

ELISA NIMBUS®

Automated ELISA Processing System



- ▶ Complete walk-away solution
- ▶ End-to-end sample tracking
- ▶ Powerful, easy-to-use software interface
- ▶ Flexibility to automate any immunoassay kit
- ▶ Complete process control
- ▶ Flexible throughput for up to 8 x 96-well plates
- ▶ State-of-the-art technology
- ▶ Quality service & support

HAMILTON 

State-of-the-art technology. Powerful software.

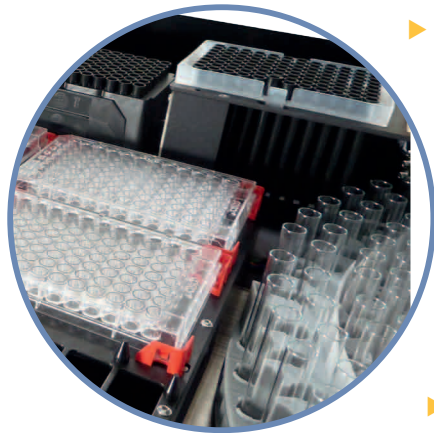
ELISA NIMUS provides you with:

Process integrity:



- ▶ Barcode reading of samples, controls, plates and reagent reservoirs enables complete traceability.
- ▶ Hamilton's Monitored Air Displacement (MAD) technology detects clots or insufficient sample volume and uses automated error handling to exclude samples and flag results.
- ▶ Track temperature, time and rpm of your incubations in 4 individually controlled, low evaporation incubation chambers.
- ▶ The 8-channel strip washer provides consistent plate washing along with linear shaking of the microplate.

Capacity and speed:



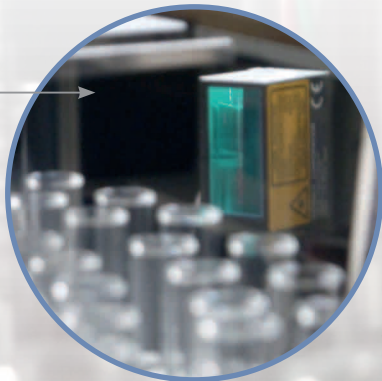
- ▶ Load up to 192 samples and controls in tubes.
- ▶ Accommodates 18 different reagents to run multi-assay panels with up to 12 assays per plate or run. Reagent troughs can be configured as 18 x 60 mL trough or 3x 12 column SBS format reservoirs with 21 mL/ column, 252 mL max.
- ▶ 4 independent pipetting channels provide fast dilutions and shortened front-to-back loading time.
- ▶ Complete walk-away automation of up to 4 plates with pre-dilutions or 8 plates without pre-dilutions.
- ▶ 4 independent shaking incubators enable different assays to run in parallel and low incubation evaporation rates mitigates the need for lidding or sealing plates.
- ▶ Tip capacity of 9 x 96 300 μ L tips or 9 x96 50 μ L tips; and reagent tip capacity of 1 x 96 1 mL tips

Flexible software integration for LIMS or existing information systems:

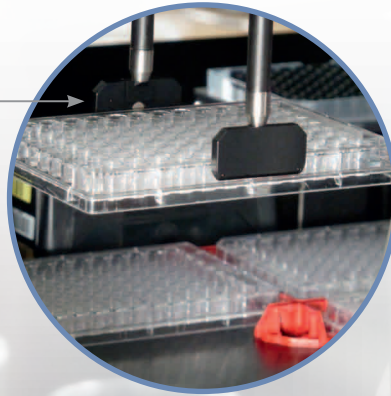
- ▶ Built-in data reduction for comprehensive experimental analysis.
- ▶ Straightforward data review with selectable output views with sample raw data (OD), controls or calibrators.
- ▶ Powerful run and data reporting using the on-board software.

Compact. Affordable. Quality.

Based on the Microlab® NIMBUS liquid handling platform, ELISA NIMBUS offers comprehensive ELISA automation. An easy-to-use interface, along with the real-time run control dashboard, provides Hamilton quality at a competitive price. Its small footprint is balanced for sample, reagent and tip capacity allowing complete walk-away analysis of up to 8 x 96-well plates. With 4 independent pipetting channels, a washer, 4 shaking incubators, and an absorbance reader, the ELISA NIMBUS delivers a plug-and-play solution to meet all your ELISA needs.



Sample tube carousel with automated barcode reading



CO-RE® Paddle Grippers plate handling



Easily access wash bottles, washer and waste from front of instrument



Easy-to-use software



ELISA made easy.



Easy ELISA automation featuring:

- ▶ Hamilton's air displacement pipetting technology reduces risk of contamination & sample dilution.
- ▶ Intuitive software user interface guides you through creating assay workflows.
- ▶ Design unique plate layouts for samples, controls, calibrators and blanks.
- ▶ Specify individual sample pre-dilutions in your worklist.
- ▶ Process a batch of samples over multiple assays.
- ▶ Shorten front-end preparation by viewing the quick-start guide that automatically calculates reagent volumes and required materials.
- ▶ Simplify complex system setup using guided user prompts.
- ▶ Real-time run status and system control on any connected, browser-equipped device.

Specifications

Physical Specifications	Dimensions
Height:	36 in 91.4 cm
Width:	57.5 in 146 cm
Depth:	26.5 in 67.3 cm
Weight:	403 lbs 183 kg
Power:	100VAC 50Hz / 240VAC 60Hz, power consumption <1000 Watts
Environmental:	15 - 35°C, RH 30-85% (non-condensing) up to 2000m above sea level, indoor use only
PC/Software:	Windows 7 (64 bit), WiFi (802.11 g/n) wireless
General Specifications	
Sample/Control capacity:	192 tubes diameter 12-13 mm (60-100 mm tall) or 128 tubes diameter 15-17 mm
Number of Assay Plates:	Up to 8 plates, if no dilutions required; up to 4 plates, if dilution required. Partial plates are possible.
Number of Dilution Blocks:	4 x 96-well deep well blocks
Reagent capacity:	18 x 60 mL reservoirs or 3 x 12 column SBS format reservoirs with 21 mL/ column, 252 mL max
Sample-tip capacity	9 x 96 300 µL tips or 9 x 96 50 µL tips
Reagent-tip capacity:	1 x 96 1 mL tips
Sample tracking:	Barcode reading of sample tubes, control tubes, reagent reservoirs, and assay plates
Pipetting:	Number of pipetting channels: 4 with independent Z movement Volume range: 1-1000 µL Accuracy: 5% at 1 µL with 50 µL tip, 5% at 10 µL with 300 µL tip, 2% at 100 µL with 1000 µL tip Precision: 5% at 1 µL with 50 µL tip, 2% at 10 µL with 300 µL tip, 1% at 100 µL with 1000 µL tip
Washer:	Manifold type: 8 channel strip washer Supply bottle: 3 x 2 L wash buffer plus one 2 L rinse bottle with weight sensors Waste bottle: 6 L with weight sensors Volume range: 50 - 1000 µL/well Residual volume: ≤2 µL Wash cycles: 1 - 9 Shaking: Linear Dispense accuracy: 5% Precision: 3% CV
Reader:	Optical system: 8-channel photometer (absorbance reader) Light source: LED Wavelength range: pre-installed 405, 450, 492, 620 nm, optional 340-750 nm also available Measurement mode: single / dual Shaking: Linear Resolution: 0.1 mOD Precision: < ±1%
Incubators:	Capacity: 4 independent shaking incubators Temperature: Ambient + 4 °C to 60 °C ± 1 °C Shaking: Orbital (3 mm), 40-1000 rpm Low evaporation rate: < 3 µL/well per hour
Waste:	Large tip waste and soft tip ejection onto tip waste slide prevents tip waste backups



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