Formulator Key Features

http://www.formulatrix.com/demosite/liquid-handling/products/formulator/index.html#tabbed-nav=tab2

**Discrete Parallel Metering Technology**

At the core of the Formulator is a patented microfluidic chip that measures and dispenses discrete volumes of liquid. The chip has 96 outputs, each with its own microfluidic valve cluster. Each valve cluster has two micro-diaphragms (200 nL and 2.5 mL) that fill and dispense up to three times per second. By combining multiple dispensing of each micro-diaphragm, the Formulator can dispense any volume down to 200 nL with a resolution of 200 nL.

**Positive Displacement Micro-Diaphragms**

The Formulator's positive displacement micro-diaphragms handle viscous and non-viscous liquids with ease and precision. No complicated liquid class settings are required. Simply select from four viscosity settings (normal, medium, high, and very high) to define the liquid class of your reagents. At a higher viscosity setting, the Formulator simply allows more time for the diaphragms to fill. Overestimating the viscosity of an reagent has no effect on dispense precision.

**Quick Stock Swap**

Adding a stock reagentto the Formulator is fast and easy. Just scan the reagent barcode, invert the bottle, and insert it in any of the reagent inputs on the top of the system. Bottle sensors tell the Formulator where you place each reagent.

Switching stock reagents is just as easy. Simply tell the Formulator to wash the supply line and to pick up the bottle. When washing the supply line the dead volume is 7 ml.

This ease of use is achieved with a specially designed lid insert and integrated check valves to facilitate washing. Currently the Formulator supports 125 mL and 250 mL Nalgene bottles and 50 mL Falcon tubes (others available upon request).

**Formulator 10, 16, and 34 Reagent Models**

There are three reagent configurations, all identical in size.

Formulator 10 Reagent Model:

* 9 inputs for either 250 mL or 125 mL Nalgene bottles, or 50 mL Falcon tubes
* 1 bulk wash input for pure water (can also be used as an reagent)
* Optional secondary wash input for other wash solutions

Formulator 16 Reagent Model:

* 15 inputs for either 250 mL or, 125 mL Nalgene bottles, or 50 mL Falcon tubes
* 1 bulk wash input for pure water (can also be used as an reagent)
* Optional secondary wash input for other wash solutions

Formulator 34 Reagent Model:

* 30 inputs for 50 mL Falcon tubes
* 3 inputs for either 250 or 125 mL Nalgene bottles, or 50 mL Falcon tubes
* 1 bulk wash input for pure water (can also be used as an reagent)
* Optional secondary wash input for other wash solutions