

OryxNano



- Vapor diffusion nanodrops down to $0.1 \pm 0.1 \mu\text{l}$
- Less than 2% of protein wasted
- Use any single or multi-drop plate
- Multi-drop screens with single or multiple proteins in one run
- Seeding screens
- Under £25,000 / US\$46,000

We've distilled 20 years' experience in building Protein Crystallization Robots and the proven technologies of the current Oryx - and the original IMPAX range of machines - into one affordable vapor diffusion screening robot.

Using our latest generation of software with the new evaporation shield, OryxNano delivers 96 vapor diffusion drops in less than 10 minutes in drops as small as $0.1 \pm 0.1 \mu\text{l}$ while using as little as $9.79 \mu\text{l}$ of protein.

Advanced features:

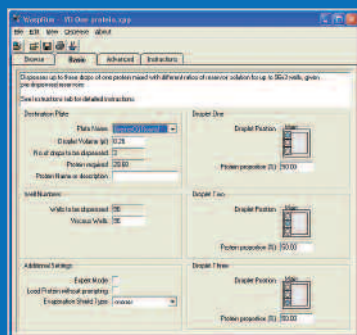
- Ability to dispense multiple drops of one protein to multi-drop plates
- Ability to dispense multiple proteins / constructs to multi-drop plates
- Seeding experiments
- Barcode support

Price: under £25,000 / \$46000



Douglas Instruments
Success in protein crystallization

OryxNano specification



Screen specification software.

The user can select drop volume, Protein percentage, drop position and other experimental variables.



Front Panel control software.

Uses 'wizards' to guide the user through the steps required to dispense an experiment.

General

Crystallization methods	Sitting Drop
Computer requirements	Windows XP / Vista

Vapor Diffusion Method

Volume of droplet	0.1 + 0.1 to 5 + 5 µl
Plates accommodated	All high quality plates can be used
Number of wells dispensed	1 to 96x3

Microtips

Number of bores	2, 3 or 4
Cross - section of microtip at tip	0.45 - 0.95mm
Internal diameter of each bore	100 µm - 475 µm
Dead volume	Zero
Material	Water repellent fluoropolymer

Universal Syringe Driver

Number of discrete steps for syringe volume	More than 44,000
R.M.S. error per step	+/- 8%
Nominal maximum error per step	16%
Nominal maximum cumulative error over complete linear displacement	2 steps

Automatic XYZ Plate Loader

Linear displacement of table:	
Travel, first horizontal axis (X)	130 mm
Travel, second horizontal axis (Y)	130 mm
Travel, first vertical axis (Z)	48 mm
Nominal maximum cumulative error over complete linear displacement	0.1 mm
Length required on bench	400 mm
Depth required on bench	610 mm