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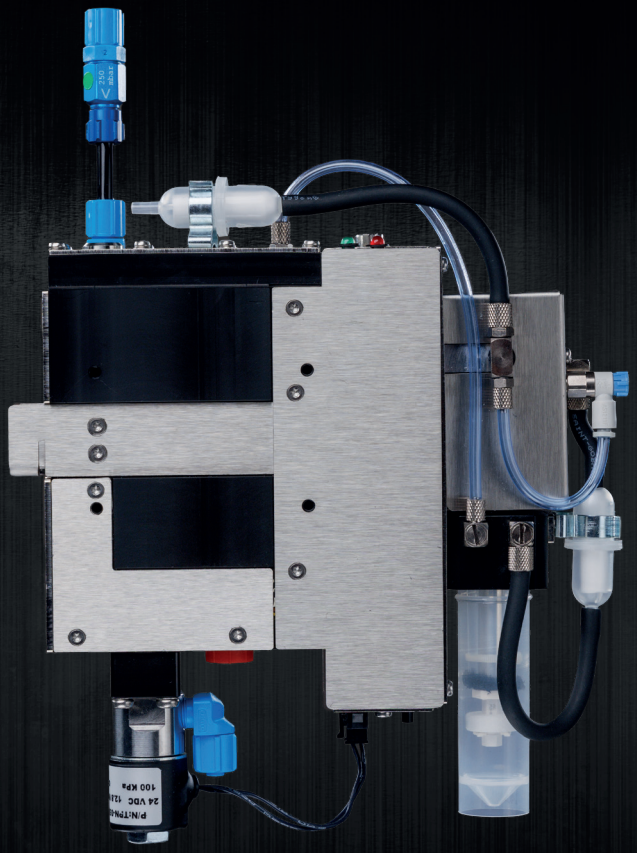

RackFit Gravity

Fluid Management System

The RackFit Gravity is a compact fluid management system designed in a 'blade' configuration where multiple units can be stacked side-by-side to create a compact fluid management engine.

The RackFit Gravity is designed to be rack mounted enabling easy integration and scalability.

The RackFit Gravity is ideal for narrow web and substrate applications and is compatible with all industrial gravity-fed printhead types.

Highlights

Ease of integration

Compact with rack mounting option provides high functionality in a small space.

Highly capable

Well-rounded fluid management system with integrated heater.

Flexible configuration

Control elements can be independently mounted from main tank to better ultilise space constraints.

Usage

Medium
Machine

Gravity

Learn more at **megnajet.com**

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Technical specifications

Physical	
Product dimensions (WxDxH)	• 50 x 200 x 210 mm
Tank volume	• 90 ml
Fluid connection options	• PK6, PK4, Luer
Weight	• 1.4 kg
Electical	
Supply voltage	• 24V
Supply power rating	• 1 - 3.5 A (dependent on options supplied)
Communication interface	• 4 wire RS422 / RS485 interface • Optional USB to RS422 communication gateway adaptor. Supplied with Megnajet communication kit.
Operating conditions	
Operating temperature	• 5 - 65°C (40 - 149°F)
Storage temperature	• 5 - 100°C (40 - 212°F)
IP rating	• IP50
Connectivity to printhead	
Printhead type	• Gravity
Number of printheads outlets	• 1 -2 (2 with additional T-pieces)
Maximum in feed pressure	• -200 mbar
Maximum purge pressure	• 950 mbar (standard 500 mbar)
Software	
Integration	• Open source ASCII interface • Optional .NET DLL SDK available on request
Supported OS	• Win XP, Win 7, Win 8, Win 10 (Requires .NET 4 or higher)

Product customisation

Units can be customised to suit fluid type and application, including (but not limited to) the use of alternate body materials (e.g. FDA approved food grade acetal and aluminium); choice of gasket material (e.g. FKM, peroxide cured EPDM and FFKM); and customisations to user software.

Compatible system components

- Degassing Pump Assembly
- Inline Heater Assembly
- Remote Manifold
- Comms Kit.

Product information

- 950 mbar purge capability, allowing simple and controllable head maintenance
- Hydraulic meniscus measurement automatically adjusts meniscus pressure during use compensating for duty giving uniform delivery of fluid to the printhead
- System material options cater for more specialised fluids, such as food grade, aggressive solvents and high density particulates
- Integrated failsafe chamber automatically shuts down the system on tank overflow preventing wider system damage and also enables easy fault finding
- Internal closed loop heater for in-tank fluid temperature control plus support for external in-line heater up to 65°C (±1°C) allows tight control of viscosity to the printhead
- Single 24V system voltage makes for safer integration and usage plus low energy consumption
- Simple and robust communications interface (galvanically isolated RS422) allows monitoring by RS422 enabled devices with ASCII strings giving industrial, fast integration and machine development
- Opto-isolated PLC compatible I/O interfacing allowing traditional systems monitoring, giving flexibility in design
- System parameters are stored within the Fluid Management System allowing for standalone operation
- Open-source interface, libraries and example code allows simple integration into customer systems
- Fluid Management software supplied with the system allows a high level of control to meet application requirements
- Brand customisation for both the main body of the Fluid Management System and software enables a bespoke, more integrated feel to the product and bolsters customer servicing and spares channels.

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