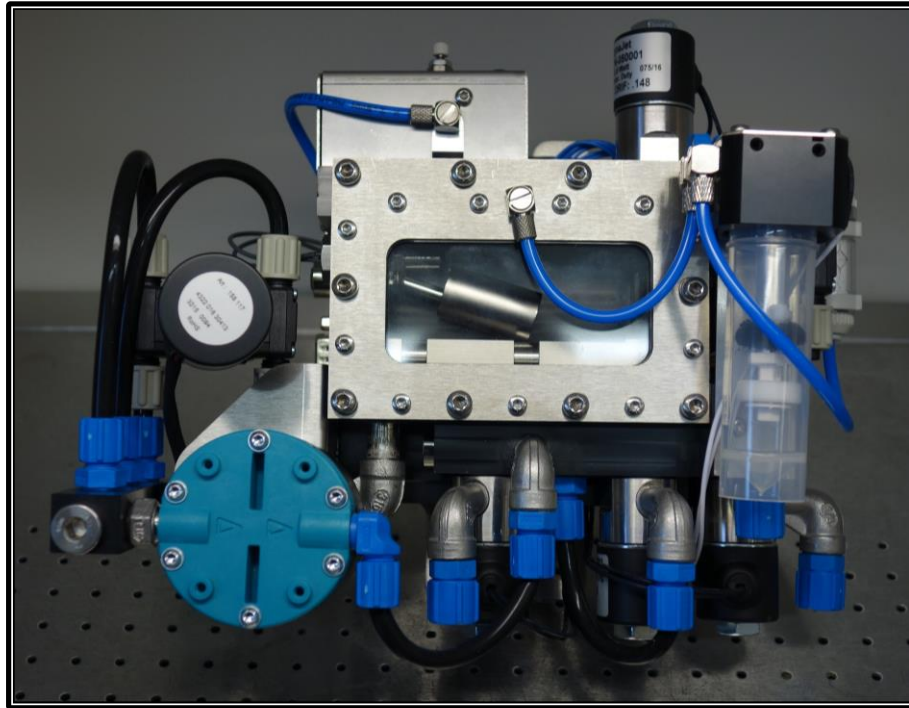


The Magnajet CIMS II range of recirculation ink delivery systems offers OEMs and integrators a stable, reliable and scalable industrialised fluid control solution. Compatible with all pressure feed through flow technology print heads, the CIMS II's advanced levels of control and ease of set up and operation, combine with a compact footprint to make this an ideal choice for production and rapid development projects.



## The CIMS II unit features:

- Built in brushless air pump- no need for external air sources or vacuum pumps.
- Integrated head shut off valves for head maintenance and instant isolation in power loss situations.
- Integrated hydraulic meniscus measurement system automatically compensates the meniscus pressure within the head as fluid levels inside the integrated fluid reservoir change during usage.
- High flow multi-head diaphragm pump system for pulse free media isolated pumping.
- Head flow rates possible from 1-400ml/min (950ml/min option available).
- Supports optional remote sensor manifold for use in scanning systems.
- Options available to ensure fluid compatibility for all jettable fluid types including high viscosity fluids.
- Head bypass mode allows fluid to be recirculated while print head is locked off, allowing for print head maintenance without the risk of temperature loss or particle dropout.
- Integrated failsafe chamber with automatic shutdown and alarm to protect hardware from damage.
- Integrated closed loop internal heater control, up to 65°C ±1°C on standard systems (other options available). Support for optional secondary external inline heater.
- Requires single low voltage 24vdc 6 amp input.
- Galvanically isolated communications interface and fully opto isolated PLC compatible I/O interfacing.
- Setup is possible from any RS422 enabled device capable of generating ascii strings such as PC, PLC, HMI or other embedded system via the integrated galvanic isolated RS422 communications adapter.
- All parameters are stored on the device allowing for hostless operation,
- Devices may be operated singularly or in a network mode up to 16 devices from standard interface.
- Simple open source ASCII interface (for PLC and motion controller interfacing) and .Net client/server DLLs (with example code) available to allow OEMs simple and seamless integration into their end user applications.

## Technical specification

Physical	
Weight	2.7kg
Tank volume	60ml
Physical dimensions	223mm x 121mm x 191mm
Fluid connections	8mm OD 6mm ID standard 6mm OD and 4mm ID options

Compliance	
CE compliant	
RoHS compliant	
WEEE compliant	

Electrical	
Supply voltage	24 V
Supply power	6-8 A
Rating	(dependent on options supplied)
Communication interface	4 wire RS 422 / 485 interface (supports multi dropping of devices; maximum of 15 nodes)  Optional USB to RS 422 communication gateway adapter. Supplied with Megnajet communications pack.

Software integration interface	
Open source Ascii interface.	
Optional .Net DLL SDK available on request.	

Operating conditions	
Operating temperature	5-65°C (40-149°F)
Storage temperature	5-100°C
IP rating	IP50

Connectivity to print heads	
Head type	Pressure feed through flow Vacuum low flow (optional)
Number of print heads supported	1 to 4
Maximum flow rate	400ml per minute Optional 950 ml pump available
Maximum in feed pressure	200 mbar 1 bar version available
Maximum return pressure	-200 mbar -600 mbar version available
Suggested distance from print head to CIMS II unit	Greater than 200mm
Suggested distance from bulk fluid tank to unit	Up to 2m for integrated fill pump. No limit if optional remote fill pump is fitted.

Megnajet user interface	
Supported OS versions	Win XP, Win 7, Win 8, Win 10 (Requires .Net 4 or higher)

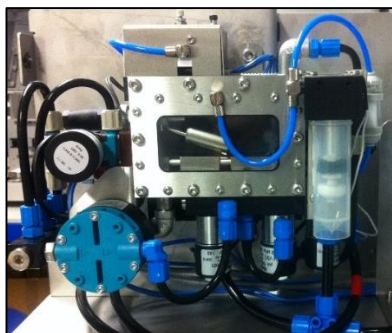
## Additional standard options

Degas vacuum source, head flush modules, external heater and manifold units.

Developer interface cable kits (including comms adapter and external medical grade power supply).

## Customisation

Units can be customised to suit fluid type and application, including (but not limited to) the use of alternate body materials (eg FDA approved food grade acetal, aluminium, 316 stainless and PEEK); choice of gasket material (eg FKM, EPDM, Nitrile and FFKM); and customisations to user software.



*Standard CIMS II system fitted with FKM gaskets.*



*Customised CIMS II system for materials deposition application- aluminium body and fittings, with solid state ultrasonic level sensing.*

**For further details, please contact us via our website or the email address below.**

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