

APS ENGINEERING

Innovative Ink Delivery Systems

Pico, Nano, and Mega
Ink or Fluid Delivery Systems
for Piezo Printheads

June 2021

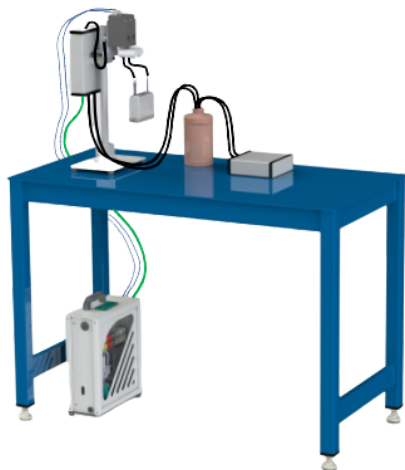
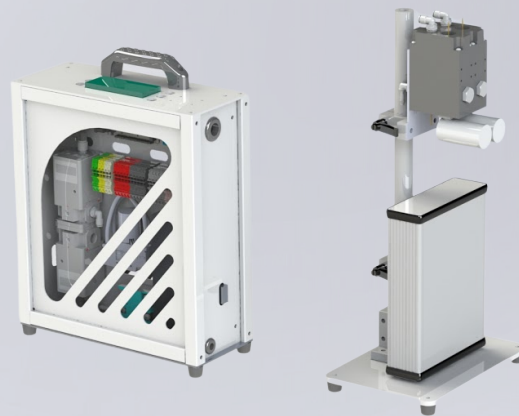


THE PICO: Compact Laboratory Unit

The Pico ink delivery system's super-efficient design minimizes stranded fluid within the system to support fluid evaluation and/or development, waveform development, and jetting reliability.

Technical specs

- Single fluid
- 100 cc/minute flowrate supports a single 2-inch piezo printhead
- <0.1 liters of stranded fluid in system after running
- Inline heating of fluid
- Compatible with UV, hot oil, solvent, and aqueous inks
- USB, CAN bus, or ethernet (OPC) interface options
- PC GUI control software (USB)



The Pico easily connects to your drop watcher hardware. Degassing can be added with the optional degas unit.

THE NANO: Versatile Low-Volume Production Unit

The Nano ink delivery system combines the compact efficiency of the Pico with increased capacity and a built-in degasser to support both drop watching and low-volume production. This system can do it all as you bring your design to life.

Technical Specs

- Single fluid
- 400 cc/minute flowrate supports up to 6 2-inch piezo printheads
- <0.25 liters of stranded fluid
- Supports low and high flow through printheads
- Inline heating and degassing of fluid
- Compatible with UV, hot oil, solvent, and aqueous inks
- USB, CAN bus, or ethernet (OPC) interface options
- PC GUI control software (USB)

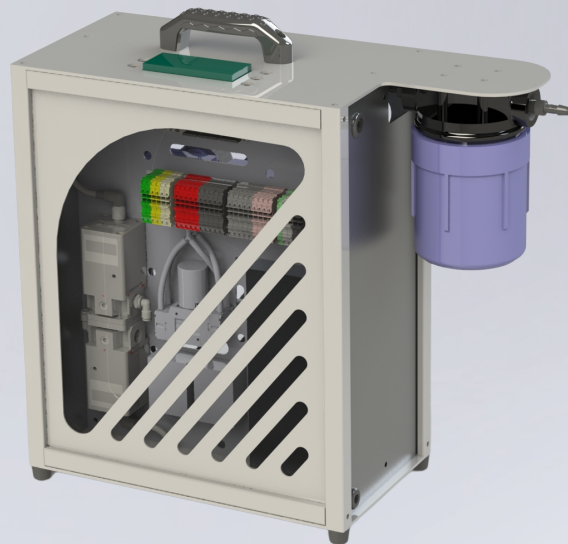


THE MEGA: Powerful High-Volume Production Unit

The Mega ink delivery system delivers twice the flowrate of the Nano, supporting large printing or additive manufacturing systems in full production. The Mega integrates easily into your existing production system to provide reliable results at large scale.

Technical Specs

- Single fluid
- 900 cc/minute flowrate supports 16 2-inch piezo printheads
- Supports low and high flow through printheads
- Compatible with UV, hot oil, solvent, and aqueous inks
- USB, CAN bus or ethernet (OPC) interface options
- PC GUI control software (USB)
- Easily integrated into existing production system



CONNECTION AND SOFTWARE

Connection Options

The Pico, Nano, and Mega all connect conveniently to your system using either USB, CAN bus, or ethernet (OPC) interface options.

Software and Display

All units share the same graphical user interface (GUI) software for easy, precise control of fluid pressure and temperature. Controls can also be adjusted via the display panel on each unit.

DEGAS UNIT

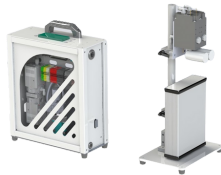


Technical Specs

- Designed for standalone use or with the Pico system
- 500 cc/min flowrate
- <0.1 Liters stranded fluid
- Inline degassing of fluid
- Compatible with UV, hot oil, solvent, and aqueous inks
- Easy access for servicing

Unit Comparison

Each of APS Engineering's ink or fluid delivery systems (IDS) is tailored to serve you at different stages in production. Contact us to discuss which system will be right for your project.



Pico



Nano



Mega



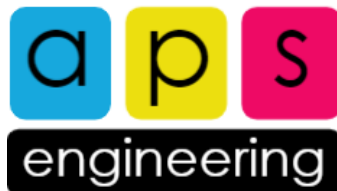
Degas Unit

	Pico	Nano	Mega	Degas Unit
Usage	<ul style="list-style-type: none"> • Drop Watcher • Single Printhead Production 	<ul style="list-style-type: none"> • Low Volume Multi-printhead Production • Drop Watcher 	<ul style="list-style-type: none"> • High Volume Multi-printhead Production 	<ul style="list-style-type: none"> • Standalone unit or add on to Pico • Fluid Degassing Only
Flow Rate	100 cc/min	400 cc/min	900 cc/min	500 cc/min
Stranded Fluid	< 0.1 Liter	< 0.5 Liter	< 2.0 Liter	< 0.1 Liter
Degas	NO - use external degas unit	YES	YES	YES
Heater	YES	YES	YES	NO

ABOUT APS ENGINEERING

APS Engineering creates cutting-edge ink delivery systems for inkjet printing, additive manufacturing, and microdispensing. APS offers an innovative line of precision ink or fluid delivery systems for all stages of production, as well as printbar design and consulting services for custom projects.

With over 30 years of experience in the industry, APS Engineering specializes in taking ink delivery, additive manufacturing, and printing hardware projects from initial concept to high-volume production.



CONTACT US



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