i, KM 1024i Ricoh Gen 5
Inks	UV, aqueous and solvent based

