

MiniFB-science

Micro-dosing of unconventional fluids Additive manufacturing



The MiniFB-science is a flatbed A3 sized unit that was developed based on ThallosJet specifications and uses the HP45 head of which ThallosJet got the right to buy them empty and to fill with whatever fluid. PeakJet is proud to work in strong synergy with ThallosJet.


The Printer can mount up to four heads and the fluid inside could be the same for all or different for each of them. How to manage the heads is completely up to the User and the software allows an extremely well controlled dosage of deposition: how and where the single drop has been jetted is always known.

The software allows automatic cleaning cycles and functionality tests, the timing for cleaning cycle and head purging is User selectable, fluids level is always known same as the number of jetted drops.

It is possible to print bi-directional and to overlap the single passes to increase the jetted quantity of ink per surface unit. The movement of the head over the two axes, X-Y, is extremely precise.

The height of the printing bar can be linearly increased, along the Z axis, up to 150mm allowing the use of different samples trays.

The MiniFB is particularly suitable for research and tests purposes, the ease of use and the low cost of the disposable thermal inkjet head benefit whatever application.

 MiniFB-science Specifications *	
Main features	Thermal ink jet unit Extremely precise movement of the printhead over the two axes X-Y Adjustable height, along Z, allowing the use of different samples tray Economical disposable cartridges to avoid contamination and to renew the system when changed Suitable to jet diverse and unconventional fluids containing a variety of different materials wholly solved or suspended. User friendly SW <ul style="list-style-type: none"> - to adjust the jetting parameters - to set the printing mode - to perform cleaning cycle - to always know precisely fluids levels and number of jetted drops. Space saving design
Thermal ink jet technology	From 1 to 4 HP45 genuine disposable printheads, selectable from SW <ul style="list-style-type: none"> - 33 pl drop volume - 600dpi physical resolution - 0,5" print swath - 0,5m/sec max print speed - jetting energy and frequency depend on the fluid
Jetting pattern	Vertical: 600 dpi physical distance between nozzles, up to 1200 dpi by SW Printhead movement direction: up to 2400 dpi by multipass Multipass over the same area is allowed.
Jetting selections	<ul style="list-style-type: none"> - number of printheads - number of jetting passes - print area for each printhead
Fluids management	Printheads may contain different fluids and can be managed accordingly and separately. Each fluid has to be properly characterized. SW gives always the number of jetted drops: the quantity of jetted material is dramatically precise.
Printhead protection	Yes, with RFID. To indicate fluid level and end-of-fluid
Jetting area	480 x 330 mm
Height along Z	Up to 150 mm
Height detection	Laser height detection and automatic "zero" positioning
Quality standard	CE Standby mode reducing power consumption Sound pressure less than 48dB(A) in operation mode (ISO 7779)
Software included	JackCube Utility and Driver RIP (raster image processor)
Operating system	Windows 10 - 64bit
PC	RAM 4.0 Gb – CPU min Intel i3 – HD space 1.0+ Gb
Connectivity	USB 2.0
Power supply	Auto switching internal module AC 100-240 V – 50-60 Hz – 1,2 A
Operating conditions	15 - 30°C 35 - 75 % RH non-condensing Storage: -5 to 70°C 20 – 70% RH non-condensing (printheads not on board)
Dimensions (LxWxH) and weight	965 x770 x410 mm (38"x30,3"x16") – 35 Kg (77,2 lbs) In the shipping wooden box: 1070 x840 x500 mm (42"x33"x20") – 47 Kg (104 lbs)
In the Box	MiniFB, power cord, SW, User Manual, cleaning kit

* Design and technical specifications subject to changes without notices