



The MISC system is aimed at integrators, OEMs and laboratories that are looking to update or add reliable industrialised ink/fluid control functionality into their existing systems without the headache of designing a costly, bespoke pressure control system. MISC offers the fastest and most reliable route to market whether it be for updating existing outdated controls in an in-house built ink system or as part of a new OEM product.

MISC controllers features:

- The MISC range of products are developed from the core functionality of the Megnajet CIMS (Compact Ink Management Systems).
- The MISC can be configured in various ways to suit individual customer requirements but all still deliver proven stable, reliable and industrialised meniscus control irrespective of header tank design, fluid level or tank location. Due to our integrated hydraulic fluid measurement system which automatically compensates the meniscus as fluid levels inside your reservoir as they change, all you need is a port at the base of your fluid reservoir and the system does the rest.
- The MISC is a fully integrated system. It has its own built-in 10k+ hour life brushless air pump, removing service life issues to integrators. This means that there is no need for costly external air sources or vacuum pumps. Head maintenance can be easily configured due to the system's on board I/O to control external valves and it has the ability to pressure purge up to 950 mbar.
- The MISC is extremely compact with the smallest unit only 60mm x 45mm x 110mm when built in the basic configuration or 85mm x 45mm x 110mm if the integrated failsafe chamber is required (as pictured above).
- Industrial grade galvanically isolated RS422 communications interface allowing setup and monitoring from any RS422 enabled device capable of generating ASCII strings such as PC, PLC, HMI or other embedded system.
- Fully opto-isolated PLC compatible I/O interfacing for traditional systems monitoring.
- All parameters are stored on the device allowing for hostless operation.
- Simple open source ASCII interface (for PLC and motion controller interfacing) and .NET DLLs (with example code) available to allow OEMs simple and seamless integration into their end user applications.
- Fluid manager software with a feature rich GUI, which can be self branded.
- All you need to complete your system is a 24V 1 amp PSU and a RS422 connection for reliable, industrialised control via PC, PLC or head drive electronics (USB to RS422 adapters and power adapters can be supplied on request).
- Available in 250ml per min (for low pneumatic volume systems such as those based on syringes) and 1.5l per min air flow versions as standard and options to enable much larger airflow capacities (increases the unit size) on request, making the MISC ideal for integrating into your systems whatever their size .

Technical specifications

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 option

Compliance	
CE compliant RoHS compliant WEEE compliant	

Electrical	
Supply voltage	24 V
Supply power rating	1A
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 Megnjet 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	n/a
Number of print heads supported	n/a
Maximum flow rate	n/a
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 unit	n/a
Max purge pressure	+950mbar

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

Additional standard options

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

Customisation

The versatility of the MISC unit enables it to be integrated to match the precise requirements of the end user.

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

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