The Remote Lung Module is an efficient and robust in-line degassing device for use with one or more Dimatix jetting assemblies.

The Remote Lung Module is a compact degassing unit capable of providing support for Dimatix jetting assemblies operating with aggressive fluids. It provides the same deaeration functionality as the lung found in Dimatix printheads and remote reservoirs.

As the fluid moves through the lung, an externally-supplied vacuum removes dissolved gasses from the jetting fluid. This degassing function is essential for fast priming and preventing bubble growth in the printhead at jetting frequencies required for high throughput.

An optional heater cartridge and thermistor temperature sensor are available for increased degassing performance and for thermal management of fluid viscosity.

The only materials in contact with the fluid are PFE, 316 stainless steel, and perfluoroethylene. These materials allow compatibility with a number of fluids including:

- aqueous fluids, pH range 3-9
- PEDOT
- buffer solutions
- surfactant-containing fluids
- acidic, dispersive, reactive and direct dyes
- organic and inorganic nanoparticles

Features:

- Deaeration incorporating Dimatix’s patented lung technology
- Optional heater and thermistor
- Stackable for increased degassing capacity
- Compatibility with a large number of fluid chemistries
Remote Lung Module

Parameter
Flow rate
Lung vacuum
Onboard fluid volume
Compatible fluids
Operating temperature range
Typical fluid viscosity (at operating temperature)
Heater and thermistor

Remote Lung
up to 1 ccsec⁻¹
≥ 67 KPa (20 inHg) gauge
< 3 cc
most solvents and aqueous fluids
up to 90°C
8-20 cPs
optional

Physical Characteristics

Lung Performance

Remote Lung Deaeration Efficiency

Dimensions:
Width 55.6 mm [2.19 in.]
Length 109.7 mm [4.32 in.]
Thickness 12.7 mm [0.50 in.]

Weight:
340 g [0.75 lb]

Remote Lung Module

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