

Innovadyne™ Nanodrop™ ExtY

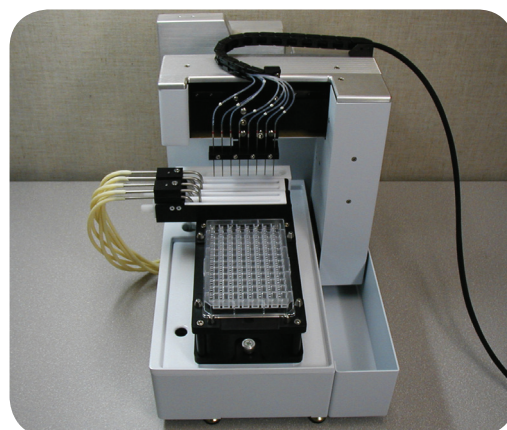
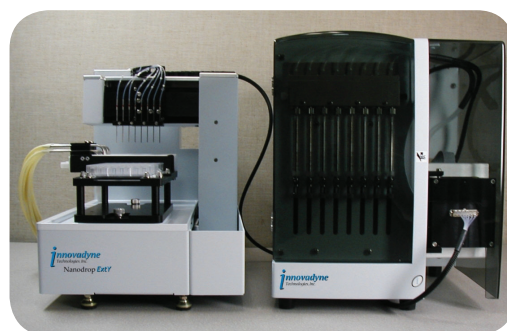
Utilizing the Nanodrop series fluidics module, the Nanodrop ExtY is a compact solution for low-volume, high-precision pipetting. It allows two sets of 4 tips each to dispense reagent to all wells of a standard SBS plate, facilitating rapid dispense of two reagents. Additionally, 4 tips can access any well position, enabling crystallization screens.

Patented Technology

The Nanodrop ExtY aspirates and dispenses a broad range of liquids including DMSO, and features the Nanobuilder software system that enables a wide range of applications and data manipulation. Innovadyne's patented technology isolates the solenoid dispense actuators from the sample path. This assures long life and easy, low-cost maintenance.

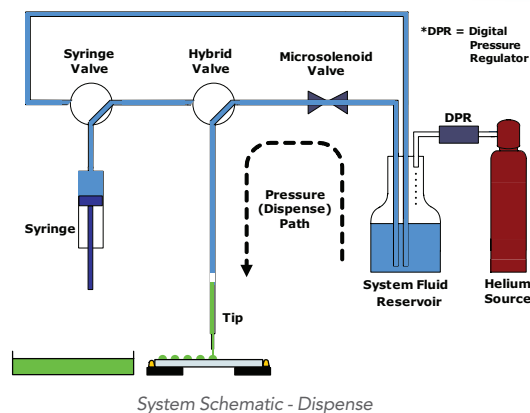
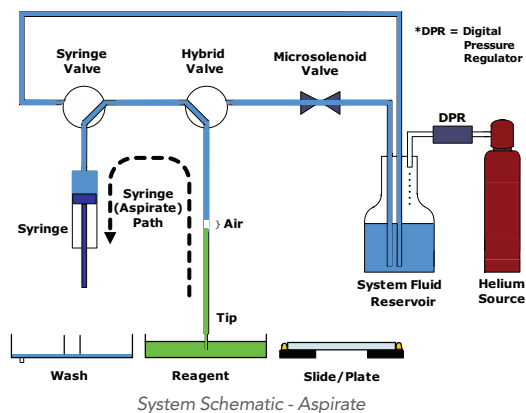
Features

- ▶ Non-contact and contact dispense provides flexibility to address applications with the best liquid handling method
- ▶ Exceptional dynamic range (nanoliters to milliliters) allows users to use the same device at multiple assay volumes
- ▶ Aspirate and dispense with individual channel articulation enables applications such as normalization and gradient formation
- ▶ Single tip addition for expensive reagents
- ▶ Simple fluid path with no moving parts helps solve reliability issues seen with in-line actuators
- ▶ Crystal plates supported
- ▶ Easy to program, easy to automate



Applications

- ▶ HTS
 - ▶ Fast reagent additions
 - ▶ Bulk reagent addition
- ▶ Cell-based Assays
 - ▶ Cell plating
 - ▶ Cell dosing
- ▶ Bead-based Assays
 - ▶ Bead manipulation
 - ▶ Reagent additions
- ▶ Protein Crystallography
 - ▶ Coarse and fine screen creation
 - ▶ Mother liquor transfers
 - ▶ Protein additions
- ▶ PCR
 - ▶ Template transfers
 - ▶ Cocktail additions



Performance Specifications

Plate Formats	96, 384, 1536, 1536 standard, low profile, deep well and crystallography plates
Plate Positions	1
Return to Spot Accuracy	0.1 mm
Dispense Functions	1, 4, 8-tip bulk reagent additions to all positions
Dispense Modes	All the same volumes or independent volumes
Aspiration Modes	All the same volumes or independent volumes
Aspiration Range	0.1 - 500 μ L
Dispensing Range	0.1 - 40 μ L (non-contact) 10 - 500 μ L (contact)
Dispensing Precision	CV < 10% at 100 nL CV < 7% at 200 nL CV < 5% at 1 μ L
Dispensing Accuracy	\pm 10% at 100 nL \pm 7% at 200 nL \pm 5% at 1 μ L
Dead Volume	1.44 μ L/channel at 1 μ L across 384-well plate
Syringe Capacity	500 and 1000 μ L
Cycle Time	20s/transfer <60s 1 μ L reagent addition (1 tip/96-well plate) <17s 1 μ L reagent addition (8 tips /1536-well plate)

Dimensions Specifications

	Fluidics Module	Stage Module
Height	33.0 cm (13 in)	34.6 cm (13.6 in)
Width	27.9 cm (11 in)	24.1 cm (9.5 in)
Depth	44.5 cm (18 in)	37.5 cm (14.75 in)
Weight	11.3 kg (25 lb)	11.3 kg (25 lb)

Technical Specifications

Environmental	10 to 40 $^{\circ}$ C, 80% RH
System Gas	Standard grade helium (99.7% pure)
Dispense Tips	304 SS, sapphire
Reagent Trays	Custom, deep well plates
Interface	RS-232 Nanobuilder $^{\circ}$ software
Automation Control	Nanodrop Automation Control (ActiveX)

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