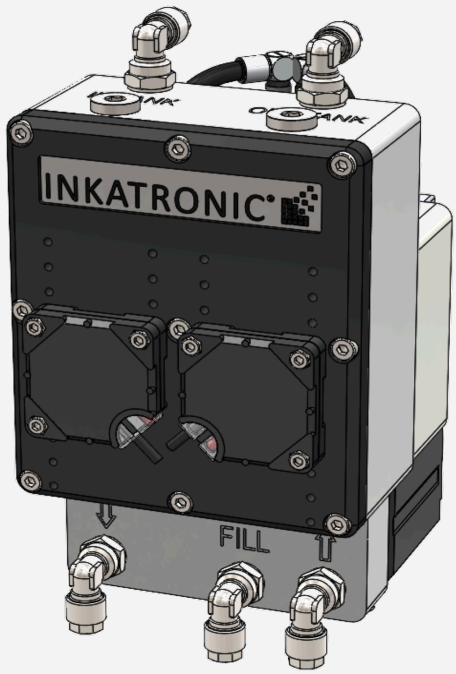
Ink Supply Systems for Digital Printing

Low Volume Lab Tank Ink Delivery System

Suitable for Inkjet Development

When testing new formulations, you want to start working with small batches. Inkatronics Low Volume Lab Tank IDS ensures stable circulation of fluids with a minimum of 30ml.
The system supports all kinds of piezo inkjet printheads. It consists of two combined ink tanks where filling and emptying the tanks works automatically, allowing for easy and clean exchange of fluids. Each tank has an integrated pressure sensor and powerful heaters that allow for precise control of pressures as well as temperature.
Two external pressure and temperature sensors can be integrated close to the printhead to analyze pressure changes caused by restricting factors in the flow path through the printhead.

LV Lab Tank IDS Specifications



Pre configured control parameters enabling the modes: **Fill, Drain, Recirculation, Gravity, Purge, Stop**	
Pressure Range	-1,000 mbar to +1,000 mbar
Tank Volume *(adjustable)*	30 ml to 200 ml
Max Purge Pressure	+1,000 mbar
Meniscus Pressure Control Accuracy	+/- 1 mbar
Max Flow Rate *(adjustable)*	150 or 300 ml/min
Heating	Up to 80°C
Sealings	FFKM
Tank Material on request	Aluminum / Stainless Steel
Amount of Printheads Supported	1 to 3 Printheads *(Flow Rate Dependent)*
Supported OS:	Win7 or higher
Power Supply	24 V
Communication Interface	USB or EtherCat
Physical Dimensions	123 x 106 x 195 mm (L x W x H)
Weight	Approx. 1,5kg

Lab Tank IDS Material Compatibility

Aluminium Lab Tank [LT-AL-01]

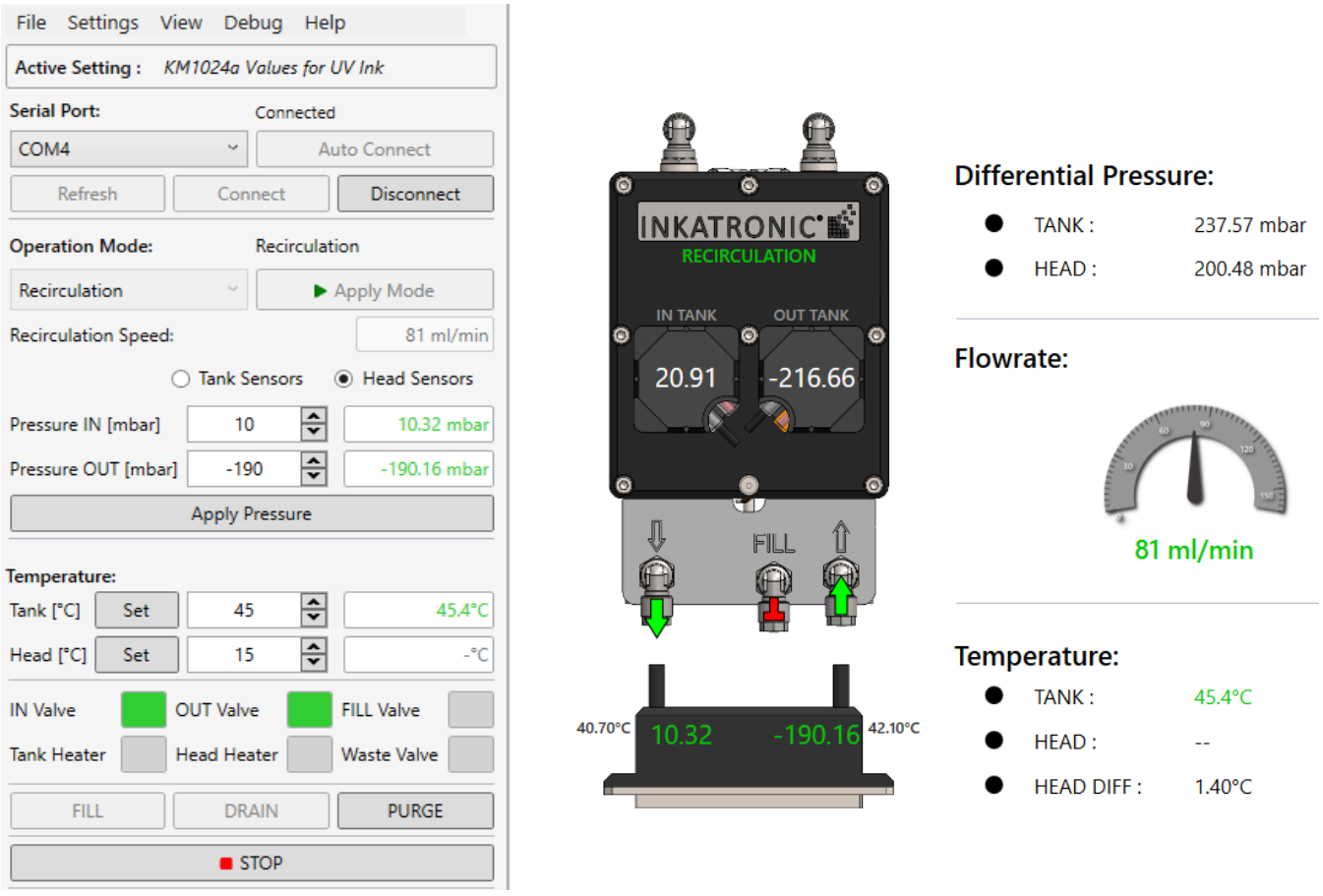
Suitable for applications using UV Chemistries.
Recommended for applications requiring higher fluid temperature, high viscosity chemistries.

Stainless Steel Lab Tank [LT-SS-01]

Recommended for applications with Water based or aggressive chemistries.
Pumps and valves are fitted with FFKM membranes and seals to withstand most chemicals.

INKATRONIC Lab Tank IDS Software

The software required to manage the IDS (Ink Delivery System) is included with the Lab Tank. The software's main view allows the operator to control the printhead's inlet and outlet pressure and temperature. The outcome of these parameters can be numerically and graphically visualized in the form of flow rate and differential pressure and temperature at the printhead. Such features are helpful when analyzing and tuning the flow behavior of different chemistries and printheads.



Lab Tank User Interface